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An examination of working hours, work-life conflict and psychological well-being in Irish academics

Victoria Fallon-Hogan, BA, MSc.

Supervisor: Dr. Margaret Hodgins

Discipline of Health Promotion
National University of Ireland, Galway

September, 2013
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Author’s Declaration

I certify that, except where acknowledged all work has been undertaken by myself and that I have not obtained a degree in this University or elsewhere on the basis of any of this work.

___________________________

Victoria Hogan
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Abstract

Research from numerous countries across the world indicates that academics are experiencing high levels of occupational stress and trends indicate that stress levels are increasing over time. Two stressors which have been implicated in this context include long work hours and work-life conflict. The current project examined patterns in working hours and behaviours and associated levels of work-life conflict and psychological strain in Irish academics. The project also examined the non-work behaviours and activities of Irish academics in order to comprehensively analyse challenges and experiences at the work-home interface. A series of three studies were conducted: a quantitative multi-variate survey examining predictors of work hours, work-life conflict and psychological strain (N=410); a seven day diary study examining post-work activities and levels of recovery and detachment from work (N=44); and a qualitative interview study examining challenges associated with maintaining work-life balance in academia (N=14). Gender effects were examined across all three studies, and workaholism effects were examined in both the quantitative survey study and the diary study. Results from Study 1 indicated a long work hours culture amongst Irish academics, with males working longer hours than females. A number of organisational, personal and individual variables including work intensity, workaholism, job involvement, organisational support and having children were found to directly and indirectly influence work hours, work-life conflict and psychological strain. Gender was found to moderate some of these effects. Study 2 revealed gender differences in post-work activities engaged in by academics, with females engaged in more household/caring activities after work, while males engaged in more work activities and passive activities. The results from Study 2 also highlighted difficulties experienced by workaholics in recovering and detaching from work and managing work-life conflict. The results from the interviews conducted in Study 3 revealed four major themes; pleasure and pain of academic work, struggle to recover, boundary management, and health and stress. The interview data highlighted a number of stressors experienced by Irish academics and the reported health effects associated with high levels of occupational stress. The strategies used by academics to recover and detach from work and the boundary work between work and home were also revealed. The findings from all three studies
are discussed with reference to the extant literature and a number of practical implications and areas for future research are discussed.
Chapter 1 - Introduction

The workplace has been identified as one of the key settings for health promotion for the 21st century (World Health Organisation, 2013) due to the significant role of the workplace in influencing the determinants of health (Green, Poland, & Rootman, 2000; Scriven, 2012). Health promotion within organisations is necessary in order to ensure the ongoing health of the workforce and the long term performance and productivity of organisations. It has been recommended that a health promotion settings approach is tailored to the sector, therefore it is necessary to understand the particularities of specific settings (Dooris, Doherty, Cawood, & Powell, 2012). The workplace setting of interest in this study is the Irish university sector. It has been noted that for real and substantial benefits to be observed, it is important for universities to integrate health into their cultures, processes and policies (Tsouros, Dowding, Thompson, & Dooris, 1998). The Irish third level education sector is currently experiencing significant operational challenges with reducing staff numbers, limited promotion opportunities, and reductions in funding available, all attributable to the recession within the Irish economy. In the face of such challenges, and the new culture of performance management in Irish universities, there is a potential for increasing workloads, higher work intensity and thus longer working hours and increasing levels of work-life conflict, all of which may have negative impacts upon employee health and well-being. The current study seeks to explore these issues and examine the way in which academics maintain their health and well-being in the face of these challenges.

1.1 Academia
There are a total of 17,701 individuals employed across the third level education sector in Ireland. Of these, 10,300 work in the university sector and 7,401 work in the institutes of technology (Higher Education Authority, 2013). This study focuses on the experiences of academic staff only within the university sector; therefore, other non-academic university workers (i.e. administrative and technical workers) are omitted from study. There are currently 4701 academic staff and 5599 non-academic staff employed in Irish universities (H.E.A., 2013). Previous university studies have been criticized for only focusing on academic staff (Gillespie, Walsh, Winefield,
Dua, & Stough, 2001). However, the deciding factor in focusing exclusively on academic staff in this study was two-fold. First, research to date shows that academic staff are significantly more stressed than the other occupational groups within the university setting (Blix, Cruise, Mitchell, & Blix, 1994; Boyd & Wylie, 1994; Gillespie et al., 2001; Tytherleigh, Webb, Cooper, & Ricketts, 2005; Winefield, et al., 2003). Secondly, one of the few work-life balance intervention studies conducted in a university setting revealed that the intervention had positive results for administrative and technical staff but not for academic staff (Doherty & Manfredi, 2006a) owing to the issue of work overload in academic staff. Therefore, more focused research on this group of employees in isolation from their university colleagues is warranted.

1.2 Working hours in academia
The role of the academic has generally been regarded over the years as a low stress occupation with considerable perks, such as, high levels of job autonomy and flexibility, generous holidays, international travel, task variety, etc. Whilst this perception of academic life still remains entrenched in public perception, research has shown that this view of academic life is far from realistic (Kinman & Jones, 2008b; Winefield, Boyd, Saebel, & Pignata, 2008). Numerous studies have demonstrated that the role of a full-time academic within the university sector involves long working hours (Misra, Hickes-Lundquist, & Templer, 2012; Tight, 2010), heavy work demands (Cantano et al., 2010; Winefield et al., 2008), high work intensity (Kinman & Jones, 2004; Ylijoki, 2013) and considerable pressure to continually increase levels of productivity and performance (Winefield, 2003; Ylijoki, 2013).

Over the past decade, work hours, particularly long working hours and their health effects have become a ‘hot topic’ (Burke & Cooper, 2008; Bunting, 2005). Furthermore, the dominance of paid work in people’s lives has been noted as worrisome not only for individual well-being, but also due to potential negative implications for families, communities and society (Gambles, Lewis, & Rapoport, 2006). In addition, commentators have noted that the role of information technology in allowing people to work at any time and any where, instead of creating more leisure time, has produced greater potential for overwork (Bunting, 2005),
particularly in knowledge workers whose work may have no clear boundaries (Lewis, 2003). The working hours of academics have been examined as part of studies in a number of countries, in relation to topics such as occupational stress and work-life balance (Kinman & Jones, 2004), gender (Misra et al., 2012) work patterns and behaviours (Gornall & Salisbury, 2012) and academic workloads (Tight, 2010). Across such studies, a trend towards long working hours within academia has been observed. A recent study has noted that academic work is becoming faster paced, therefore more intensive (Ylijoki, 2013) and high work intensity has been linked to longer work hours (Krings, Nierling, Pedaci, & Piersanti, 2009). In the context of the broader life experience of academics, one potentially negative consequence of high work intensity and long work hours is increased levels of work-life conflict. Work-life conflict occurs when either the demands of work conflict with other life activities (e.g. home or family demands), or when other life activities conflict with the demands of work. An associated challenge is the requirement for greater resilience as greater demands are placed on the recovery capacity of academics working for long hours at a high level of work intensity. Therefore, central to this study is a focus on work hours and its relationship with work-life conflict, recovery and well-being in Irish academic workers.

1.3 Occupational stress in academia

Concern has been noted in other countries regarding high levels of occupational stress experienced by academics and also associated stress-related health outcomes (Cantano et al., 2010; Kinman & Jones, 2004; Winefield et al., 2008). Many commentators have noted that the nature of third level educational institutes is changing and that these changes are partly responsible for increasing stress levels reported by academics (Kinman, Jones, & Kinman, 2006; Winefield et al., 2008). Hodgins et al., (2005) have noted that the culture of universities is shifting from the traditional collegial system towards a more industrial model with a greater emphasis on increasing productivity, generating income, increasing student numbers and having outputs that are quantifiable and therefore comparable with other institutions. Academics also face high expectations around research outputs and increasing levels of administration (Kinman & Jones, 2004; Tight, 2010). All these challenges point at least anecdotally towards potential for longer work hours and potential employee strain. Research has shown that high stress levels in academia have been linked with
negative physical, psychological and organisational outcomes for example, see Gillespie et al., 2001 and Kinman & Jones, 2003. This project aims to analyse the impact of long work hours, heavy work demands and high work intensity, (i.e. previously identified occupational stressors within academia) on both the work and home domains of Irish academics.

1.4 Work-life conflict in academia
There has been growing interest in the relationship between work life and home life (Casper, Eby, Bordeaux, Lockwood, & Lambert, 2007; Eby, Caspar, Lockwood, Bordeaux, & Brinley, 2005; Jones, Burke, & Westman, 2006a), with research being conducted across a range of disciplines, including occupational health psychology, human resource management, and industrial/organisational psychology. A number of factors are fuelling this level of interest; in particular demographic and labour force changes (Hodgins, Hogan, & Galvin, 2007), such as, the aging European workforce, the increasing participation of females, dual-earner couples and non-traditional families in the workforce.

Research in other countries (i.e. Canada and Hong Kong) has identified work-life conflict as a major stressor for academics (Cantano et al., 2010; Leung, Siu, & Spector, 2000). Furthermore, research from Australia has shown that work-life conflict has increased over time for academics (Winefield et al., 2008). In addition, higher levels of work-life conflict have been linked to higher levels of psychological strain in academics (Winefield et al., 2008; Cantano et al., 2010; Kinman & Jones, 2003). Although two Irish universities have individually commissioned research studies into work-life balance in the university setting (Coughlan, 2005; Hodgins, Galvin, & Hogan, 2005), multi-institute research within Ireland has not to date been published, therefore, this study aims to comprehensively examine work-life conflict across a number of institutions. By also focusing on the non-work activities of academics (i.e. how academics spend their free time) this study aims to provide a more in depth analysis of issues faced by academics at the work-home interface.

1.5 Recovery and detachment from academic work
Gambles et al., (2006) suggest that increased workloads and work hours and the increasing availability and use information technology may negatively affect home
lives and may have potential effects for societal and individual health as people need time to care for themselves and others. Research has shown that academics tend to be hyper-professional in that they regularly use information technology in the work setting, the home setting and beyond to stay switched on to their work (Gornall & Salisbury, 2012). This ability to work remotely allows easy transition back into work mode in the home environment, therefore, transcending the traditional physical and temporal boundaries between work and home. Post-work recovery is a positive process designed to re-vitalise a person and prepare them for the tasks and work due in the following days, however, stress, fatigue and ill-health are potential outcomes if a person repeatedly does not achieve recovery after work (Demerouti, Bakker, Geurts & Taris, 2009). Research suggests that recovery is aided through psychological detachment from one’s work (Sonnentag & Bayer, 2005; Brosschot et al., 2005; Demerouti et al., 2009), whereby a person is not preoccupied with or ruminating about work related issues during their leisure time. This study aims to examine both the work and non-work behaviours of Irish academics and investigate the degree to which Irish academics recover and detach from work and what strategies are most beneficial for these important processes in the face of potentially demanding work lives. A quantitative diary study is employed to investigate patterns in post-work activities and self-reported levels of recovery and detachment, while a qualitative interview study allowed the detachment and recovery strategies of academics to be examined in more detail.

1.6 Work-home boundary management in academia

An influential theoretical model in work-life conflict research is the model of segmentation (Edwards & Rothbard, 2000). This model describes the degree to which a person separates their home and work lives. The degree to which a person separates or integrates their work and home lives is a matter of personal choice and in reality full segmentation or full integration are rare. Neither integration nor segmentation is superior to the other, what matters is if the boundaries in place between work and home are working for the person (Clark, 2000). Notably, research has recently begun to explore boundary management in academia, and shows that most academics have difficulties in maintaining work-home boundaries (Kinman, 2012; Ylijoki, 2013). Boundary management is included in two of the studies as it is related to work-life conflict and a person’s ability to recover and detach from work.
Within the quantitative questionnaire survey study, the degree to which academics desire greater segmentation between the home and work place is examined. This issue is then further analysed in the qualitative interview study, where the variety of different segmentation and integration styles adopted by Irish academics and their experience in managing the flow of activity in the work-life interface are explored.

1.7 Gender
Across all three studies of this project gender is included as a variable of interest. There are a number of valid reasons for focusing on gender as a variable within academic research. First, as Gambles et al., (2006) have noted, the continuing association of women with the home domain and men with the work domain perpetuates the ideal worker and ideal parent assumptions. An ideal worker is regarded an individual (typically male) who works long hours and gives almost exclusive attention and allegiance to the work role and is generally regarded as unencumbered by family and caring responsibilities, whereas an ideal carer can be regarded as a parent (typically female) who gives almost exclusive attention and allegiance to the family/home role. However, mothers in the 21st century are more likely than not to be working (Damaske & Gerson, 2008) and there are increasing numbers of dual earner couples in the labour force (Whitehead, 2008) for whom the ideal worker norms may cause difficulties. Universities are regarded as male dominated workplaces (Deem & Brehony, 2001) and a gap exists in progression rates to more senior positions, favouring male academics (Doherty & Manfredi, 2006b; Mayer & Tikka, 2008). British commentators have stated that the picture for female academics trying to progress is bleak, and research has shown that they are more negatively affected by stress and stress related ill health than male academics (Jacobs, Tytherleigh, Webb, & Cooper, 2010).

Second, theories such as the Gender Role Hypothesis (Greenhaus, Bedeian, & Mossholder, 1987) and Rational Theory (Gutek, Searle, & Klepa, 1991) predict gender differences in work-life conflict and many research studies have shown that female academics experience more stress than their male counterparts, for example,

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1 For example, in Ireland figures from the Higher Education Authority for the year 2011-2012 revealed that 57% of academic staff in Irish universities are male. It was also noted that 81% of Irish university professors are males.
see Sorensen & de Peuter (2006) and Winefield et al., (2008). Furthermore, research also has found that female academics experience more stress than male academics due to higher reported levels of work-life conflict (Cantano et al., 2010). Work-life conflict in turn predicts lower job satisfaction in female academics compared to males (Ergeneli, Ilsev, & Bayhan Karapinar, 2010). However, less is known about how gender moderates the impact of stressors such work intensity and work hours expectations on work-life conflict and psychological strain. In addition, the role of gender in recovery and detachment research is regarded as understudied and gender differences in boundary management within academia has not been fully explored. Therefore, gender and gender differences remain an important topic of research within the context of academia.

1.8 Research Aims
There are three main research aims in this study:

1. To identify and examine a number of personal (number of dependents), individual (workaholism, level of work involvement) and organisational factors (organisational and supervisor support, work intensity, work time expectations) that potentially influence work hours, work-life conflict, and psychological strain in Irish academics, and to determine how gender moderates these relationships.

2. To examine the post-work activities of academics over the course of a week and to determine the extent to which academics achieved recovery and detachment from work during their non-work time.

3. To qualitatively explore post-work recovery, detachment from work and boundary management to gain a greater understanding of the strategies used by academics to protect and enhance their well-being and family functioning.

1.9 Thesis Structure
Chapter 2 examines the issue of work hours and work intensity in academia. General trends and patterns in work hours in Ireland and Europe are examined in order to provide contextual data. Antecedents and consequences of long working hours are discussed and research data relating to trends in working hours in academia is reviewed.
Chapter 3 reviews the extant literature on occupational stress within academia. Two theoretical models of occupational stress relevant to this study are reviewed – the Effort-Reward Imbalance Model (Siegrist, 1996) and the Job-Control Demand Model (Karasek, 1979). Occupational stressors in academia are described and the impact of occupational stress on health and wellbeing is also discussed. The research to date on the relationship between work-life conflict and occupational stress in academia is also examined.

In Chapter 4 theoretical and empirical work relating to work-life conflict in academia is discussed. Research on antecedents and consequences of work-life conflict are reviewed with a particular focus on factors hypothesised to be related to work-life conflict in academia. The outcomes associated with work-life conflict in academia are also examined.

Chapter 5 discusses the concepts of post-work recovery and psychological detachment from work and work-home boundary management. The extant literature on recovery, detachment and work-home boundary management is reviewed with a particular focus on research conducted on these topics within academia.

Chapter 6 describes the rationale for each of the three studies conducted as part of this project and outlines the specific hypotheses and research questions for each of the studies.

Chapter 7 describes the methodology, results and discussion for the first study, a quantitative multivariate cross-sectional survey which focused on the antecedents and consequences of long work hours and work-life conflict in academia. Chapter 8 describes the methodology, results and discussion of the second study, a seven day diary study which focused on post-work activities, recovery, detachment and work-life conflict. Chapter 9 describes the methods, results and discussion for the final study, a semi-structured interview study that explored how academics achieve recovery and detachment from work and their home-work boundary management strategies.
Chapter 10 presents a general discussion of the results from all three studies and considers the practical implications, directions for future research and summary conclusions.
Chapter 2 – Work Hours

This chapter examines current trends in working hours in Ireland and Europe and focuses on what is known about work hours in academia. Causes of long working hours are identified and examined and the health and psychosocial consequences of long working hours are described.

2.1 Working hours and health research

Working hours and in particular the need for flexible work options to aid work life balance need to be addressed at the European level (Reidmann, 2006). This is now considered a matter of priority for the European Union if employment rate targets are to be achieved and to allow particular groups (e.g. older workers and female workers) greater access to the workplace. Furthermore, there is a continued need for research on the impact of working hours on health because many employees are unhappy with their work hours and the research to date on working hours and well-being has produced complex results with many inconsistencies (Burke & McAteer, 2007). For example, while the statistics show that working hours are declining for most workers over time, there is considerable evidence that many workers are unhappy with their hours of work (Clarkberg & Moen, 2001; Dembe, 2005; MacInnes, 2005). In addition, 22% of European citizens report that their working hours fit poorly or not at all with family and other commitments (European Foundation for the Improvement of Working and Living Conditions, 2004). A number of risks associated with working long hours have been identified, including increased health and safety risks, increased negative impact on one’s health, and a significant mismatch between one’s work hours and one’s needs, roles and responsibilities outside of the workplace, for example, in family and social domains of life (EFIWLC, 2006).

On one hand, it has been stated that work hours are one of the most widely studied structural aspects of employment in the work-family literature (Barnett, Gareis, & Brennan, 1999). On the other hand, Major et al., (2002) noted that little attention has been given in the work-life conflict literature to hours worked, with few studies
reporting on this variable. More recently, in relation to work time it has been suggested that there is a paucity in quantity and quality of salient research (Kirkcaldy, Furnham, & Shephard, 2009). Despite this lack of agreement within the literature, the importance of the study of work time in the context of the broader work-home interface has been noted. For example it has been stated that “The amount of time demanded by occupations [is] …. among the most obvious and important ways that occupational life affects family life” (Kanter, 1977, p. 31).

2.2 Working hour trends – Europe and Ireland
Reasonable work time first became an issue in the early battles between trade unions and employers in the 19th and 20th centuries (Abrams, 2001; Bunting, 2005). More than a hundred and fifty years ago during the Industrial Revolution it was recognized by workers that excessive working hours had detrimental health effects; government and employers succumbed to pressure from unions and employees to reduce working time with the introduction in Britain of the Ten Hour Act for women and children in 1847 (Baxter, Adams, Aw, Cockcroft, & Harrington, 2000). Yet despite this battle for reduced work hours, in some occupations today the 1847 limits are exceeded, for example, managerial employees can average between 80-100 hours per week as standard working hours (Burke & McAteer, 2007).

The Working Time Directive was implemented in Europe in 1993 and sets in place the minimum requirements for holidays, rest breaks during working hours and maximum weekly working hours. The legal limit for working hours in Europe is 48 hours per week averaged over a 17 week period. In Ireland, the 48 hour working week is implemented via the Organisation of Working Time Act, 1997. When working time is examined at a European level, there is a large degree of variability across European countries with regard to the standard working week (Figart & Golden, 1998; Lee, McCann, & Messenger, 2007). Average weekly working hours range between 35-45 hours across countries and are dependent on the regulations in place and collective agreements within each country (Lee et al., 2007). Statistical data shows the average length of the working week in Europe is tending to reduce over time; however, some European countries still show trends towards a proportion of the work force engaged in long working weeks, including Ireland (Cowling, 2005; EFIWLC, 2006). The introduction of the Working Time Directive (1993) is thought
to have influenced the overall drop in hours of work. However, a quarter of European employees work more than 42 hours per week and spend another 40 minutes per day commuting to and from work (Parent-Thirion, Fernandez-Macias, Hurley, & Vermeylen, 2007). In addition, 14% of European workers report engaging in more than 48 working hours per week (Taris, Beckers, Dahlgren, Geurts, & Tucker, 2008).

The average number of hours worked in Ireland has declined over the past ten years. In 1999, the average working week was 38.3 hours (Central Statistics Office), while in 2007; the working week had reduced to 36.7 hours (EFIWLC, 2009). However, this reduction may in part be explained by the changing composition of the Irish workforce, which includes more workers engaged in part-time work. If working hours are calculated using full time workers in Ireland only, a 40 hour week is the average (Eurostat, 2005). A higher figure of 44 hours per week being the average full time working week has been also been put forth (Federation of European Employers, 2007).

Working in excess of 48 hours per week can be considered the benchmark when investigating long working hours, as evidence shows there are potential health risks for workers working in excess of this level (Spurgeon, 2003). In Ireland in 2005, 35% of the labour force worked in excess of 48 hours a week (EFIWLC, 2009); however this figure includes the self-employed who tend to work long hours. When self-employed workers are removed from the analysis a rate of 5.5% of workers engaging in hours in excess of 48 hours per week has been reported (Lee, et al., 2007), with 8.9% of men and 1.8% of women engaging in over 48 hour weeks. Drew and colleagues (2002) in a national survey of Irish businesses and workers found that Irish men reported working on average 41 hours per week, while Irish women reported working on average 39 hours.

2.3 Gender differences in working time
Trends in ILO member state data reveal that long working hours (in excess of 48 hours per week) is a predominantly male phenomenon (Lee et al., 2007), whereas the main pattern in female working hours is the high proportion of women who engage in part-time work (i.e. working less than 35 hours per week). Irish data indicates that male workers are more likely to work longer hours than their female counterparts.
(Drew, Humphreys, & Murphy, 2002). For example, in one study it was reported that Irish males reported working on average 42 hours a week and Irish females reported working on average 36 hours a week (Darcy & McCarthy, 2007). In a national survey of Irish businesses and workers, 56% of persons surveyed reported working longer than standard work hours (i.e. 9am-5pm norm), with men more likely than women to report working longer hours (62% versus 38%) (Drew et al., 2002).

However, women report longer working hours in the home (Greenhaus & Parasuraman, 2002), sometimes referred to as the ‘double burden’, that is, the additional work at the end of the day required to maintain a home and family (Bunting, 2005). For example, it was reported in 1991, that on average a woman’s workload reaches 78 hours per week, while for men the average total workload (including working hours in the home) is 68 hours (Frankenhauser, 1991). More recently, it has been reported that Irish women spend 24 hours a week on domestic/household tasks, versus 15 hours spent by men (Darcy & McCarthy, 2007).

Having a family adds to the total length of the working week. For example it has been reported that women with families average a 90 hour working week in comparison to a 70 hour week for men with families. This equates to an extra 2.5 hours per day of work for women within families (Noor, 2002). Total workload increases with the number of children in the household (Frankenhaeuser, 1991; Lundberg, Mardberg, & Frankenhaeuser, 1994). Although it has been reported that men are now engaging in more domestic and caring work in the home (Saxbe, Repetti, & Graesch, 2011), in Ireland men spend less than half the time women do on household work (Organisation for Economic Co-operation and Development, 2011). Therefore the gap between men and women in total hours worked remains. This extra workload can have negative effects on women’s health due to the inability to wind down effectively (Frankenhaeuser, 1991).

Drew et al., (2002) note that upon becoming parents, both men and women modify their working times, with women statistically more likely to do so (62% of females versus 27% of males). For 90% of mothers who had modified their work hours, this led to a reduction in time at work, compared to 78% for fathers. Therefore, women face a problem, in that they face temporal constraints on their availability to work
due to the need to devote time to caring and household tasks (Lee et al., 2007). However many organizations tend to operate as if their employees do not have any external/family responsibilities (Burke & McAteer, 2007).

While this data is not specific to the academic sector, a number of related trends have also been observed in academia. Notably, a culture of long working hours in British, and American academic institutions has been revealed in recent studies (Kinman & Jones, 2003; O’ Laughlin & Bischoff, 2005). Furthermore, the University of California estimates that female academics with children work a 100 hour week (taking into account academic work, household chores and caring activities) as compared to male academics with children who spend 85 hours. At the same time, research suggests that male and female academics without children work less than 80 hours a week (Mason & Goulden, 2004).

2.4 Antecedents of long working hours

Much research has focused on the antecedents of long working hours. Factors identified range from internal motivation (Porter, 2004) to external global economic conditions (Gambles et al., 2006). Drew et al., (2002) reported that for Irish workers, the most frequent reason offered for working long hours was the employee’s own desire to get the work task completed. It has been reported that people who are highly educated and work in large organizations tend to work longer hours (Maume & Bellas, 2001). More generally, it has been suggested that three factors are important determinants of working hours: the hours desired by the worker, the hours demanded by the employer, and the institutional environment in which working hour decisions are made, for example, legal constraints, workplace norms, and the larger economic environment (Golden, 1998).

2.4.1 Workaholism

Personal motivation may be an important factor contributing to long working hours. For example, it has been postulated that a person’s level of work enjoyment and tendency towards perfectionism contribute to long hours. Enjoyment of work influences the amount of time dedicated to work, because of the inherent satisfaction a person gains from working, whereas a person with perfectionist tendencies puts in long hours to meet their own extremely high standards (Porter, 2004). In the current
study, two related factors which determine a person’s tendency towards workaholism are considered as potential drivers of long working hours in academia, namely: work enjoyment and work drive.

Workaholism is generally considered to be a stable individual characteristic (Burke & Fiskenbaum, 2008). Numerous definitions of workaholism are available, and similar to many psychological terms, it has readily been taken up in day to day parlance. Most definitions portray workaholism in negative terms. For example, the first definition of a workaholism described “a person whose need for work has become so excessive that it creates noticeable disturbance or interference with his bodily health, personal happiness, and interpersonal relationships, and with his smooth social functioning” (Oates, 1971, p. 4). The most widely used operational definition defines a workaholic person as a person who “is highly work involved, feels compelled or driven to work because of inner pressures, and is low in enjoyment at work” (Spence & Robbins, 1992). A more recent definition has been put forth which defined workaholism as a personal reluctance to disengage from work evidenced by the tendency to work (or to think about work) anytime and anywhere (McMillan & O'Driscoll, 2000; McMillan, O'Driscoll, Marsh, & Brady, 2001). Most definitions of workaholism agree on the fact that workaholics tend to work exceptionally hard (Burke, 2001a) and have an obsessive inner drive to work (McMillan & O'Driscoll, 2006).

Three main features of workaholism have been put forth (Scott, Moore, & Miceli, 1997). The first is that workaholics tend to spend a large proportion of their time working when given the discretion to do so and often to the detriment of other non-work activities. The second feature of workaholism is that workaholics think about work frequently and persistently during their free time. The last feature is that workaholics work beyond reasonable expectations (to meet organisational or economic requirements).

According to Spence and Robbins (1992) it is not sufficient to group workers under a general label of ‘workaholic’ because the workaholism construct is far more complex than this. In this study, a two factor model of workaholism is employed consisting of work enjoyment and drive to work. Because the two factors are highly independent,
workers can be categorized based on their scores on these two factors into different types, i.e. workaholic (low enjoyment/high drive), enthusiastic workaholic (high enjoyment/high drive), relaxed worker (high enjoyment/low drive), uninvolved worker (low enjoyment/low drive) (McMillan, Brady, O'Driscoll, & Marsh, 2002). Notably, workers categorised as workaholics have been found to report higher levels of perfectionism, non-delegation of responsibility, and more job-stress and health complaints than the other groups (Spence & Robbins, 1992).

The relationship between workaholism and working hours is complex. As has been previously stated, work enjoyment has been found to influence the amount of time spent at work (Porter, 2004). However, it has been noted that it is not sufficient to just examine number of hours worked when trying to determine workaholism status, as other factors are regarded as more important, including level of work involvement (Machlowitz, 1980; Spence & Robbins, 1992), and underlying motivation (Schaufeli, Taris, & Bakker, 2008). However, it has been demonstrated in a large scale Dutch study (N=7,594) that long working hours are positively related to workaholism (Schaufeli, et al., 2008), and also linked with working during weekends and taking work home (Burke, 1999; Kanai, Wakabayashi, & Fling, 1996; Taris, Schaufeli, & Verhoeven, 2005a). In addition, it has been shown that work enjoyment (labeled passion) and work drive (labeled addiction) were positively correlated with work investment (i.e. work hours, extra hours worked, and job involvement) in both Canadian managers and professionals (N=530) and female psychologists (N=658) in Australia (Burke, 2008).

2.4.2 Job involvement

Greenhaus and Parasuraman (2002) summarized the relevance of social identity theory and role salience with regard to time allocation to life roles. Social identity theory states that social roles are central to a person’s identity (Burke, 1991; Frone, Russell & Cooper, 1995), and that the more salient the role, the more meaning that is derived from that role (Thoits, 1991), and therefore, more time is invested in that role (Burke & Reitzes, 1991; Lobel, 1991). Role salience has also been implicated as an important factor with regard to work-life conflict (Frone & Rice, 1987). See Chapter 4, Section 4.4.2 for a more detailed discussion of the relationship between job involvement and work-life conflict.
Brett & Stroh (2003) have reported that high job involvement predicts long work hours in male managers, and that both male and female managers who reported the longest working hours also reported that they felt alienated from their families. Major et al., (2002) also reported that employees who had high career identity salience worked longer hours. Although Greenhaus and Parasuraman (2002) found no relationship between job involvement and time allocated to work, they did find a relationship between high job involvement and work-life conflict. The research evidence in general suggests that highly job involved workers experience higher levels of work-life conflict, as do workers who engage in long working hours (Eby, et al., 2005).

An older study has reported that academics have high job involvement and that their work forms part of their core identity (Kanungo, 1982a), while a more recent Canadian study of job involvement in academia revealed that high job involvement was linked to long working hours in senior academics (Mantler & Murphy, 2005). The term ‘absorptiveness’ has been put forth as a potential explanation for the long work hours culture within academia, whereby some academics display a very high level of interest and devotion to their work (Bailyn, 1993) which can translate into long hours spent working.

2.4.3 Workload

Work organisation factors have also been identified as contributing to the long hours culture. For example, work overload has been linked to long working hours. (Drew, et al., 2002; Major, Klein, & Erhart, 2002; Wallace, 1997). Work demands can be regarded as the prescribed activities that an employee performs within their role in an organisation (Geurts & Demerouti, 2003). While work overload is regarded as having too much work to do in the time available, it is also related to the number of hours a person works each day (Greenhaus & Parasuraman, 2002). Related to the concept of work overload is work intensity which involves the speed of work conducted (Burchell & Fagan, 2004). Work intensity is associated with work effort (Burke & Fiskensbaum, 2008), defined as “the rate of physical and/or mental input to work tasks performed during the working day…”(Green, 2001, p. 56). Increasing work effort and work intensity are linked to workers having less idle time, having
more responsibility and having to work harder and faster and also having more deadlines (Green & McIntosh, 2001). Also related is the concept of over-working defined as “the cumulative consequences of operating at overcapacity” (Golden & Altman, 2008, p. 65).

European survey data has shown that for 46% of European employees work intensity has been identified as an occupational stressor (EFWLC, 2006), and trends in the data indicate that this tendency is on the increase (EASHW, 2007). Increasing work intensity has been linked with growing stress and musculoskeletal disorder epidemics across Europe (EASHW, 2007). Bunting (2005) argues that overwork and long working hours are becoming the norm rather than the exception in the modern working world, with many employees working more hours than they are contracted for. For example in Ireland two out of three professionals regularly work longer than their contracted hours (Drew, et al., 2002). In many cases there is no additional reward available to the employee for the extra time worked (such as a time in lieu system or overtime payment). These findings are consistent with the general literature in this area which finds that managerial roles in organizations tend to be demanding and time consuming (Brett & Stroh, 2003). Burke & McAteer (2007) propose that working long hours is a prerequisite for achieving senior leadership positions.

Other factors also point to the impact of work overload on working hours and behaviours; for example, ‘lunch hours’ are now estimated to be 27 minutes and there is a lack of uptake of statutory holidays, with only 44% of British workers actually taking the holidays to which they are entitled (Bunting, 2005). Major et al., (2002) found that corporate employees who report having too much to do in too little time tend to work longer hours. High work intensity has also been identified as the strongest predictor of work-life conflict (Skinner & Pocock, 2008), in a national study in Australia (N=887). Greenhaus & Parasuraman (2002) have reported that work overload increased the time allocated to work by both men and women alike. Evidence is available in the literature, which supports a positive relationship between working overtime and highly deman kerstedt et al., 2004; Beckers (2006) postulates
that jobs with heavy workloads may induce overtime, due to a lack of time during the regular working day to complete all one’s duties.

### 2.4.4 Organisational Expectations and Rewards

A number of researchers have highlighted the importance of organisational norms and expectations around working time and attempted to explain how these norms translate into long working hours. Although some employees work long hours voluntarily, it has been noted that some employees work longer hours than they actually wished to work and the number of hours completed was a function of the hours worked by their colleagues (Eastman, 1998). Workers often align their work hours with those of their peers through a process of social comparison and interactions (Brett & Stroh, 2003). Put simply, a worker may observe long working hours in their peers and determine that this is what is expected and thus adjust their own work pattern to come into line with the normative working hours.

Another reason put forth for involuntary engagement in longer work hours is that the worker has conformed to the ideal worker norm (Golden & Altman, 2008). The ‘ideal worker’ is defined as “someone who works at least forty hours a week year round. This ideal-worker norm, framed around the traditional life patterns of men, excludes most mothers of childbearing age” (Williams, 2000, p.2). Therefore, in some organizations, long hours norms may be set by a few individuals; new workers are socialized into these organisational norms (most likely through a process of formal and informal reinforcement), therefore setting the organisational standard around long working hours and presenteeism. Unfortunately, this type of dedication to the job is increasingly problematic for many workers. The ideal worker expectation also fuels the traditional gendered assumption that a person can give this form of dedication to the workplace because there is a partner at home taking care of the family/home domain.

According to Burke & Fiksenbaum (2008) a central issue in the relationship between hours worked and well-being is whether one works long hours out of choice or if one is pressurized into work long hours. Working long hours because of a sense of job or organisational commitment or for more pay may have very different implications than working long hours due to fear of losing one’s job. Nevertheless, in both cases
(i.e., under conditions of either positive or negative reinforcement) one can predict that organisational expectations in relation to working hours will influence worker behavior. Research confirms this prediction. For example, Major et al., (2002) report that work hours are strongly influenced by the organisational work hour expectations communicated to employees.

Another important factor in the development of a long working hours culture is whether or not employees feel rewarded for their long hours. Employees may potentially be ‘seduced’ into working long hours and giving priority to work issues due to the organisational rewards and recognition received (Burke, 2008). These organisational rewards and expectations may be communicated to the employee both formally and informally and eventually lead to organisational norms around working time. Evidence also shows that organisations try to mold their employees to make work their number one priority (Burke, 2008). However, Major et al., (2002) found that organisational rewards were negatively related to hours worked in an industry based sample. Based on their study findings, they recommended that additional research attention be given to the relationship between organisational rewards and working time.

As this review of antecedents shows, a number of personal and organisational characteristics have been linked to long working hours and it is hypothesised in this study that a number of factors combine to influence long working hours of academics, as has been shown previously in a study of corporate employees (Major et al., 2002). Major and colleagues (2002) used structural equation modeling to determine salient predictors of working time, work-life interference and psychological distress. Job involvement, work overload, organisational expectations (around working time), organisational rewards (for long work hours), non-job responsibilities, parental demands, and perceived financial need were included as the predictor variables in the model. It was found that high job involvement, work overload, high organisational expectations around working hours, and perceived financial need were associated with longer work hours, while both organisational rewards and non-job responsibilities predicted shorter working hours. Longer working hours also predicted higher levels of work-family interference, which in turn predicted higher levels of psychological distress. Major et al., (2002) concluded
from their study findings that people worked longer hours when they had strong career identities, had too much to do in too little time on the job, perceived that supervisors expected them to put in the extra work hours and had fewer responsibilities away from the workplace.

2.4.5 Gender differences in antecedents of long working hours

Some gender differences have also been reported in factors that impact on long working hours. For example, in a study of American managers it was found that the long work hours of male managers was explained by the financial and psychological rewards (i.e. accomplishment and self-esteem) they received. When the rewards for long hours were held constant, it was found that male managers who worked the longest hours were the most involved in their work. For female managers in the same study, their long working hours were explained by multiple factors including, financial rewards, social contagion (i.e. increasing work hours as a result of social comparisons with co-workers) and trading off their leisure time in favour of earning money (Brett & Stroh, 2003). Interestingly, it was found that female workers who spent extremely long hours at work did not receive any psychological benefits.

It has been argued that women working in organisations where long working hours are expected are at a disadvantage in comparison to their male co-workers, because women often have more home and family responsibilities and do not have the same available free time as men (Rutherford, 2001). It has been found that women are more negatively affected by long working hour expectations than are men. Specifically, it was reported that, while work-life conflict mediated the relationship between long working hours expectations and emotional exhaustion in both men and women, there was also a direct effect of long working hour expectations on emotional exhaustion in women, but not men (Posig & Kickul, 2004).

The literature on gender differences in workaholism is inconsistent and hampered by multiple definitions and methods of measuring workaholism. For example, Burke (1999) found no significant differences between male and female MBA graduates using Spence & Robbins’ measurement scale of workaholism, while Schaufeli et al., (2008) found that men scored higher for workaholism than women in a Dutch study, using the same measure. When workaholism was measured using hours worked per
week as their main indicator of workaholism, it was also found to be more prevalent in men (Harpaz & Snir, 2003). Based on the results of their research, both Burgess et al., (2006) and Russo & Waters (2006) have stated that if a relationship exists between gender and workaholism, it is a weak relationship (Aziz & Cunningham, 2008). However, relatively few studies have analysed gender as a variable in workaholism research. Therefore, exploring gender differences in workaholism is important, particularly, in relation to different work settings and occupations.

Spence and Robbins (1992) noted in their early study of workaholism that women (social workers in academic positions) scored higher than men on feeling driven to work, work enjoyment, job involvement and time commitment. Their findings suggest that women may be more prone to workaholism than men. It has been proposed that women working in competitive environments (such as academia) may have a greater tendency toward workaholism (Aziz & Cunningham, 2008).

2.5 Health and psychosocial effects of long work hours

A number of theories have been postulated as potential explanations for the negative relationship between long work hours and health (Burke & McAteer, 2007). One hypothesis is that working long hours negatively affect the cardiovascular system through chronic exposure to increases in blood pressure and heart rate (Burke & Fiksenbaum, 2008). A second hypothesis is that working long hours leads to negative health behaviours e.g. unhealthy diet, lack of exercise and smoking (Van der Hulst, 2003). A third hypothesis is that long working hours do not leave sufficient recovery time from the demands of the day (van der Hulst, 2003), as predicted by the Effort-Recovery Theory (Meijman & Mulder, 1998). The lack of recovery theory in relation to poor health outcomes has received support in the literature. For example, high need for recovery has been shown to increase the risk of coronary heart disease in a large scale prospective study (van Amelsvoort, Kant, Bultmann, & Waen, 2003).

Almost 20 years ago it was concluded that working over 48-56 hours per week is harmful (Folkard, 1994). Sparks et al., (1997) completed a review of the existing literature on the effects of hours of work on health, using both qualitative and quantitative analysis in order to examine the relationship between the length of the working week and health symptoms. The meta-analysis of 19 studies examined the
relationship between hours worked and health outcomes. In addition a qualitative analysis of 12 studies was completed. The results of the meta-analyses showed a small but significant positive relationship between longer hours of work and increased symptoms of ill-health, providing quantitative support for the conclusion drawn from the qualitative analysis that working long hours is detrimental to one’s health. However, Sparks et al., (1997) recommended adopting a cautious stance in relation to this conclusion because of a number of problems identified in their analysis. They noted that there was a paucity of studies that examine the direct effects of working hours on health symptoms. Furthermore the studies in the extant literature at that time differed considerably in terms of the health outcomes measured, which made comparisons amongst studies difficult. In particular, much of the research on working hours does not differentiate between long working hours and shiftwork, and long working hours and work overload, which may significantly affect the conclusions of meta-analytical review studies that combine these different factors in different ways in the prediction of health outcomes.

A number of reviews and meta-analyses have since been published and the general conclusion is that working long hours is potentially harmful to worker health (Caruso, Hitchcock, Dick, Russo, & Schmitt, 2004; Harrington, 2001; Spurgeon, 2003; van der Hulst, 2003; White & Beswick, 2003). Harma (2006, p. 504) summarised the situation as follows: “There is evidence that continuously worked long hours (like 50 hours or more a week) or long total work hours (work + home) are associated with objective and self-rated health problems, sickness absences and fatigue”. Contrary to this statement, it was found in a large scale Finnish study of long working hours (N=25,703 public sector workers) that long work hours were associated with lower rates of sickness absence. However, it was also found that long domestic hours and total work hours were associated with higher rates of medically certified sickness absence in both males and females (Ala-Mursula et al., 2006).

Specific health findings associated with long work hours have been documented in the literature; it has been reported that research into overtime and extended work schedules show an increased risk of hypertension and cardiovascular disease (Sparks, Cooper, Fried, & Shirom, 1997). Similar levels of support are available in the literature for the relationship between long working hours and fatigue and self-rated
health problems (van der Hulst, 2003). Evidence also points to a relationship between long working hours in the development of specific illnesses, for example diabetes (Kawakami, Araki, Takatsuka, Shimazu, & Ishibashi, 1999). Acute health problems (i.e. occupational injuries) can also be linked to long working hours (Dembe, Erickson, Delbos, & Banks, 2005). Harma (2006, p.504) reported that significant evidence exists to show that “both daily and weekly work hours are directly related to an increase in the rate of occupational accidents and injuries”. It has been reported that the health effects associated with working long hours may be more severe for female workers (Alfredsson, Spetz, & Theorell, 1985). However, the reason for this gender difference in health outcomes is not fully understood (Ala-Mursula et al., 2006).

Sparks et al., (1997) reported positive correlations between hours worked and a number of components of psychological health, e.g. stress, relationship problems, anxiety, depression and social dissatisfaction. Additional studies have also examined the relationship between long working hours and psychological well-being, for example, in a study using self-reported stress levels, it was found that medical and dental professionals working in excess of 48 hours per week reported higher levels of work related stress than professionals who worked less than 48 hours per week (Kirkcaldy, Trimpop, & Cooper, 1997). Anxiety and depression have also been identified as adverse effects associated with working long hours (Harrington, 2001). In a study of German managers, it was reported that persons who worked more than 48 hours per week were more likely to worry than those who worked fewer hours (Kirkcaldy, Levine, & Shephard, 2000). An Australian study of long working hours and well-being in fathers reported that men working in excess of 48 hours per week reported a lower sense of vitality and more negative effects of work on family than fathers working between 35-40 hours per week (Weston, Gray, Qu, & Stanton, 2004).

However, it has been noted that studies of employee distress as a result of work hours have yielded inconsistent results (Barnett, 1998). Burke & Fiskenbaum (2008) note that the relationship between working hours and well-being is complex due to the many factors which can moderate this relationship e.g. reasons for working long hours, work schedule autonomy (Tucker & Rutherford, 2005) and money (Brett &
Barnett (1998) further cautions that the effects of work hours may be non-linear and that negative effects associated with long hours may be an issue only for those who work extremely long hours. Greenhaus and Parasuraman (2002) conducted a study with dual-earner couples, which investigated the relationship between working time and stress. It was reported that the time allocated to work had no effect on life stress (for both men and women), but that work-family conflict had a direct effect on stress. They concluded that job demands/intensity impact working time decisions, but it is the conflict between juggling the work and family roles, rather than the amount of time per se dedicated to each role, that causes stress.

There is a large body of research evidence which provides support to the argument that engaging in very long working hours is detrimental to family-related tasks and activities (EFILWC, 2004) and is associated with more work-family conflict (Barnett & Gareis, 2002; Crouter, Bumpus, Maguire, & McHale, 1999; Geurts, Beckers, Taris, Komper, & Smulders, 2009; Geurts & Demerouti, 2003; Jacobs & Gerson, 2004; van der Lippe, Jager, & Kops, 2006; Wharton & Blair-Loy, 2002). For example, if a person spends excessive time in their work role, they may experience ‘time-based work-life conflict’ due to insufficient time to allocate to their home/family role, and also have insufficient time to rest and recover from work. This relationship between length of working hours and potential for ‘time-based conflict’ has been supported by Major et al., (2002). Another study has shown that long regular work time, overtime hours and commute time were positively related to work-life conflict (Jansen, Kant, Nijhuis, Swaen, & Kristensen, 2004). Van Hooff et al., (2007) have also reported from a diary study that working overtime in the evenings was associated with higher levels of work-life conflict in both men and women. A study of male and female managers reported that men and women who worked the longest hours reported feeling alienated from their families and male managers who worked the longest hours also reported high levels of work-to-family stress (Brett & Stroh, 2003).

The findings from two meta-analytic reviews also support a positive relationship between long work hours and work-life conflict (Byron, 2005; Michel, Kotrba, Mitchelson, Clark, & Baltes, 2011). Byron (2005) reviewed over 60 studies of work-family conflict in order to assess the impact of work, non-work, demographic and
individual factors on work-interference with family and family-interference with work. The work variables included in the review were: hours spent at work, job involvement, work support, schedule flexibility and job stress. The analysis revealed that all the job variables had a greater impact on work-interfering with family than on family-interfering with work. Employees who were highly job involved, had higher levels of job stress or worked longer hours had more work-interfering with family than family-interfering with work and employees with lower levels of schedule flexibility and lower levels of co-worker or supervisor support also reported greater work-family interference than family-work interference. Michel et al., (2011) in their meta-analytic review of 142 studies noted that their study differed from Byron (2005) in a number of ways, for example, they narrowed their focus to studies which included work-family conflict measures (therefore excluding studies which employed work-life conflict measures) and conducted a more finely grained analysis of the impact of job stressors on work-family conflict. Their review also included studies published after Byron (2005). Michel et al. (2011) included four broad categories of work domain variables in their review: role stressors (3 variables), role involvement (2 variables), social support (3 variables) and work characteristics (8 variables). Work time demands, defined as the amount of time devoted to the work role was included in the role stressor category as a subcomponent of the role overload variable. It was found that work time demands had a moderate relationship with work-family conflict.

2.6 Antecedents and consequences of long work hours in academia

According to Gambles et al., (2006) evidence from a number of sources shows that workers in control of their own work hours, with the ability to work flexibly (as in the case of academics) are under most pressure and tend in fact to work more hours rather than fewer hours. Research to date on working hours in academia shows that academics are engaged in long working hours. For example, it was reported from a survey of 1000 British university and college lecturers that lecturers worked an average of 44-47 hours per week, with some lecturers working between 46 and 55 hours per week on and off site each week (Sparks et al., 1997). More recently it has been reported that the average working week for American and British academics is 55 hours (O'Laughlin & Bischoff, 2005; Tight, 2010). The minimum working week has been estimated at 45 hours per week in one study (Kinman & Jones, 2003) and
55 hours per week in another (Gornall & Salisbury, 2012). Misra et al., (2012, p. 318) noted “exceptionally long hours” worked by (N=349) American academics, with the average being 66 hours per week and the average time spent at the weekend working was 12 hours. Academics consistently rank long working hours as a major source of dissatisfaction (Winefield et al., 2008). However, there is no published data relating to Irish academics working time, to date.

The work hours of academics with children or other dependents may be constrained, as shown in a study of gender inequality in academic employment. It was reported that almost half of female academic participants (in a single institution) with dependents reported that they had to reduce their hours of work or stop work (Probert, 2005). Similarly 40% of male academics with caring responsibilities also reported cutting back on their work. Women academics in particular reported that when it came to cutting back on work, that research output was most often the work responsibility that was put off. However, Burke et al., (2008) have reported that academics who regarded their organisations as not supportive of work-life balance worked longer hours than academics who regarded their organisations as supportive.

For academics, their working hours are largely self-regulated, therefore, new entrants to this work environment must decide on appropriate working hours. If Latane’s social contagion concept (Brett & Stroh, 2003) is applied to the university setting, it means that through a process of social comparison and interactions, most workers align their work hours to those of their peers, further reinforcing the long hours culture.

As previously noted, employees with too much to do, tend to work longer hours, and work overload is commonly identified as an occupational stressor in academia. For example, it has been reported in Britain, that many academics regard their workloads as unmanageable (Kinman & Jones, 2003). This observation of having too much to do and too little time has also been noted in a study of Irish academics (Hodgins et al., 2005). A number of factors have influenced the intensification of academic work, including requirements to increase efficiency from management and governments, increasing student numbers without increasing resources, multiple and sometimes conflicting demands upon the academic, and the implementation of quality and
assessment methods in order to make academic work more transparent and measurable (Ogbonna & Harris, 2004). Emotional labour has also increased due to heightened intensification of the academic labour process (Burke & Fiksenbaum, 2008).

Ylijoki (2013) identified a number of internal and external changes in universities which have resulted in academic work speeding up. For example, research work reliant on external funding is becoming more prevalent, however, external research requires work in the first instance to tender for the project and externally funded projects typically have short turnaround times. Managerial changes which attempt to make academic work more transparent have produced more work, particularly paperwork (e.g. strategic plans, mission statements, evaluations, reviews, audits, etc). Academics are under pressure to achieve more (e.g. more publications, higher ranked journals, more networking, more research students) and aim for better quality in order to have a chance at obtaining scarce resources e.g. funding, permanent positions. Scientific advances are rapid in some academic fields therefore; academics may struggle to keep up to date with the latest research. Furthermore, technological developments have also increased the pace of academic work, as pointed out by Ylijoki (2013) research work which used to take a month; can now be done in a day due to technological advances.

It has been stated that “...for an academic to work less than 40 hours a week is to be underemployed” (Thorsen, 1996, p.474), despite acknowledging the negative relationship between long work hours and stress. Bailyn (2003) notes that one reason for the high demands upon academics is having to complete multiple roles. Academics must juggle teaching duties, research duties, administration and community responsibilities. She notes that part of the problem for academics is the timeline between the demands placed upon them and their outputs. Considerable time has to be spent developing research ideas, groups and executing projects, developing new teaching materials and methods of assessment etc., all requiring significant time before the results are observable.

Although there is evidence of long working hours and heavy work demands in the university setting, academics also enjoy a large degree of autonomy over their work
and job control, this has been found to be the case in a single institution study of Irish academics (Hodgins et al., 2005). And it has been reported that job control may have a protective element, in that it acts as a buffer against the effects of long working hours (Geurts, et al., 2009).

Hodgins et al., (2005) have reported high levels of job involvement in a single institution qualitative study of work-life conflict in Irish academics. However, the study did not provide any quantitative estimate of the strength of the relation between job involvement, work hours and work-life conflict. Kanungo (1982a) reported that academics have high job involvement and that their work forms part of their core identity. A Canadian study of job involvement in academia revealed that high job involvement was linked to long working hours in senior academics (Mantler & Murphy, 2005).

Spence and Robbins (1992) conducted their initial work on the measurement of workaholism on academics. One of the reasons for using this group of workers was due to the fact that Spence and Robbins (p. 163) considered the work of the academic as open-ended, that is “their duties are not restricted to set times and places, and there are essentially no limits to the amount of job related activities that they could take on, except those imposed by themselves.” Furthermore, it has been proposed that women working in competitive environments (such as academia) may have a greater tendency toward workaholism (Aziz & Cunningham, 2008; Spence & Robbins, 1992). Spence & Robbins (1992) reported that female academics reported higher work drive, work enjoyment, job stress, job involvement and time commitment than male academics. A study of gender and workaholism in academia in New Zealand (N=331) reported that female academics reported significantly higher levels of drive than male academics (Smith, 2011). Burke et al., (2008) conducted a study on workaholism in Turkish academics and reported that academics who were high on work drive, work enjoyment and work involvement worked longer hours than academics who were lower on these three elements of workaholism.
Chapter Summary

Irish workers (particularly males) work long hours, while females tend to work shorter hours in the workplace but longer hours in the home. It is not known if this pattern of working hours applies to the Irish academic setting, but based on the work patterns identified in academic institutes in other countries, a long work hours culture within the Irish university setting is expected. It has been shown that numerous factors (individual, organisational and personal) have the potential to impact on working hours and that some gender differences have been observed in previous studies, therefore it is important to determine the significance of these variables in influencing long working hours of Irish academics, and in turn, to determine the outcomes associated with long working hours.
Chapter 3 - Occupational Stress in Academia

In this chapter two theories of occupational stress are outlined and examined with regard to the academic profession. The literature on occupational stress in academia is reviewed, and the relationship between work-life conflict and occupational stress in academia is examined. Gender differences and health outcomes associated with stress in academia are also reviewed.

3.1 Occupational Stress

Occupational stress is the second most reported (work-related) health issue in Europe, affecting 22% of European workers (European Agency for Safety and Health at Work, 2013). The European Agency for Safety and Health at Work (EASHW) have defined occupational stress as “a pattern of emotional, cognitive, behavioural and physiological reactions to adverse and harmful aspects of work content, work organization and the working environment. It is a state characterised by high levels of arousal and distress and often by feelings of not coping” (EASHW, 2002, p. 3). The psychological approach to stress views work stress as a dynamic interaction between workers and their environment (Cox & Griffiths, 2005). The main psychological approaches and models of occupational stress are divided into interactional theories and transactional theories (Dollard, 2003). The job demand-control model is an example of an interactional theory, focusing on the structural/organisational aspects of work, while the effort-reward imbalance model is an example of a transactional theory, focusing on the interaction between environmental constraints and the person’s coping resources (Dollard, 2003). In this chapter, the job-demand control model (Karasek, 1979) and the effort-reward imbalance model (Siegrist, 1996) are reviewed and discussed in light of the research on occupational stress in academia.

For stress to occur one must be exposed to stressors. Stressors can be divided into acute and chronic stressor categories. Acute stressors are short lived and may be once off incidents within the workplace (e.g. a computer crash and loss of 2 hours work), whereas chronic stressors are more permanent and may have to be endured on a daily basis by the affected person (e.g. work load issues, work-life conflict). In chronic
stress conditions, psychological strain can occur, which has been defined as a reaction to the condition of stress, and may manifest itself in physiological symptoms (e.g. insomnia, gastrointestinal complaints), psychological reactions (e.g. anxiety, difficulties concentrating) and behavioural effects (i.e. negative coping behaviours, such as increased consumption of alcohol, cigarettes, drug-use) (Dollard, 2003). Psychological strain (also referred to in some studies as psychological well-being) is often measured in occupational stress studies by using physical symptom (known to be associated with stress) inventories (Winefield et al., 2008), the General Health Questionnaire-12 (Goldberg, 1972), the ASSET Psychological Well-being subscale (Cartwright & Cooper, 2002), emotional exhaustion measures (Maslach & Jackson, 1981) and the General Well-being Questionnaire (Cox, Thirlaway, Gotts, & Cox, 1983). While many of the antecedents and consequences of psychological strain have also been examined in the occupational stress and health literature (see sections 3.4. and 3.5), more research is needed to understand causes and consequences of psychological strain in academics and gender differences in this context.

Burnout is also a commonly studied form of psychological strain (Beehr & Glazer, 2005) and has been defined as “a prolonged response to chronic emotional and interpersonal stressors on the job” (Maslach, Schaufeli & Leiter, 2001, p.397). Burnout results from job stress, whereby one’s ability to cope with work-related stressors is expended (Beehr & Glazer, 2005). According to Maslach & Jackson (1981) burnout is comprised of three dimensions; emotional exhaustion i.e. a sense that one’s emotional energies are drained (Maslach et al., 1996); depersonalisation i.e. distancing oneself from co-workers and clients (Purvanova & Muros, 2010) and diminished personal accomplishment, i.e. negatively evaluating one’s work accomplishments (Lackritz, 2004). However, emotional exhaustion and depersonalisation are now viewed as the core components of burnout (Purvanova & Muros, 2010). The experience of burnout is associated with negative outcomes for individuals, such as reduced organisational commitment, increased turnover and lower job performance (Croppanzano, Goldman & Benson, 2005). Lackritz (2004) found that 20% of academics reported the highest levels of burnout in a single institution study (N=265). In addition it was found that female academics reported higher levels of emotional exhaustion and male academics reporting higher levels of depersonalisation, which is in line with the findings on gender differences within the
3.2 Theories of Occupational Stress

3.2.1. Job Demand – Control –Support (JDCS) Model

The job-demand-control (JDC) model of occupational stress (Karasek, 1979) is regarded as one of the most influential models in stress research (van der Doef & Maes, 1999). Karasek (1979) identified two crucial job elements in the workplace: job demands and job control (also known as decision latitude). Job demands refer to workload and have been operationalised mainly in terms of time pressure and role conflict (Karasek, 1985; Van der Doef & Maes, 1999). Job control refers to the ability of the person to control their work activities. The JDC model states that jobs high in control should not be stressful, even if the jobs are demanding; these are known as active jobs. Stressful jobs on the other hand are characterised by high demand and low control. Low demand and low control jobs are considered passive and low demand jobs with high decision latitude are considered to be low strain (see Figure 3.1). It is often assumed anecdotally that academic work is characterized by a combination of high work demands and a significant degree of work autonomy and self-regulation, which would categorise academics within the active job category (Hodgins, et al., 2005). However, this anecdotal view provides insufficient understanding of the complexities of academic work and a closer examination of the literature on work environments and the nature of academic work in particular reveals a more complex relationship between autonomy, work demands, self-regulation, and psychological strain.
Notably, the JDC model was augmented by the addition of social support in the 1980s (Johnson & Hall, 1988; Johnson, Hall, & Theorell, 1989) which resulted in the creation of the Job Demand-Control Support Model. Under the newly formulated model, high demand jobs with low control and low supervisor/co-worker support are high risk for the development of either psychological or physical disorders (labeled high strain isolated jobs) according to Dollard (2003). Kinman & Jones (2008b) have noted that organisational support in academia is associated with better health and greater job satisfaction and Hodgins et al., (2005) noted in a qualitative study that the role of the supervisor was important in the context of work-life conflict.

This model of stress is important to this study because traditionally academics, by the nature of their jobs, commanded reasonably high levels of job control and could determine when and how work was done, in effect being their own task master. Hodgins et al., (2005) reported high levels of job control in a single institution study of Irish academics and although reported work demands were high, the sample did not report high stress levels, presumably because the high demands plus high job control equated to an active job as opposed to a stressful job. However, the JDC model has been used to explain increasing stress levels in academia as follows; although the academic role is normally labeled an ‘active job’, not likely to induce
stress because of high levels of control, currently in the third level sector increasing demands (e.g. pressure to publish and obtain research funding, increased levels of scrutiny, increasing student numbers) are being made on academics, but control is eroding (e.g. lack of tenure, fixed term academic contracts, required office hours), hence resulting in high stress conditions under the JDC model (Winefield, 2003). Indeed, this pattern of increasing work demands and increasing work intensity in academic work was highlighted in Chapter 2. Also, while academics may report high levels of autonomy and control, organisational expectations and supervisor expectations may impact the way in which autonomy and control are experienced. As a consequence, the JDC model may provide an oversimplified view of the potentially complex relationship between job demands and control and psychological wellbeing. Therefore, in this study, job control and work demands are included as variables of interest.

3.2.2 Effort – Reward Imbalance (ERI) Model

The ERI model of stress (Siegrist, 1996) is considered sociological in nature and adopts a transactional view of the stress-strain relationship. It proposes that negative emotions and psychological strain occurs if there is a perceived imbalance between the efforts of the employee and the rewards they receive. From an occupational perspective, workers are rewarded via three different systems: money, esteem and career opportunities. It is also posited that over-committed employees experience effort-reward imbalance more frequently (Kinman & Jones, 2008). Over-commitment is defined as “a set of attitudes, behaviours and emotions reflecting excessive striving in combination with a strong desire of being approved and esteemed” (deJonge, Bosma, Peter, & Siegrist, 2000, p. 1381). Therefore the ERI model addresses both intrinsic (over-commitment) and extrinsic factors (efforts and rewards) that determine whether or not imbalance is perceived. It differs significantly from Karasek’s model with the introduction of a personal factor into the stress-strain process (See Figure 3.2) and taking into account employment conditions (e.g. pay, job security, promotion opportunities) which can affect well-being (Kinman & Jones, 2008).
High effort and low reward situations are considered a risk factor for physical and psychological health problems, including cardiovascular health, subjective health, mild psychiatric disorders and reported symptoms (deJonge et al., 2000). It has been argued that the ERI model is more suitable for analysing stress in contemporary workplaces than the JDC model and this model is being increasingly used in the field of occupational health psychology (Kinman & Jones, 2008). Kinman & Jones (2008) highlighted the importance of the ERI model when examining work-life conflict in academics; in their study they reported that academics who felt a lack of reward for their efforts reported more work-life conflict, with over-committed employees being significantly more likely to do so.

3.3 Occupational stress and strain in academia

Research suggests that academic work is becoming faster paced and therefore more demanding (Ylijoki, 2013). Although historically regarded as a low stress occupation (French, Caplan, & Harrisson, 1982), levels of academic stress are increasing over time (Winefield, 2003). Factors related to the increasing levels of stress have been proposed, including: increased student numbers (Akerlind & McAlpine, 2009), increased emphasis on research and the need to continuously publish research findings in a ‘publish or perish’ culture, reduction in salaries, less
job security given that many academic positions are untenured, increasing pressure to attract funding (Winefield, 2003; Winefield et al., 2008). (See also section 3.5).

As stated in the introduction, the population of interest in the current study is Irish academics. Although it is acknowledged that there have been calls to extend occupational stress research in the university sector to include non-academic university workers (Gillespie et al., 2001), evidence highlights the importance of further analysing the unique experience of academics (See also section 1.1). As previously stated, work-related stress levels experienced by both academic university staff and general university staff have been compared in numerous studies and these studies have all found that academic staff report higher stress levels than the non-academic staff (Gillespie et al., 2001; Tytherleigh et al., 2005; Winefield et al., 2003; Winefield & Jarrett, 2001). For example, Winefield et al., (2003) found that academic staff tended to fare worse than general university staff on the GHQ-12 measure of psychological strain. Furthermore, academics were also found to have the lowest levels of job satisfaction in comparison with the general staff. In a qualitative (focus group) study of academic stressors in an Australian context, Gillespie et al., (2001) noted that both academic and general staff reported a dramatic increase in stress during the previous five years, with the academic staff reporting higher levels of stress than general staff.

In a study of UK based academic staff, Abouserie (1996) found that the majority of academic staff fell into the moderate or seriously stressed categories (74.1% and 14.7% respectively). It was suggested that the almost 15% of academic staff that reported being seriously stressed may in fact have been in need of help, and could be struggling to fulfill their duties as a result of work related stress. Notably, Kinman (1998) found that in a sample of 782 academics, 52% indicated that, if given the opportunity to start afresh in their careers, they would not choose to work in higher education.

The concern with regard to stress levels in academia is further highlighted when reported stress levels are compared to stress levels in other professions. For example, in one of the first comparative stress studies, it was found that university employees (N=1588) reported higher overall levels of job stress and significantly lower
perceived organisational support than either corporate (N=450) or military personnel (N=393) (Spielberger & Reheiser, 1994). A more recent British study compared 26 occupational groups on the ASSET stress measure and specifically investigated levels of psychological health, physical health and job satisfaction (Johnson, et al., 2005). A total of 1051 lecturing staff took part in this study. Lecturers were found to have better than average scores on physical health and job satisfaction, but worse than average scores on psychological health when compared with normative scores on the ASSET measure. Out of the 26 occupational groups, lecturers were ranked sixth highest on the psychological health measure (with higher scores indicating poorer functioning).

Additional data from Britain also shows that academics reported lower psychological well-being when compared with other professions (Kinman & Jones, 2004) and when compared to the general public and normative data (Kinman, 2001; Kinman & Jones, 2003). Winefield et al., (2003) have also reported that psychological distress as measured by the GHQ-12 was much higher in their sample of Australian academic staff in comparison to scores obtained in a national survey of mental health and well-being (Andrews, Hall, Teeson, & Henderson, 1999). Cantano et al., (2010) have reported that Canadian academics had a higher incidence of high stress levels than other white collar workers. It has been suggested that university lecturers and research staff are now experiencing similar pressures to professionals working in large organizations (Thorsen, 1996); however, occupational stress levels within academia have been found in a number of studies to be higher than levels reported in other professions.

A number of studies of academic stress have been completed in countries throughout the world including: Canada (Cantano et al., 2010), USA (Hogan, Carlson, & Dua, 2002), UK (Hind & Doyle, 1996; Kinman, 1998; Kinman & Jones, 2004), New Zealand (Boyd & Wylie, 1994), Australia (Winefield et al., 2008; Winefield et al., 2003), the Netherlands (Taris, Schreurs, & Van Iersel-Van Silfhout, 2001) and Hong Kong (Leung et al., 2000). In Ireland, at least two universities have conducted internal research into specific occupational stressors, i.e. work-life balance issues (Coughlan, 2005; Hodgins et al., 2005); however, the findings have not been published in peer reviewed journals. Between country variability in reported
occupational stress levels has been identified (Winefield, 2000). For example, Kinman & Jones (2004) reported higher levels of psychological distress (as measured by the GHQ-12) in British academics than in Australian academics (Winefield et al., 2003). These differences may reflect different operating, structural, and cultural factors which may impact upon academic work practices. Therefore, it is important to continue to advance research in this area and investigate occupational stressors within the Irish university sector and use a combination of quantitative and qualitative research methodologies to determine the potentially idiosyncratic stress related issues for the Irish institutions.

Existing studies differ in terms of their sample populations, with some studies using multiple institutes in an attempt to achieve more generalizable results (Kinman & Jones, 2004; Kinman & Jones, 1998; Winefield et al., 2003) while others have employed single institution studies (Abouserie, 1996; Hodgins et al., 2005; Hogan et al., 2002). Almost all studies to date have used the questionnaire survey approach to determine occupational stress levels at a specific point in time. However, some studies have used longitudinal design (Winefield et al., 2008; Winefield et al., 2003), while others have used qualitative methodologies e.g. focus groups (Gillespie et al., 2001).

3.4 Stress related health outcomes in academia

Research in the field of occupational stress suggests that high levels of unmanaged stress cause stress-related illness, absenteeism and staff turnover (Cooper & Cartwright, 1994). The potential effects of work related stress on academics can be grouped into the following categories: cognitive (e.g. impaired memory, lower levels of creativity), behavioural (e.g. absenteeism, poor time management), physical (e.g. headaches, digestive disorders) and psychological (e.g. depression, anxiety, low self-esteem) (Kinman, 2001). In a study of 728 British academics, a quarter reported having suffered from a stress-related illness within the past year that required them to take time off work. Illnesses reported included migraine, high blood pressure, stomach ulcers and recurrent viral infections (Kinman & Jones, 2003). Occupational stress and work-life conflict are also linked to increased alcohol consumption (Jones, Kinman, & Payne, 2006). In a union survey of 1000 British third level lecturers, eighty percent of full time lecturers reported unacceptable stress levels and
complained of insomnia and exhaustion (Sparks et al., 1997). Increased conflict, constant exhaustion, anti-social feelings and poor communication were all reported due to the impact of stress in an Australian survey of 9000 university staff (Winefield, et al., 2003).

Gillespie et al., (2001) investigated both professional and personal consequences of occupational stress in university staff. Employees reported both physical and psychological health problems as a result of occupational stress. Physical health effects included: headaches and migraines, sleep disorders, back and neck pain, constant muscle tension, weight loss or gain, skin disorders, heart disorders, hypertension and lowered immunity to colds and viruses. The psychological problems identified included: feelings of anxiety, depression, burnout, anger, irritability, helplessness, being overwhelmed, forgetfulness, inability to switch off and frustration. The professional impacts included negative effects on job performance, interpersonal work relationships, commitment to the university and extra-role performance. This study included both academic and non-academic university employees, therefore, the findings must be interpreted cautiously with regard to academic workers.

Occupational stress is associated with changes in levels of general malaise (Cox & Griffin, 2005) and this may be reflected as a pool of signs and symptoms. Measurement of self-reported signs and symptoms of ill-health therefore can be used to indicate sub-optimal health and/or levels of well-being (i.e. the person’s experience of their health) (Cox & Griffiths, 2005). Winefield et al., (2008) have noted their concern in relation to the levels of stress related ill-health in Australian academics. They measured levels of stress-related symptoms (e.g. headaches, muscle pain, breathing problems) and stress-related medical conditions (e.g. migraine, coronary heart disease) and found a number of health symptoms and medical conditions were significantly associated with work stressors. It was concluded that the physical health of academics may be affected by work-related stress and this may have further consequences in terms of work performance and absenteeism.
3.5 Occupational stressors in academia

A UK based study of occupational stress in academics found that academic staff rated work as the most significant cause of stress in their lives (Abouserie, 1996). Specific sources of stress for academics identified in this study included; conducting research, time constraints, relationships with colleagues, teaching, administration and bureaucracy, and students demands. Other early studies of occupational stressors in academia also identified issues such as workload, deadlines and demands (Boyd & Wylie, 1994), securing financial support for research, inadequate time to keep up to date, inadequate salary and work-life conflict (Gmelch, Wilke, & Lovrich, 1986; Hind & Doyle, 1996) as significant stressors for large proportions of surveyed academics. In a more recent British study, Kinman & Jones (2003) identified seven major stressors: work-life conflict, professional constraints (e.g. lack of opportunity for promotion, training), student issues (e.g. increasing student numbers), time demands, professional demands (e.g. increasing demands over time) and professional supports (e.g. fewer resources, lack of administrative support).

In a study of American academics, working overtime was the most frequently reported stressor, followed by frequent interruptions and meeting deadlines (Hogan et al., 2002). As shown in Chapter 2, the working hours of American academics are long with the average at 55 hours per week (Gornall & Salisbury, 2012). Kinman & Jones (2003) also identified time demands as a significant stressor for British academics and noted that just over half (53%) of academics felt that their workloads were unmanageable, and 72% reported that their work was too rushed. Difficulty balancing competing work demands was also highlighted in relation to time demands. Trying to combine the demands of both teaching and research (Taris et al., 2001) has also been identified as a significant stressor for Dutch academics.

In a study of Hong Kong academic staff, the two strongest predictors of distress were perceived organisational practices (e.g. role ambiguity, conflicting demands, lack of support) and work-life conflict. (Leung et al., 2000). They noted that it was not uncommon for lecturing staff to bring work home and work during holidays, which may have lead to family difficulties and work-life conflict. In addition, Cantano et al., (2011) in a national Canadian study of academics (N=1440) identified five high ranking stressors, these were: workload, role conflict, work-life conflict,
administrative unfairness and unfairness in relation to rewards. It was noted in this study that only work-life conflict significantly predicted four of the five outcome measures (i.e., job satisfaction, psychological strain, physical strain and positive well-being). See Chapter 4, Section 4.4 for more details on the outcomes associated with work-life conflict.

Using a qualitative design employing focus groups, Gillespie et al., (2001) identified five main sources of stress for both academic and general university staff. They were: insufficient funding and resources, work overload, poor management practice, job insecurity, and insufficient recognition and reward. These sources of stress were subsequently confirmed by Winefield et al., (2003), when 9000 university staff were surveyed.

Notably, many studies examining sources of occupational stress in academia are based on reports of perceived stressors. Increasing student numbers are one objective measure of occupational stress and student to staff ratios are reportedly deteriorating in numerous countries, including the UK, Australia and New Zealand (Winefield, 2003). Irish statistics support a similar increasing trend, with 65,112 students attending university in Ireland in 2000/2001, and 89,273 attending in 2010/2011 (Department of Education and Skills, 2011). Winefield (2000) has suggested that increasing student numbers implies increasing workload, and that this is reflected in studies of occupational stress in academia in the form of complaints of insufficient time to conduct work to an acceptable level, for example, see (Boyd & Wylie, 1994). More recently, Hodgins et al., (2005) noted in their focus group study that the issue of academic work overload was highlighted and specific references were made with regard to the need to improve staff-student ratios. Furthermore, Kinman & Jones (2004) reported that 74% of academics stated that their pace of work was too rushed.

A stressor that may be unique to academia is the “unbounded nature of the academic career” (Anderson, Morgan & Wilson, 2002), which can be explained with reference to the multiple demands placed on academics in order to fulfill their role. Fisher (1994) has noted that academics are expected to teach, conduct tutorials, labs, and seminars while also being expected to carry out their research, seek research funding and publish extensively. In a comparison of the effect of different occupational roles
on employees’ private lives it was concluded that the role of the university academic is one of the more psychologically difficult (Bailyn, 1993), again due to the open-ended nature of academic work and the multiple demands placed on academics. Thus the unbounded nature of academic work may be one of the reasons why academics may get drawn into a pattern of working long hours that cross both the work and home domains, potentially resulting in work-life conflict and increased psychological strain if boundaries and work hours are not carefully managed. What has not been fully elucidated to date is the role that recovery and detachment from work play in counteracting psychological strain in demanding academic environments. See Chapter 5 for greater details on recovery and detachment from work.

Stress levels within academia have also been shown to be related to levels of work enjoyment (an element of workaholism). In a study of the antecedents and consequences of workaholism in Turkish academic staff (N=406) across multiple institutes, it was reported that academics who reported higher levels of work enjoyment reported higher levels of emotional well-being, while academics who were high on work drive but low on work enjoyment (workaholics) reported higher levels of job stress (Burke, Koyuncu, & Fiskenbaum, 2008).

3.6 Work-life conflict and stress in academia

The relationship between work stress and work-life conflict in academia has been explained with reference to the rational model of work-life conflict (O’ Laughlin & Bischoff, 2005). The rational model of work-life conflict argues that the greater the time demands associated with a role (in this case the work role), the more potential there is for strain in the opposing role/domain (Greenhaus & Beutell, 1985). Given that the reported average working week for academics is between 45-55 hours per week (Misra et al., 2012; O’ Laughlin & Bischoff, 2005; Tight, 2010) a lack of time to dedicate to the home role and personal recovery may be an important factor in the development of stress. O’ Laughlin & Bischoff (2005) reported that for both male and female academics, the longer the work hours, the greater the reported levels of work-life conflict.

Work-life conflict has been identified as a cause of stress in a number of academic stress studies. For example, Leung et al., (2000) reported that one of the two
strongest predictors of occupational stress in Hong Kong academics were difficulties at the work/home interface. They noted that the practice of bringing work home and working during holidays was commonplace and could cause family difficulties. The negative impact of work overload in academia on home/family life was also noted in a qualitative occupational stress study (Gillespie et al., 2001), whereby academics reported having to forgo time with their family due to working overtime in order to fulfill all work commitments.

Kinman & Jones (2004) in their survey of 782 British academics reported that heavy workloads were causal in preventing engagement in hobbies and social pursuits. The majority of academics believed that their work encroached into their home lives and 72% regarded this encroachment as detrimental to family life. Earlier studies of academics in the US have also identified job demands that interfere with personal life as a significant stressor (Gmelch et al., 1986; Hind & Doyle, 1996).

Work-life conflict was also identified in a recent study as one of five major stressors for Canadian academics (Cantano et al., 2010), however, of those five stressors (workload, role conflict, work-life conflict, unfairness-administration and unfairness-rewards), work-life conflict was the variable most strongly associated with higher levels of psychological distress. Female academics reported higher levels of work-life conflict in this study, which Cantano and colleagues attributed to the fact that female academics generally undertake a greater proportion of caring and household duties in the home.

Increasing levels of work-life conflict have also been reported in a four year longitudinal study of Australian universities (Winefield et al., 2008) It was noted by Winefield and colleagues that work-life conflict and job insecurity were the two most significant workplace predictors of psychological strain in academics. The link between long work hours, work-life conflict and psychological strain is discussed in more detail in Chapter 4.

3.7 Gender differences in occupational stress in academia
A number of research studies have found that female academics experience significantly higher levels of psychological distress than male academics (Blix et al.,
1994; Brown et al., 1986; Cantano et al., 2010; O’ Laughlin & Bischoff, 2005; Sorensen & de Peuter, 2006; Winefield et al., 2008). Burke et al., (2008) have also reported that female academics report more psychosomatic symptoms than male academics. Female academics tend to hold lower level/junior academic positions and tend not to progress to more senior positions (Doherty & Manfredi, 2006b; West & Curtis, 2006). Results from a comparative study of family friendly policies in academia across Sweden, Finland and America concluded that in all three countries that female academics were more likely to be in lower paid positions, and concentrated in the social sciences (Mayer & Tikka, 2008). Problems may arise due to the fact that while junior academics often have the highest teaching loads, research activity is important for promotion and thus junior academics who wish to gain promotion may need to work very long hours to succeed (Soliman & Soliman, 1997).

Other studies have found that more junior members of academic staff (Abouserie, 1996; Jarrett & Winefield, 1995) and younger staff (Dua, 1994; Hogan et al., 2002) report higher stress levels than more senior and older staff members.

Research also shows that male and female academics tend to engage in different work related tasks, i.e. female academics undertake a disproportional amount of teaching and student related duties (Thomas & Davies, 2002; West & Curtis, 2006), while male academics conduct more research and administrative duties (Bellas, 1999). Female academics tend to be less research active than men, which has been argued to be associated with the need to use one’s own discretionary time for research, which many women cannot commit to (Doherty, 2010).

However, gender differences in reported stress levels are not consistent across studies. For example, Hogan et al., (2002) found no gender difference in reported occupational stress in their university survey. However, there was a significant difference between male and female staff with regard to non-work stress, with females reporting higher levels of non-work stress. Similar levels of stress in both men and women were found in a sample of English university workers when age and job characteristics were controlled for (Tytherleigh, Jacobs, Webb, Ricketts, & Cooper, 2007), however, females were more vulnerable to the health related outcomes of stress. Hodgins et al., (2005) also reported no gender difference in stress levels in a sample of 294 Irish academics.
O’Laughlin & Bischoff (2005) investigated the impact of tenure status and gender on levels of work-life conflict and stress in a sample of 276 American academics. It was hypothesised that pre-tenure academics would show higher levels of stress and work-life conflict than their tenured counterparts, due to greater demands, perceptions of less control, and greater investment in work hours. In addition, they hypothesised that the predictors of work-life conflict and stress for female and male academics would differ. Analysis of the results of on-line questionnaire indicated no difference between men and women in the predictors of work stress. For both men and women, the more hours worked, the higher the levels of work-life conflict, supporting the rational model of work-life conflict. However, female academics reported significantly higher levels of academic stress, family stress and less organisational support for work-life balance than men. There were also no significant differences between tenured and un-tenured academics in their family or work stress levels, however, both groups did report high work related stress levels and also reported working more than 50 hours a week on average.

The need to maintain high research output, manage increasing workloads and sustain a home life and caring roles is a significant task for all academics; however, research suggests that female academics are more likely to have more time constraints on their availability to work when compared with male academics (Mason & Goulden, 2004; Misra et al., 2012). For example, in dual-career academic couples, women reported spending significantly more time on childcare and household tasks relative to their partners (O’ Laughlin & Bischoff, 2005), in line with the general trends discussed in Chapter 2 of female workers spending more time in household and family tasks than males (Darcy & McCarthy, 2007; Greenhaus & Parasuraman, 2002; OECD, 2011).

**Chapter Summary**

As stated by Gillespie et al., (2001, p.54) “It is clearly important that universities manage and protect their staff from increasing levels of stress in order to preserve staff well being, organisational performance and the intellectual health of the nation. In order to do this, we first need to understand the experience of stress on staff within the university sector.” Empirical evidence highlights the prevalence of high levels of stress in academia and a number of causal factors have been identified, including
heavy workloads and high levels of work-life conflict. Some studies have shown gender differences in mean levels of stress, while others have found no such gender differences. This area of study is complex, with work hours, work-life conflict and stress being open to influence by many work, home, individual and personality factors (Fielden & Cooper, 2002).

In order to advance research in the area, the current study aims to elucidate the relationship between long working hours, work-life conflict and psychological strain in Irish academics. Predictors of long working hours are examined and gender differences in the predictors of the outcome variables are also explored. However, prior to presenting a detailed rationale for the current study, it is important to explore in more detail the research and theory that has focused on work-life conflict and the causes and consequences of work-life conflict in academia.
Chapter 4 - Academia and work-life conflict

In this chapter relevant work-life interface definitions and theories are reviewed. Antecedents and consequences of work-life conflict are examined and the empirical literature on work-life conflict in academia is reviewed. Relevant trends with regard to gender differences in work-life conflict research are also outlined. In this chapter, the term work-life is employed as it is more comprehensive than the term work-family (Rantanen, Kinnunen, Mauno, & Tillemann, 2011). With regard to references from the extant literature, the terms work-life and work-family are used according to the citations.

4.1 Work-life interface definitions
Role conflict and conflict theory have dominated research on the work-home interface (Eby et al., 2005; Rothbard & Dumas, 2006). According to Frone (2003) the most widely cited definition of work-family conflict is that “it is a form of inter-role conflict in which the role pressures from the work and family domains are mutually incompatible in some respect. That is, participation in the work (family) role is made more difficult by virtue of participation in the family (work) role” (Greenhaus & Beutell, 1985, p.77). This definition implies a bidirectional relationship between work-family conflict, that is, work can interfere with family and family can interfere with work (Frone, 2003). It has also been noted that conflict between roles can be asymmetric or reciprocal (Tenbrunsel, Brett, Maoz, Stroh, & Reilly, 1995). For example, in an asymmetric situation an individual may perceive that their work role interferes with their home role, but that their home role does not interfere with their work role. In a reciprocal situation an individual may feel that aspects of work interfere with the home role, while aspects of the home role also interfere with functioning at work (Rothbard & Dumas, 2006). Carlson & Frone (2003) identified two types of interference that can occur at the work-home interface which they called internal and external interference, both of which are related to work-life conflict. O’Driscoll et al., (2006) state that preoccupation with one’s work is an example of internal interference which can negatively impact on home life, while time demands are an example of external interference.
Frone (2003) has noted that it is difficult to find an explicit definition of work-life balance, while Kalliath & Brough (2008) have stated that there is no one definition of work-life balance. However, the definition of work-life balance employed in this study is “satisfaction and good functioning at work and at home, with a minimum of role conflict” (Clark 2000, p. 751). According to Frone (2003) work-life balance is comprised of two components: a lack of work-life conflict and adequate work-family facilitation. Work-family facilitation is defined as “the extent to which participation at work (or home) is made easier by virtue of the experiences, skills, and opportunities gained or developed at home (or work)” (Frone, 2003, p.145). Work-life facilitation is also bi-directional as it can operate from family to work or work to family (Frone, 2003). Work-life conflict and work-life facilitation are regarded as independent constructs as opposed to opposite ends on a single continuum (Voydanoff, 2008), as it has been shown that they are only mildly correlated (Grzywacz & Marks, 2000). However it has been noted that work-life facilitation has received far less attention than work–life conflict and therefore the literature is quite limited (Frone, 2003; O'Driscoll, Brough, & Kalliath, 2006).

Voydanoff (2008, p. 52) notes that work-family conflict, work-family facilitation, work-family fit and work-life balance are “cognitive appraisals that reflect work and family demands and resources in different ways”. Work-family fit is defined as “a form of inter-role congruence in which the resources associated with one role are sufficient to meet the demands of another role such that participation in the second role can be effective” (Voydanoff, 2008). Another definition of work-life fit is the degree to which employees optimize their family’s adaptive strategy in the workplace (Barnett et al., 1999), that is, the degree to which each partners’ work schedules meet their individual needs and those of their spouse and children. Work-family fit comes from the person-environment fit approach to work-related stress (Voydanoff, 2008), which states that stress arises when there is a lack of fit between the person and the environment as opposed to from either one alone (Edwards & Rothbard, 2005).
4.2 Models and concepts in work-life research

Six basic linking mechanisms or models on the relationship between work and family roles have been identified (Edwards & Rothbard, 2000) and examined within the extant literature. These are: spillover, compensation, segmentation, resource drain, congruence and work-life conflict. Rothbard & Dumas (2006) note that spillover, compensation, segmentation and congruence have been used primarily to explain relationships between work and family, while resource drain and work-life conflict are mainly regarded as outcomes. Frone (2003) noted that there is empirical evidence to support all of these mechanisms and that many of them may occur simultaneously. Furthermore, he has stated “When considered individually, none of these linking mechanisms provide a useful conceptual basis for understanding the dynamics of work-family balance. Rather, they all need to be brought together, along with other processes, to develop an integrative and dynamic understanding of work-family balance” (p. 147). A brief description of each of the linking mechanisms is now provided.

Frone (2003) notes that both segmentation and congruence are non-causal models, that is, “even if work and family variables are interrelated, no causal relationships exists between work and family life”. (p. 146). Segmentation is not used to link the work and non-work domain, but is used to describe the separation of work and family (Rothbard & Dumas, 2006). It has been put forth in the literature that segmentation not only occurs due to the physical distance between the home domain and the work domain, but is in fact an active psychological strategy employed by the person to prevent work or home related thoughts and issues occurring in the incorrect domain (Rothbard, Phillips, & Dumas, 2005). A newer perspective within the literature relating to segmentation focuses on how workers manage the boundary between home and work, termed boundary work. Frone (2003) has stated that the “theoretical models of role transitions (Ashforth, Kreiner, & Fugate, 2000; Clark, 2000) have much potential to help define the conditions that minimize and maximize work-family balance” (p. 148). See Chapter 5 for more detail in relation to boundary theory and work-home boundaries. According to Edwards & Rothbard (2000 p. 182) “congruence refers to similarity between work and family, owing to a third variable that that acts as a common cause”. For example, dispositional affect may affect both work and family satisfaction (Watson & Clark, 1984), thus causing a positive
spurious relationship between work and family satisfaction (Frone, Russell, & Cooper, 1994).

Spillover is a prominent linking model in work-life conflict research which is defined as “a process whereby experiences in one role affect experiences in the other, rendering the roles more similar” (Rothbard & Dumas, 2006, p.73). Spillover can take the form of emotions, attitudes, and behaviours (Greenglass, 2000), both positive and negative. However, most research has focused on mood spillover (Rothbard & Dumas, 2006). Frone (2003) regards the spillover theory as both causal and positive in nature, that is, what happens in one domain of life can have a causal impact on what happens in another domain. Positive spillover can occur in tandem with negative spillover; therefore the two constructs are regarded as distinct entities as opposed to opposite ends of a spillover scale (Frone, 2003).

The compensation model postulates a negative causal relationship between work and home (Frone, 2003). Compensation is regarded as “a relationship between work and non-work roles whereby people attempt to make up for deficiencies in one role through greater involvement in another role” (Rothbard & Dumas, 2006, p.74) For example, Greenglass, (2000) states that an employee compensates for dissatisfaction in one domain, by increasing their level of involvement in the other.

The resource drain model is another negative linking model between the home and work domains (Frone, 2003). Resource drain refers to “the transfer of finite personal resources, such as time, attention, and energy from one domain to another” (Edwards and Rothbard, 2000, p.181). The resource drain model has been used to link work-life conflict with role stressors (Michel et al., 2011), whereby, role stressors from the home and work domains subtract from these finite resources. For example, if an employee has to spend long hours at work, this will drain his/her time resources that are available for the home domain, thus causing time-based conflict.

As previously stated the work-life conflict model has dominated within work-life research. The theoretical underpinning of work-life conflict can be traced back to role theory (Kahn, Wolfe, Quinn, Snoek, & Rosenthal, 1964; Katz & Kahn, 1966). The basic premise of role theory is that a person experiences conflict when the
demands and requirements of one role interfere with the demands and requirements of the other role. The theory of role conflict was further developed by Greenhaus & Beutell (1985) when they extended the theory by dividing work-life conflict into three categories: time-based, strain-based and behaviour-based conflict.

Time-based conflict arises when the time spent in one role does not allow sufficient time within another role (Greenhaus & Beutell, 1985). There is support in the empirical literature for this relationship between longer working hours and greater time-based conflict (Major, Klein, & Erhart, 2002). Strain-based conflict occurs when stress from one role affects one’s performance in another role. A simple example of strain-based conflict is when fatigue or anxiety from the work role is carried back to the home setting and negatively affects the home role. Behaviour-based conflict occurs when norms and expectations for behaviour in one role are incompatible with expectations for behaviour in another role (Rothbard & Dumas, 2006). O’Laughlin & Bischoff (2005) use the example of an academic working from home as a type of behaviour-based conflict, where the focus and energy needed to complete one’s work may conflict with the demands for time and attention from spouses and/or children.

4.3 Work-life conflict research
It has been noted that most of the research on the work-family interface has focused on the construct of work-family conflict (Edwards & Rothbard, 2000; Frone, 2003; Greenhaus & Powell, 2003; Greenhaus & Allen, 2011; Tetrick & Buffardi, 2006) while the construct of work-family facilitation has received far less attention (Frone, 2003). However, Rothbard & Dumas (2006) noted that new streams of work-life research have started to emerge, for example, research relating to enrichment, work-home boundaries and identity navigation. Work-life conflict research has advanced and has led to the development of theoretical models, empirical studies, and organisational sponsored work-family initiatives (Grant-Vallone & Donaldson, 2001). Much of the research completed has investigated both the predictors and consequences of work-family conflict, for example, see Byron (2005) and Michel et al. (2011) for reviews. Section 4.4 below provides greater detail on a number of antecedents of work-life conflict and Section 4.5 details the consequences of work-life conflict.
Frone (2003) notes that within the work-family balance literature (encompassing work-life conflict and facilitation) that research attention has largely been given to examinations of gender differences in the extent of work-life conflict (See section 4.6 for more details) and comparisons of the relative amounts of work-family conflict versus family-work conflict experienced. He notes that research generally shows that work-family conflict occurs more frequently than family-work conflict. Eby et al. (2005) have noted that there are gaps in work-family research. For example, they note that there has been an over-emphasis on the work domain relative to the home, family and non-work domains and there has been scant attention given to individual differences such as personality factors and motivational traits. Furthermore, Tetrick & Buffardi (2006) have noted that there is a need for more longitudinal work-family research and shorter-time spanning research which investigates the dynamic nature of work-life conflict. They note that experience sampling procedures such as daily diaries may be a particularly useful method of capturing these dynamics.

4.4 Antecedents of work-life conflict
A recent meta-analysis classified potential antecedents to work-life conflict into work domain factors, personality factors and home factors. Work and home domain factors included: role stressors, role involvement, social support and work/family characteristics (Michel et al., 2011). A number of specific antecedents of work-life conflict are examined in the following sections.

4.4.1 Work hours
As outlined in Chapter 2, the amount of time we have for work and home life is finite and if a person spends excessive time in their work role, they may experience time-based work-life conflict due to insufficient time to allocate to their home/family role. Many research studies have revealed a positive relationship between engaging in long working hours and increased levels of work-life conflict (Crouter et al., 1999; Eby et al., 2005; Major et al., 2002). As noted in Chapter 2, Byron (2005) reported in a meta-analytic review of work-family conflict and its antecedents that employees who spent more time at work reported more work interfering with family than family interfering with work, while a more recent meta-analysis reported a moderate relationship between work time demands and work-life conflict (Michel et al., 2011).
The amount of time dedicated to work and home life and the degree to which a person integrates their work and home life can vary from person to person and there can be individual differences in what is considered optimum. Work-life conflict problems may occur if the fit between the employees’ time needs and their partner’s time needs or their organisational time needs are incompatible. For example, in a questionnaire study of married physicians, Barnett et al., (1999) found that the better the perceived fit between one’s own and one’s partner’s work schedules, the lower one’s feelings of burnout on the job.

4.4.2 Job involvement
Social identity theory posits that social roles form the basis of a person’s identity (Burke, 1991). Based on this theory, the more involved a person is with a particular role that they hold, the more time they invest in this role. Frone & Rice (1987, p.46) have also used role theory to underpin the relationship between job and family involvement and work-life conflict, stating that “work-family conflict occurs when meeting one’s family role expectations is perceived to be incompatible with meeting the role demands of one’s job, and vice versa.” Two mechanisms can be at play when role involvement leads to work-life conflict (Frone & Rice, 1987). First, the amount of time a person has available to them on any given day is finite, and the majority of time will tend go to the role that the person is most involved in, or the role that is most important for their self-concept, for example, their family role or work role. If this occurs continually, with one role consistently receiving more time, then this can lead to time-based work-life conflict. The second mechanism is more cognitive in form, whereby, a person in their less dominant role may be preoccupied mentally with their more salient role, again leading to work-life conflict. For example, it has been argued that if a worker places more value on their family/non-work role, but is forced due to work demands to give more resources (time/cognitive attention) to the role of lesser salience, then conflict and strain will occur (Carlson & Kacmar, 2000).

Numerous studies have found a positive link between high job involvement and work-life conflict (Adams, King, & King, , 1999; Duxbury & Higgins, 1991; Frone & Rice, 1987b; Major et al., 2002). For example, Frone & Rice (1987) conducted a survey of 141 non-academic university employees and
found that job involvement was positively related to job-parent conflict no matter what the level of parental involvement. In a study of (N=314) governmental employees which employed structural equation modeling to investigate the role of job involvement, family involvement and social support on work-life conflict and job and family satisfaction, it was found that highly job involved workers experienced higher levels of work-family conflict (Carlson & , 1999). In another study of full-time working women and men, while it was found that workers who were highly job involved reported high levels of job satisfaction, these highly job involved workers also reported higher levels of work interfering with family (Adams et al., 1996). In addition, Carlson & Kacmar (2000), in an analysis of the relationship between work-life conflict and life role values in governmental employees, reported that stressors from the less valued role were associated with higher levels of conflict and dissatisfaction. Specifically, workers who were more work oriented, experienced more family-work interference and less family satisfaction. Conversely, more family oriented workers experienced less job satisfaction as a result of work time demands and job involvement. Carlson & Kacmar (2000) suggested that if resources given to the role of lesser salience to the person interfere with the resources available to the more important role then conflict and strain will occur.

The general trend in the literature shows that high work involvement is linked to higher levels of work-life conflict. A series of review and meta-analytic studies provide strong support for the positive relationship between job involvement and work-life conflict, that is, those persons who display high job involvement generally report higher levels of work-life conflict. (Byron, 2005; Eby et al., 2005; Michel et al., 2011). Byron (2005) also reported a gender difference in the job involvement and work-life conflict relationship, whereby highly job involved men reported higher levels of both work-interfering with family and family interfering with work than highly job involved women.

4.4.3 Workload
Individually may have numerous demands placed upon them from their various roles; if these demands become excessive then role overload may occur. Role overload is defined as “a time-based form of role conflict in which an individual perceives that the collective demands imposed by multiple roles are so great that time and energy
resources are insufficient to adequately fulfill the requirements of the various roles to the satisfaction of self or others” (Duxbury, Higgins, & Lyons, 2008, p.130). Work demands are regarded as the single most important predictor of role overload (Duxbury & Higgins, 2005). Major et al., (2002) reported that workers who have too much to do tend to work longer hours. A meta-analysis of antecedents of work-life conflict concluded that work role overload was a significant predictor of work-life conflict (Michel et al., 2011).

4.4.4 Workaholism

Burke & McAteer (2007) noted that the impact of workaholism on family functioning is relatively under-studied and it has also been stated that research on the relationship between workaholism and work-life conflict is underdeveloped (Andreassen, Hetland, & Pallesen, 2013; Harpaz & Snir, 2003). However, some studies have investigated these relationships. For example, in a study of 107 self-declared workaholics (members of Workaholics Anonymous Chapters in America), workaholics showed poorer family functioning than non-workaholics (Robinson & Post, 1997). Additional support is provided within the literature, showing that workaholics have significantly worse family functioning than non-workaholics which affects themselves, their spouses and children. For instance, it has been reported that children of workaholic fathers suffered greater levels of depression and anxiety when compared to children of non-workaholic fathers (Robinson & Kelley, 1998); and workaholics experience higher levels of marital estrangement than non-workaholics (Robinson, Flowers, & Carroll, 2001).

As noted in Chapter 2, there are different types of workaholics under the workaholism typology designed by Spence and Robbins (1992) (i.e. workaholics, enthusiastic workaholics, etc.). Reported levels of work-life conflict are also higher for workaholics (Bonebright, Clay, & Ankenmann, 2000; Russo & Waters, 2006). For example, Bonebright et al., (2000), in their study of 171 employees in a technology company found that enthusiastic workaholics and workaholics reported significantly higher levels of work-life conflict than non-workaholic employees. Similarly, it has been reported that work addicts (persons who score highly on work drive and involvement, but low on work enjoyment) experience higher levels of work imbalance when compared to work enthusiasts (persons who score highly on work
involvement and work enjoyment but low on work drive) and enthusiastic addicts (persons who score highly on all three elements (Burke, 1999c), and view their organizations as less supportive of work-life balance (Burke & Fiksenbaum, 2008). Within a Dutch sample of managerial retail workers (N=199), workaholism was found to strongly affect both exhaustion and work-life conflict (Taris, Schaufeli, & Verhoeven, 2005b). Russo & Waters (2006) noted in their study of workaholism in the legal profession (N=169) that when working hours were controlled for, workaholics and enthusiastic workaholics still reported higher levels of work-life conflict than non-workaholics, therefore, the effects of workaholism on work-life conflict are not fully accounted for by number of hours worked. A study of working professionals and academic and non-academic university employees (N=232) revealed that workaholism scores significantly predicted work-family conflict. However, it was noted that high scores on work drive significantly predicted higher work-family conflict scores, while high scores on work enjoyment predicted lower levels of work-family conflict (Brady, Vodanovich, & Rotunda, 2008).

A Norwegian study on the impact of workaholism on both positive and negative work-family spillover in a cross-occupational sample (N=661) found that work drive was positively related to both negative work-to-family spillover and negative family-to-work spillover and also negatively related to positive work-to-family spillover. On the other hand, work enjoyment was positively related to positive work-to-family spillover and positive family-to-work spillover. The authors concluded that work enjoyment covaries with positive spillover, while work drive covaries with negative spillover and that work drive is particularly negative for the work-family interface (Andreassen et al., 2013).

4.4.5 Support

4.4.5.1 Supportive Organisational Cultures

“Organisational culture is a socially learned and transmitted group level phenomenon, comprising many different visible or conscious, and invisible or subconscious ‘deep’ cognitive, behavioural and emotional aspects” (Kinnunen, Mauno, Guerts, & Dikkers, 2005, p.89). Culture provides norms relating to how acceptable behaviour is defined, how commitment is defined and how success is defined (Friedman & Johnson, 1996). One aspect of organisational culture is the
level of support for family/non-work activities. Work-family culture has been defined as the shared assumptions, beliefs and values regarding the extent to which an organization supports and values the integration of employee’s work and family lives (Thompson, Beauvais, & Lyness, 1999).

Work-family culture is regarded as being composed of three dimensions: (1) managerial support for work-family balance, (2) less negative impacts on one’s career due to use of work-life balance programmes, and (3) less time demands from the organization, which could interfere with family time (Thompson, et al., 1999). In studies measuring work-family culture, this construct tends to be measured via organisational expectations and behavioural norms in organizations (Kinnuen et al., 2005). Similar to other norms within organizations, it is assumed that levels of perceived support for family/home life issues are learned through socialization within the organization. Thomas & Ganster (1995) have stated that a supportive workplace is vital in order for work-life balance initiatives to be implemented and for uptake of such initiatives.

Supportive organisational cultures, supervisors and mentors have been shown to help to reduce levels of work-life conflict experienced by employees (Eby et al., 2005). While organisational support is often defined in terms of family-friendly or work-life balance programmes and policies available within an organization, the provision of policies as a form of support is not as important as the employees’ perceptions of whether or not the company is actually supportive (Allen, 2001; Jahn, Thompson, & Kopelman, 2003). It has been reported that employee satisfaction with family-friendly policies is more important in reducing levels of work-life conflict than is access or usage (Roisin & Korabik, 2002). It has also been concluded from a meta-analysis that family friendly policies tend to be beneficial only to general employees and not persons in management or professional positions (Baltes, Briggs, Huff, Wright, & Neuman, 1999).

Research findings show that large public sector institutions such as universities generally provide comprehensive work-life balance policies (Bardoel, Moss, Smyrnios, & Tharenou, 1999; den Dulk, 2001; Ingram & Simons, 1995). However, formal family-friendly polices/work-life balance initiatives can often prove
ineffective in practice due to the underlying organisational culture (Poelmans & Sahibzada, 2004; Waters & Bardoel, 2006). The mere availability of policies does not guarantee that they will be used or work effectively (Lewis, 1997). For example, although maternity leave is a legal entitlement, one study found that only 30% of female academics in the U.K. took their full maternity leave entitlement due to perceived negative career consequences (Finkel, Olswang, & She, 1994), while an Irish study revealed that many female academics worked during their maternity leaves (Byrne & Keher, 1995).

Often when family-friendly/work-life balance policies are made available within organizations there is a ‘take-up gap’, that is, although the demand is apparent, barriers (either personal or organisational) prevent employees from actually using the policies (Kodz, Harper, & Dench, 2002). Family-friendly initiatives may also be resisted by management (Burke, 2006), if they are perceived to be an impediment to organisational success (Bowen, 1998). Gambles et al., (2006, p.5) note that the problem with policies alone is that they “…..tend not to tackle or address cultural and organisational values or deep identity tensions that are so important in implementation.” Waters & Bardoel (2006) studied barriers to uptake of work-family policies in an Australian university and found that there are a number of informal barriers to the uptake of these policies, for example, lack of communication in relation to the policies available, high workloads, career repercussions, influence of peers, management support and administrative processes.

Uptake of such policies could be perceived by employees as a sign that a person is not fully committed to their careers. Indeed, the construct of ‘bias avoidance’ (Drago et al., 2006) has been developed to describe why employees do not avail of work-life balance initiatives. Bias avoidance describes “behaviours designed to escape potential career penalties associated with care-giving commitments” (Drago et al., 2006, p.1223) Drago et al., (2006) divide bias avoidance behaviour into two categories; productive and unproductive behaviours. Productive behaviours “facilitate career success by increasing the time and energy available for employment” (e.g. not having children) while unproductive behaviours are “behaviours that enhance the appearance of commitment to a career while either leaving unaffected or even hindering work performance” (e.g. hiding caring
commitments to maintain an appearance of high job commitment) (p.1223). In their study of academics from 507 institutions across America (N= 4188), Drago and colleagues found that bias avoidance was common amongst academics, with women engaging in both productive and unproductive bias avoidance more often than male academics. Unequal division of labour in the home and the ideal worker concept were put forth as possible explanations for this gender difference. The ideal worker concept involves “internally and externally held expectations that employees will be committed to the job for long hours, with only minimal breaks, and for periods of years or decades at a stretch” (Drago et al., 2006 p.1224).

In a review of the empirical literature on work-family culture and organisational support, it was concluded that organizations with supportive family-work cultures had increased use of work-family policies (Kinnunen et al., 2005). Conversely, unsupportive family-work cultures were linked to higher levels of work-life conflict and job dissatisfaction and low organisational commitment. Furthermore, the use of work-family polices was dependent on each individual’s personal circumstances, for example, it was found that employees who were female, married, or had children at home are more likely to avail of work-life policies (Kinnunen et al., 2005). Burke et al., (2008) reported that Turkish academics whose organisations were perceived to be unsupportive of work-life balance reported significantly higher intentions to quit than academics who perceived their organisations to be supportive. At the same time, Turkish academics who had work environments that were supportive of work-life balance, reported greater relationship satisfaction. However, in a study which compared perceptions of family-friendly policies in university and corporate employees, it was reported that university employees were significantly more negative towards their institute’s work-family culture than corporate employees (Anderson, Morgan, & Wilson, 2002).

4.4.5.2 Supervisor support

Employees sometimes use the level of supervisor support as a proxy for organisational support (Hopkins, 2005). However, organisational support (i.e., family friendly policies) and supervisor support (i.e., specific patterns of communication between supervisors and workers) are also often differentiated. Indeed, it has been argued that it is important for employees to differentiate between
supervisor and organisational support as they should not be considered synonymous with one another (Ayman & Antani, 2008).

The importance of one’s immediate supervisor with regard to the uptake of work-family policies has been highlighted in a report by the Crisis Pregnancy Agency on work-life balance, where it is stated that “Both research and anecdotal evidence suggest that it is an employee’s immediate manager who makes all the difference as to whether or not that employee avails of flexible work options” (Redmond, Valiulus & Drew, 2006, p. 62). It has also been stated that supervisors are key to the success of work-life integration policies as they “embody and reflect organisational culture” (Burke, 2006, p.254). The empirical research supports the role of supervisor support in facilitating work-life integration, as many studies have reported a negative relationship between supervisor support and work-life conflict (Frone, Yardley, & Markel, 1997; Galinsky, Bond, & Friedman, 1996; Moore, Grunberg, & Greenburg, 2005; Nielson, Carlson, & Lankau, 2001; Thomas & Ganster, 1995). A meta-analytic review of the literature on antecedents of work-life conflict revealed a negative relationship between supervisor support and work-life conflict (Michel, et al., 2011). It has been reported that family sensitive supervision and work flexibility help reduce work-life conflict by providing a sense of community and control on the job (Clark, 2002). Drago et al., (2006) have reported a consistently negative relationship between levels of supervisor support for work-family integration and bias avoidance behaviour in academics.

However, not all the research supports a negative relationship between supervisor support and work-life conflict. At least one study has noted (Anatani & Ayman, 2004) that the more support an employee received from their supervisor in relation to family issues and the more support that they received from their colleagues, the higher their reported levels of family interfering with work. This finding may be an anomaly or it may be that employees experiencing very high levels of work-life conflict engender support from their colleagues and superiors.

Gender differences have been observed in how much workers benefit from social support in the workplace. For example, a survey conducted with 500 respondents across three industries revealed that while women were more likely to report conflict
from work interfering with family, they also benefited more from social support than men. Specifically, while social support was associated with lower levels of work-life conflict for both men and women; it also was associated with increased work & Carlson, 2002). However, on the other hand in a study of diverse workers (N=187), it was reported that there was no evidence of gender differences in workplace support or levels of work-family conflict (Thompson & Cavallaro, 2006).

4.4.6 Dependents and Family Involvement
Family time demands have been shown to be related to work-life conflict (Frone, Russell, & Cooper, 1997) and the number of dependents that a person has is related to their experience of work-family conflict (O'Driscoll et al., 2006). This can be explained by the Conservation of Resources model (Hobfoll, 1989), in that, an increasing number of dependents results in increasing loss of resources such as time and energy, therefore leading to stress and work-life conflict. In particular, the presence of dependents tends to increase the home demands and reduce the amount of time available to do work outside the home. For example, it has been reported that academics with children under the age of 12 work approximately 3.8 hours less a week than other academics (Misra et al., 2012).

Increases in home demands associated with dependents are evidenced in the total hours worked during a week, that is, both paid work hours and hours worked in the home. For instance, it has been reported that the greater the number of children in the household, the more hours working parents tend to work (Lundberg et al., 1994). In a study of work time allocations in American academics, it has been estimated that having a child under the age of 12 equates to an additional 30 hours of (caring) work per week (Misra et al., 2012). Having dependents can interfere with work both internally and externally, for example, if a worker is preoccupied during work time with family issues or if the demands from family actually prevent attendance in the workplace (Carlson & Frone, 2003). As such, the number of children is often taken as a proxy for family demands and/or family involvement (ten Brummelhuis, van der Lippe, Kluwer, & Flap, 2008).
However, the relationship between work-life conflict and family structure is still unclear, with mixed findings reported in the literature (Mullen, Kelley, & Kelloway, 2008). Evidence shows that having children and being highly involved with family can increase the potential for work-family conflict (Eby et al., 2005) and is associated with higher levels of psychological strain (Tausig & Fenwick, 2001). It has been reported that for persons who are more involved in their family role compared to their work role, having to spend greater time at work and being more involved at work was negatively related to job satisfaction (Carlson & Kacmar, 2000). However, Byron (2005) found no relationship between the level of reported family involvement and work-life conflict. And Michel et al., (2011) reported that the link between number of children and family-work conflict was small.

Some argue that the age of the dependents in the home is important when investigating work-life conflict and that having pre-school children is associated with higher levels of strain (Parasuraman & Simmers, 2001), while other studies report that having babies and pre-school children increases the levels of strain (Darcy & McCarthy, 2007). However, Major et al., (2002) found that parental demands, measured using a categorization based on the number and ages of children, did not predict either time spent at work or levels of work interfering with family in employees of a Fortune 500 company. In their meta-analysis on work-life conflict Michel et al. (2011) reported that age of children was not a strong predictor of work-family conflict.

4.5 Consequences of work-life conflict

As noted above, the Resource Drain Model postulates that individuals have a limited supply of resources, such as time, energy, and attention. If one life domain requires more of a particular resource, then there is less of this resource available for the other domain, which may then lead to work-life conflict and longer term manifestations of stress and strain.

A number of physical, psychological and organisational outcomes have been linked to work-life conflict in the empirical literature (Eby et al., 2005; Mullen et al., 2008). For example, it has been reported that experiencing either family-work or work-family conflict is related to anxiety disorders, mood disorders and substance abuse
disorders (Frone, 2000). Studies have linked work-life conflict to psychological distress (Burke & Greenglass, 1999; Kelloway, Gottlieb, & Barnham, 1999; Major et al., 2002), general psychological strain (Grzywacz & Marks, 2000a), burnout and depression (Allen, Herst, Bruck, & Sutton, 2000; Frone, Russell, & Cooper, 1992; Googins, 1991). Experiencing work-life conflict has also been linked to lower life satisfaction (Allen et al., 2000; Hill, 2005; Kossek & Ozeki, 1998).

Chronic work-life conflict also negatively affects physical health (Allen et al., 2000; Bellavia & Frone, 2005), and has been linked to increased somatic/physical symptoms (Burke & Greenglass, 1999), obesity (Grzywacz, 2000), hypertension (Frone, Russell, et al., 1997), heavy alcohol use (Frone, Russell, & Cooper, 1993) and lower energy levels (Googins, 1991). Evidence from most studies of health outcomes is cross-sectional in nature (Mullen et al., 2008), however, longitudinal studies (Frone, Russell, et al., 1997; Grant-Vallone & Donaldson, 2001), and more recently diary studies, have also been conducted (Montgomery, Panagopoulou, Peeters, & Schaufeli, 2009) and have provided support for a negative relationship between work-life conflict and health/well-being.

In a study that utilized both a cross-sectional and longitudinal design (Grant-Vallone & Donaldson, 2001) it was revealed that 342 non-professional employees (from a diverse range of occupations) who reported high levels of work-family conflict also reported lower levels of positive well-being as measured by the General Well-Being Schedule. It was observed that levels of work-family conflict predicted self-reported levels of positive well-being and also co-worker reports of positive well-being. This study showed that work-family conflict is a potential health factor for both professional and non-professional employees. Finally, work-family conflict affected all employees equally regardless of gender, marital status and dependents status.

The organisational impacts associated with work-life conflict include absenteeism, turnover intentions, lower organisational commitment and lower job satisfaction (Dorio, Bryant, & Allen, 2008; O'Driscoll et al., 2006). The majority of research on job satisfaction and work-life conflict indicates a negative relationship, in that, higher work-life conflict causes less job satisfaction (Allen et al., 2000; Kossek & Ozeki,
This has been shown in a range of diverse samples and measures of work-life conflict and job satisfaction (Dorio et al., 2008).

O’Driscoll et al., (2006) note that work-life conflict has been found to be positively associated with workplace absenteeism (Thomas & Ganster, 1995). However, Dorio et al., (2008) state that the relationship between absenteeism and work-life conflict has produced divergent results. In general, studies employing bi-directional measures of work-life conflict have shown positive relationships with absenteeism, but overall, due to the diversity of measures of absenteeism and work-life conflict employed in the literature, further research is needed in this area before more solid conclusions can be drawn. Numerous studies have reported a positive association between work-life conflict and turnover intentions (Allen et al., 2000; Boyar, Maertz, Pearson, & Keough, 2003; Kelloway et al., 1999), and in general, the relationship holds stronger for work interfering with family and turnover intentions, than for family interfering with work and actual turnover (Dorio et al., 2008).

Lesser studied organisational outcomes include: career satisfaction and career success. For example, it has been reported that work interfering with family is negatively related to career satisfaction for women and older men (Martins, Eddleston, & Veiga, 2002) and subjective career success was negatively related to work interfering with family in a sample of full-time academics (N=424) across two American universities (Peluchette, 1993).

4.6 Gender differences in work-life conflict

Rational theory (Gutek et al., 1991) predicts that work-life conflict occurs when a person spends excessive time in one particular role, and because men traditionally spend more time at work, the theory predicts that men should experience more work-life conflict. According to this theory women should experience more family/home-work interference because they spend more time on home responsibilities. Conversely, the gender role hypothesis (Greenhaus et al., 1987) argues that work-life conflict occurs when a person spends excessive time in their non-traditional role, that is, the traditional role for the woman is the primary caregiver and the traditional role for the man is the breadwinner (Nelson & Burke, 2002). According to this theory, “these gender roles affect perceptions of work-interfering with family and family-
interfering with work such that additional hours spent in one’s prescribed gender role domain (family for women and work for men) are not seen as an imposition as much as additional hours spent in the domain associated with the other gender” (Korabik, McElwain & Chappell, 2008, p. 218). Therefore, according to this theory, women should report higher levels of work-life conflict than men even if they spend an equal number of hours at work, and men should experience more family-work conflict than women even when they spend the same amount of time engaged in family activities. There is support within the extant literature for each of these theories (Byron, 2005).

Gender is the demographic variable most studied in work-family research (Guerts & Demerouti, 2003). It has been noted that most studies which have examined gender differences in work-life conflict have analyzed mean differences in levels of work-life conflict and the results to date are very contradictory (Voydanoff, 2002). Many studies have reported higher levels of work-life conflict in women when compared with men (Berntsson, Lundberg, & Krantz, 2006; Cantano et al., 2010; Carlson, Kacmar, & Williams, 2000; Duxbury, Higgins, & Lee, 1994; Frankenhaeuser et al., 1989), and some studies have also reported that women experience higher levels of family interfering with work than men (Aryee, Luk, Leung, & Lo, 1999; Frone, Russell, & Barnes, 1996). Conversely, some studies report higher levels of work-life conflict in men when compared with women (Huffman, Payne, & Castro, 2003; Jansen, Kant, Kristensen, & Nijhuis, 2003), and other studies report no gender differences in work-life conflict (Byron, 2005; Frone et al., 1992; Grant-Vallone & Donaldson, 2001; Grzywacz & Marks, 2000; Windslow, 2005). Korabik et al., (2008) concluded that most studies to date have not found gender differences in mean levels of work-life conflict. However, a number of methodological problems may have contributed to discrepancies in the results of studies to date. For example, it has been noted that many different kinds of work-life conflict measures have been employed across studies and that participants across studies have also varied considerably, with some studies employing white collar workers and others employing blue collar workers. In addition, some studies have employed skewed samples with one gender more represented in the sample and other study samples have differed with regard to their employment status and family status (Korabik, McElwain, & Chappell, 2008).
Despite the contradictory findings to date, Korabik et al., (2008) recommend that future studies should examine the moderating role of gender in work-life research as this will aid in understanding the role of gender in relation to the antecedents and consequences of work-family conflict. Byron (2005) also recommended that studies investigate gender differences in the antecedents and consequences of work-life conflict. Eby et al., (2005) regard continuing work on gender differences as essential, and Hill (2005) recommended that studies investigating the work-home interface should always include gender as a variable. The analysis of mean differences provides limited insight into the underlying causal factors that differentially impact levels of work-life conflict in men and women. Given the different individual, role and organisational factors that may shape the experience of men and women in different contexts, it is important to conduct multi-dimensional analyses of gender differences in antecedents and consequences of work-life conflict. This issue is taken up in more detail in Study 1.

Notably, gender differences have been observed in antecedents of work-life conflict. For example, Michel et al., (2011) observed in their meta-analysis that males experienced more work-family conflict from work role ambiguity than females and males also experienced a greater reduction in work-family conflict as a result of higher job autonomy than females. Having children and working in a senior position caused higher levels of work-life conflict for female bank employees than males, whereas, working unsociable hours predicted higher levels of work-life conflict for men (Emslie, Hunt, & Macintyre, 2004).

4.7 Work-life conflict in academia
It has been noted that the structure of the academic career follows a traditional male model of a worker who can devote unlimited time to work and that this structure is increasingly causing problems for male and female academics (Mayer & Tikka, 2008). It has been stated that total commitment to academic work which requires spending long periods of time concentrating on one’s subject matter is in fact glorified in academia (Ylijoki, 2013). Female academics, and those who have left academia have reported problems in balancing career demands and home/family responsibilities (Drago et al., 2006; O’Laughlin & Bischoff, 2005). This difficulty in balancing the demands of academia and home/family responsibilities is reflected in
the over-representation of women in lower paying positions in academia across countries (Mayer & Tikka, 2008). Indeed, evidence from the US points to female academics foregoing romantic relationships and having children in order to conform to the requirements of the academic role (Drago et al., 2006).

Studies of British academic staff revealed that academics regard their personal priorities as being compromised (Kinman, 1998), with work encroaching into family time experienced as stressful and detrimental to family life (Kinman & Jones, 2003). Three quarters of academics (N=782) who participated in Kinman’s (1998) study reported that it was becoming harder to achieve work-life balance (Kinman, 2001). It has been reported that 87% of academics versus 58% of general university staff reported work-life conflict, and that academic staff reported higher levels of stress associated with work-life conflict compared to general staff (Winefield et al., 2003). Winefield et al., (2008) report that work-life conflict has increased over time for Australian academics (Winefield et al., 2008) and work-life conflict in academia has been found to predict psychological strain (Cantano et al., 2010; Winefield et al., 2008), less positive well-being, physical strain and negative work outcomes, such as job dissatisfaction (Cantano & Francis, 2010). Work-life conflict is one of the most frequently reported stressors by British academics (Tytherleigh et al., 2005).

Heavy workloads have been implicated as the cause of work-life conflict and a general lack of time to engage in non-work activities and social pursuits. Additional predictors of work-life conflict in academia which have been identified include: high effort, low rewards and greater work over-commitment (Kinman & Jones, 2008a). Balancing the multiple demands of academic work has been put forth as a cause of strain-based work-life conflict in academics (O’ Laughlin & Bischoff, 2005). Buffers to work-life conflict in academics include high levels of job control, schedule flexibility and organisational support, and are associated with reports of better health and increased job satisfaction (Kinman & Jones, 2008b). Schedule flexibility may be an important resource that allows academics to adapt their working hours to meet their personal/home life needs and thus cope with the competing demands of work and the home domain. In addition, academics who maintain stronger boundaries between their work and home lives were found to be more likely to have achieved a better work-life balance (Kinman & Jones, 2008a).
Consistent with the Gender Role Hypothesis, Cantano et al., (2010) have reported higher levels of work-life conflict in female academics when compared with male academics, and that this conflict was one major source of stress for female academics. Higher levels of work-life conflict in female academics may reflect the fact that most female academics are also the primary caregivers in the home and are responsible for a larger proportion of household tasks (Misra et al., 2012; O'Laughlin & Bischoff, 2005; Probert, 2005). This responsibility for family and household duties can equate to a lack of discretionary time, and a lack of additional time to give to work activities such as research. In a Canadian study of female academics, it was noted that balancing work and childcare demands was a ‘daily dilemma’ and was associated with exhaustion, sleeplessness and high stress levels (Acker & Armenti, 2004). However, in a survey of Australian university workers in 2000, it was found that male academics reported higher work-life conflict and job involvement than female academics (Winefield et al., 2008).

**Chapter Summary**

In summary, work life conflict is a significant issue for academic workers, in particular time-based conflict and strain-based conflict due to long working hours and juggling competing work demands. A number of factors can contribute to work-life conflict and it is important to elucidate which factors are most important in determining work-life conflict in academia. The findings to date on gender differences in work-life conflict in the general literature are contradictory, and similarly in studies of academics, there is evidence to support both the conclusion that female academics have more work-life conflict and male academics have more work-life conflict. The negative physical and psychological outcomes associated with chronic work-life conflict in the general literature and in the literature on academia highlight the importance of this issue for the health and well-being of academics and ultimately productivity in the university sector.
Chapter 5 – Recovery and Detachment from work

This chapter explores the inter-related concepts of post-work recovery and psychological detachment from work and presents empirical literature on post-work recovery and detachment in academic settings. The literature with regard to the maintenance of boundaries between work and home by academics is also reviewed and its relationship with recovery, detachment and well-being is outlined.

5.1 Border theory and the work-home interface

Concerns are noted in the literature (Desrochers & Sargent, 2004) in relation to the increasingly blurred boundaries between work and home life, due in part to work becoming increasingly intensive and invasive (Gambles et al., 2006). The blurring of the boundaries between home and work life (also referred to as boundary ambiguity) has been defined as the experience of confusion or difficulty in distinguishing one’s work from one’s family roles in a given setting in which these roles are seen as highly integrated (Desrochers, Hilton, & Larwood, 2002), for example doing paid work at home.

Two theories are relevant when examining the ‘after work’ activities of academics; these are Border Theory (Clark, 2000) and Boundary Theory (Ashforth et al., 2000). Both of these theories address how people choose to demarcate their work and home lives, and whether or not a person tends towards more integration between work and home or greater segmentation between the work and home domains. Because the focus of Clark’s Border theory is on the work and family domains and the maintenance of balance between work and home, a more detailed outline of this theory and the relevance to this study is provided.

Clark regards the home and work domains as separate and that employees must move across borders (temporal, physical, psychological) between these two domains, therefore, employees are regarded as border crossers. Employees are not passive in this system; they actively shape and define the borders and links between home and work.
work in order to achieve balance, which is defined by Clark (p. 751) as “satisfaction and good functioning at work and at home, with a minimum of role conflict”.

Clark argues that, although the domains are separate and distinct from one another in terms of culture, they do influence each other. One example given by Clark is that of ‘spillover’, whereby the events/moods/behaviours within one domain affect the behaviour/mood within the other (e.g. someone coming home from work in a bad mood due to a work problem). In order to manage these two domains and achieve balance, employees may choose to integrate their home and work lives (to varying degrees) or to segment their home and work lives. Integration and segmentation are regarded as opposite ends of a spectrum and that neither is more desirable than the other -- what is important, is whether the strategy employed works for the person.

Figure: A pictorial representation of work/family border theory (Clark 2000, p. 754)

Clark states that borders between work and home can be comprised of temporal, physical and psychological elements. For example a temporal border could be where a worker may have defined work hours (e.g. 9-5, Monday-Friday), outside of which he/she does not work. A physical border for example could be only doing work in the workplace and not bringing work home. Psychological borders are rules employed by the person, with regard to emotions, thinking patterns and behaviour patterns in each domain, for example, not talking about family at work. A key feature of the borders is their permeability, which “involves the extent to which a boundary allows
psychological or behavioural aspects of one role or domain to enter another” (Desrochers & Sargent, 2004, p.41), for example, paying household bills during work time.

Another important feature of borders is their flexibility, which Desrochers & Sargent (2004, p. 41) define as “the malleability of the boundary between two or more role/domains” that is, how the border contracts and expands depending on what is required (Hall & Richter, 1988) in each domain at a particular time. For example, if one is free to choose one’s own work hours or is free to work from different locations, then the person has high temporal and physical flexibility. When the boundaries between the two domains have a high degree of both flexibility and permeability they are classed as ‘blended’ by Clark, whereas Ashforth et al., (2000) use the term ‘integrated’. Desrochers & Sargent (2004) note that in these ‘blended’ situations, that the borders between domains may become blurred. The overall strength of the border is determined by its flexibility, permeability, that is, the degree to which the border is blended. However, the fit between the employees’ expectations around their home-work boundaries and their actual real life boundaries is also highly important with regard to the experience of work-life conflict (Desrochers & Sargent, 2004; Rau & Hyland, 2002)

Border theory also recognises the importance of outside influences on employees’ borders, i.e. supervisor support, spousal support and overall organisational culture. Supervisors and spouses can be referred to as ‘border keepers’, who ultimately can influence the ease with which an employee transitions across the border from one domain to another.

Desrochers & Sargent (2004) note the importance of border theory when investigating certain aspects of the work-family interface and note its importance to investigations concerning working at home, flexible scheduling, workplace culture and the influence of information-communication technology, all of which are relevant to the academic setting. The relevance of border theory to work-life conflict research has also been highlighted (Hyman, Scholarios, & Baldry, 2004). Furthermore the importance of borders with regard to recovery and detachment from work has also been highlighted. Boundaries are postulated to have a psychological
function, in that they allow people to gain psychological distance between themselves and work and this is necessary to detach and recover from work (Zijlstra & Sonnentag, 2006).

5.2 Work Recovery and Detachment Definitions

There are a number of definitions of work recovery available in the literature, for example work recovery has been defined as a process of restoration, recuperation or unwinding (Sonnentag, Binnewies, & Mojza, 2008), where an individual’s functioning returns to its pre-stressor level and in which strain is reduced (Sonnentag & Natter, 2004). Another definition of recovery is “…the feeling that one is sufficiently rested and capable of commencing work at a specified or optimum level” (Zijlstra & Cropley, 2006, p.223). Recovery cannot be defined simply by reference to the number of hours away from the office, it is also dependent on, how ‘switched off’ from work one really is, which is referred to in the extant literature as ‘psychological detachment’.

Psychological detachment from work has been defined as “the individual’s sense of being away from the work situation” (Etzion, Eden, & Lapidot, 1998, p. 579). This encompasses not doing work or not thinking about work during one’s free time (Sonnentag & Bayer, 2005; Sonnentag & Fritz, 2007). Detaching from work involves disengaging from both the negative and positive aspects of work, because if an employee is thinking about work (be it positive or negative) they remain cognitively aroused (Cropley, Dijk, & Stanley, 2006). A failure to cognitively switch off (i.e. detach) has been linked to poor recovery from work (Sonnentag & Bayer, 2005). Therefore, post-work recovery and detachment are inter-related, and it is assumed that full recovery cannot take place without some degree of psychological detachment from one’s work. It has been recommended that the role of psychological detachment should be a central factor of enquiry in research conducted on work recovery (Eden, 2001).

5.3 Theoretical Models of Work Recovery

, Bond, & Kinman, 2012); the Effort-Recovery Model (Meijman & Mulder, 1998) and the Conservation of Resources Model (Hobfoll,
1989). Both models suggest that it is vital that workers allow sufficient time for post work recovery in order to avoid strain and longer term negative health consequences.

### 5.3.1 The Effort-Recovery Model

The Effort-Recovery Model employs a work-rest cycle and proposes that long working hours do not leave sufficient time to recover from the demands of the day. After engaging in effortful work one potential outcome is energy depletion and post work fatigue (van Hooff, Geurts, Kompier, & Taris, 2007). Post work fatigue should normally be a short lived experience and is quite normal; however, problems begin when there isn’t sufficient time available to recover from work. The recovery period can be thought of as a period in which rest occurs and there are no demands put upon the person, this allows depleted energy and resources to be restored (Zijlstra & Cropley, 2006). As noted in Chapter 2, a lack of recovery is regarded by some researchers as one potential causal mechanism linking long working hours to ill-health (e.g. Härma, 2006).

Lack of recovery from work is most likely to occur in circumstances where the same psycho-physiological systems are used both at work and during non-work hours (van Hooff, et al., 2007). For example, if during off-job time a worker is worrying either about past or future work events/activities then the same psycho-physiological systems are in use and this negatively affects recovery (Brosschot, Pieper, & Thayer, 2005). If these psycho-physiological systems are activated repeatedly or continually, then there is the potential for chronic over activity and subsequent changes to normal functioning.

### 5.3.2 The Conservation of Resources Theory

The Conservation of Resources (COR) theory states that we each have a set of resources available to us (e.g., personal characteristics, sources of energy, tools, social support) and that we endeavour to protect and retain our resources. Energy can be conceived of as a resource (Zijlstra & Cropley, 2006) and periods of recovery are required to maintain and restore resources (Sonnentag, 2001). Stress can arise if a person perceives that their resources are under threat or lost (Hobfoll, 1989). Features of organisational life, such as, long working hours can threaten resources (Flaxman et al., 2012). If a person works very long hours and is tired as a result and
lacking in energy and resources, then investment in recovery is required to restore lost resources.

5.4 Need for recovery

Demerouti et al., (2007, p. 205) define need for recovery as the “sense of urgency that people feel to take a break from their demands, when fatigue builds up” or in layman’s terms it can be thought of as a need to ‘recharge the batteries’ (Zijlstra & Sonnentag, 2006). Need for recovery is considered an indicator of the efficacy of recovery strategies (Veldhoven, 2008), that is, high need for recovery may indicate that a person is under strain and is failing to adequately recover from work. It has also been argued that a sense of need for recovery could be regarded as the beginning of a long-term strain process which could lead to further problems like psychological distress, chronic fatigue, cardiovascular complaints and related health problems (Demerouti, Bakker, Guerts, & Taris, 2009). Notably, need for recovery predicts levels of well-being at bedtime (Sonnentag & Zijlstra, 2006), sickness absence (De Croon, Sluiter, & Frings-Dresen, 2003), psychosomatic complaints, sleep problems, and emotional exhaustion (Sluiter, Van der Beek, & Frings-Dresen, 1999). Taken together this evidence points to the fact that high need for recovery may indicate work induced fatigue and the beginnings of health problems (Demerouti et al., 2009).

A significant relationship has been established between work load and high need for recovery (Veldhoven, 2008). In particular, high work intensity and high job demands predict a high need for recovery after work (Meijman, Mulder, Van Dormolen, & Cremer, 1992; Sonnentag & Zijlstra, 2006). It has also been found that longer working hours, a longer working week (Jansen, Kant, & van den Brandt, 2002) and working during off-job time are also associated with a greater need for recovery (Sonnentag & Zijlstra, 2006).

On the other hand, the ability to control one’s effort expenditure is important when discussing need for recovery (Zijlstra, 1996). For example, decision latitude at work has been found to be negatively related to need for recovery (Demerouti et al., 2009; Sonnentag & Zijlstra, 2006). Also, engaging in physical and social activities after work is negatively related to need for recovery (Sonnentag & Zijlstra, 2006).
In a longitudinal study of employees (N=123) across different occupations, it was found that high need for recovery and work-life conflict were reciprocally interrelated, with high need for recovery predicting more work-life conflict, and more work-life conflict predicting high need for recovery (Demerouti, Taris, & Bakker, 2007). Research suggests that work-life conflict reduces opportunities to recover (Taris, et al., 2006) and that employees can go into ‘negative spirals’, with combined high need for recovery and high levels of home-work interference having a negative impact on concentration levels and work productivity (Demerouti et al., 2007).

5.5 Recovery Research
Sonnentag (2001) has noted that the amount of variance in well-being and health which can be attributed to work in most studies is low, not exceeding 10% in the majority of studies. Therefore, she recommended that attention is given to other aspects of life, which may interact with work to ultimately influence one’s health, including activities and behaviours in the non-work domain. Using quantitative diary methodologies, Sonnentag and colleagues have extensively studied both post-work recovery (Kuhnel & Sonnentag, 2011; Sonnentag, 2001, 2003; Sonnentag, Binnewies, et al., 2008; Sonnentag & Natter, 2004) and cognitive detachment from work (Sonnentag & Bayer, 2005; Sonnentag & Kruel, 2006; Sonnentag, Kuttler, & Fritz, 2010; Sonnentag, Mojza, Binnewies, & Scholl, 2008) in a number of working populations. Quantitative diary studies pre-dominate the work to date on recovery and detachment. However, other methodologies have also been employed, including qualitative interviews (Cropley & Millward, 2009), observational methods and stress hormone measurements (Saxbe et al., 2011) and longitudinal designs (Binnewies, Sonnentag, & Mojza, 2009).

A central question of interest to recovery researchers is whether or not all post work activities are equally beneficial in facilitating recovery. Using a quantitative diary design distributed to a group of teachers, Sonnentag (2001) revealed that engaging in work during non-work time was not conducive to well-being at bedtime. Another diary study supported Sonnentag’s (2001) findings, where it was reported that individuals who worked in the evenings reported higher levels of fatigue than those who engaged in other activities (Zijlstra & Rook, 2003). Fatigue is regarded as an
outcome of poor recovery (Demerouti et al., 2009). In addition, it has been found that individuals who regularly partake in overtime work report more sleep problems than those who work normal hours (Rau & Triemer, 2004). Sonnentag & Zijlstra (2006) also reported that engaging in work activities during non-work time was related to higher need for recovery and poorer well-being at bedtime.

The findings with regard to recovery and engaging in passive activities is mixed (Bakker, van Emmerik, Guerts, & Demerouti, 2008). Sonnentag (2001) found that engaging in passive activities (e.g. watching television, listening to music) was conducive to well-being at bedtime in teachers. Conversely, a diary study of professionals from a variety of occupations revealed that engaging in passive activities was not conducive to post-work recovery, but were associated with greater feelings of fatigue (Zijlstra & Rook, 2009). Another study also found that engaging in passive activities had no impact on well-being at bedtime in flight attendants (Sonnentag & Natter, 2004).

While passive activities may be relaxing, they do not necessarily involve actively seeking after a state of relaxation. Research suggests that actively engaging in relaxation activities (e.g. meditation, having a bath) in the evening is associated with positive mood and increased life satisfaction and negatively associated with need for recovery, sleep problems, exhaustion and health problems (Sonnentag & Fritz, 2007).

The findings with regard to engaging in social activities (e.g. meeting friends) and recovery are also mixed. For example, Zijlstra & Rook (2009) reported that social activities in the evenings were not conducive to recovery after work. Furthermore, social activities have also been found to be unrelated to self-reported fatigue or mood at bedtime (Sonnentag & Bayer, 2005). Indeed, in one study of recovery in flight attendants, it was found that engaging in social activities was associated with higher levels of depression at bedtime. Conversely, Sonnentag (2001) reported that engaging in social activities was conducive to well-being. Furthermore social activities have been found to be negatively related to need for recovery from work (Sonnentag & Zijlstra, 2006).
There is strong and consistent evidence in the extant literature showing that engaging in physical exercise in the evenings results in improved recovery outcomes (cf. Demerouti et al., 2009). Even partaking in physical activity for small amounts of time can have a significant positive impact on well-being (Sonnentag & Natter, 2004). However, it has been reported in a study of police officers that although people are generally aware of the positive effects of engaging in physical activities, on days when people faced a lot of problems and hassles at work, they were less likely to engage in physical activities and more likely to engage in passive activities (Sonnentag & Jelden, 2009). Similarly, the relationship between engaging in mastery activities, (defined by Binnewies & Sonnentag (2008) as activities that provide challenging experiences and opportunity to learn new skills and experience competence in domains outside of work e.g. hobbies) and recovery, although not widely researched, also appears to be positive, with studies suggesting that engaging in hobbies results in increased recovery (Garrick, Winwood, & Bakker, 2008; Winwood, Bakker, & Winefield, 2007). Zijlstra & Rook (2009) have stated that for workers whose roles are primarily mentally demanding (e.g. academics), that physical activity after work is vital for recovery and therefore, such workers should try to maximise the amounts of their free time devoted to physical activities.

Engaging in household and childcare activities after work requires effort (both psychological and physical) and has an obligatory element (Demerouti et al., 2009). Therefore, although these activities may draw on different resources from work, the fact that they have to be done, may pose a barrier to recovery, in that a person may be fatigued after work, but still has to for example, prepare the evening meal and get children ready for bed. A number of studies have found no relationship between engaging in household/caring activities and self-reported recovery (see for example, Sonnentag 2001, Sonnentag & Natter 2004; Sonnentag & Bayer 2005; Sonnentag & Zijlstra, 2006). This may be potentially due to the fact that the measurement of household and caring activities tend to be measured together and are thus confounded in many studies. It may be the case that childcare activities promote recovery whereas household activities detract from recovery (Demerouti et al., 2009). In a recent study by Saxbe et al., (2011) that measured household activities without confounding with childcare activities, a negative relationship was observed.
between time spent in household activities after work and physiological recovery from work for both men and women.

Research has shown that the level to which post-work activities are regarded as facilitating recovery and detachment is more important than the actual time spent in these activities (Zijlstra & Rook, 2009). Sonnentag & Natter (2004, p. 373) in a recovery study in flight attendants explained the importance of a person’s perception of recovery by using the term ‘recovery experience’ which was defined as “an individual’s perception that the activity he or she pursues helps in restoring his or her resources.” Therefore, it is important to not only measure the amount of time spent in different activities after work, but also to measure the recovery experience, that is, the degree to which a person experiences an activity as recovering. Sonnentag & Natter (2004) have suggested that individuals need to determine which types of activities work best for them in allowing them to recover from work.

Achieving recovery is particularly important for productivity in the long run, as has been shown in a quantitative diary study (Sonnentag, 2003). Workers (across public service organisations) who recovered successfully after work were more engaged in their work on the subsequent working day and had the resources to engage in proactive work behaviour such as taking initiative and pursuing learning goals. Another study of assembly line workers reported that work engagement was a function of recovery level, and daily productivity was predicted by engagement level (Bakker, van Emmerik, et al., 2008). Also, if employees had adequately recovered then they perceived high job demands as challenges rather than stressors. The researchers concluded that effortful work during the day is not damaging in the long term provided that the employees achieve sufficient levels of recovery on a daily basis (Bakker, van Emmerik, et al., 2008). Use of internal recovery opportunities i.e. taking breaks from work during the working day, also appear to facilitate recovery and higher energy levels at night (Sanz-Vergel, Demerouti, Moreno-Jimenez, & Mayo, 2010).

Achieving recovery on a daily basis is important, because it has been shown that accumulated recovery over a number of days predicts vigour (Sonnentag & Niessen, 2008), which refers to the person’s subjective experience of energy and aliveness.
(Peterson & Seligman, 2004; Ryan & Frederick, 1997). This has positive benefits for both work and family in that a person may have greater energy for both the home and work domains, therefore enriching and facilitating functioning at work and in the home domains.

The weekend has been noted as an important time for recovery from work as it provides the opportunity for substantial recovery, and allows the person to return to pre-stressor levels of functioning, and it has been argued that the level of recovery achieved at the weekend is not possible during the working week (Zijlstra & Rook, 2009). However, putting off recovery until one gets a block of time e.g. long weekends/holidays, may not be the best strategy in the long run. Evidence shows the positive effects associated with recovery during weekend breaks and holidays, for example, decrease in burnout and increase in engagement (Kuhnel & Sonnentag, 2011), decreases in exhaustion and health complaints (Fritz & Sonnentag, 2006). However, the positive effects of these vacations dissipate quickly (known as fade-out), and well-being can deteriorate after the individual returns to work (de Bloom, et al., 2010; de Bloom et al., 2009; Kuhnel & Sonnentag, 2011; Westman & Etzion, 2001). Therefore, it is important that workers use their free time in evenings and weekends to adequately recover and rejuvenate their resources for the remainder of the working week.

Recovery research to date shows that achieving recovery after work is important in order to protect and promote well-being and productivity. Lack of recovery after work may have negative long term consequences for health, for example, it has been put forth as a theory to explain why work related stress may potentially develop into ill health (Guerts, Kompier, Roxburgh, & Houtman, 2003; Meijman & Mulder, 1998; Sluiter et al., 1999). However, there have been some inconsistent findings across occupational groups in recovery and respite research, therefore, additional research is necessary in order to examine recovery processes in different sectors. Academic work entails long working hours and high workload; therefore it is important to examine the extent to which academics achieve recovery in a high demand environment.
5.5.1 Gender differences in recovery

The extant literature on gender differences in recovery is limited, with few quantitative diary studies directly examining gender differences. However, some relevant findings have been reported, for example, Sonnentag (2003) found that men reported lower recovery levels than females in a quantitative diary study. This finding was explained due to the fact that the men in this study had more children than the women and that the number of children was negatively related to day level recovery. It was also noted that the men engaged in more work-related tasks in the evenings than the women (Sonnentag, 2001) and that this might have affected their overall recovery levels (i.e., the activities that the men engaged in during leisure time did not promote recovery).

Evidence of gender differences in recovery has been provided from a number of studies of physiological recovery after work. For example, post-work recovery in Swedish male and female managers was found to differ, in that, men recovered more quickly from work than women. Men showed decreases in cortisol and norepinephrine excretion and lower blood pressure, whereas for women their blood pressure, cortisol and norepinephrine levels either stayed constant or increased (Frankenhaeuser et al., 1989). Other recovery studies have supported the finding that women recover less effectively after work than men (Lundberg & Frankenhaeuser, 1999; Pollard, Ungpakorn, Harrison, & Parkes, 1996).

More recently, Saxbe et al., (2011) conducted a study of 30 dual earner couples, investigating the impact of time spent on leisure and household activities after work on physiological recovery. Scan sampling observations conducted every 10 minutes after work over the course of four days revealed that women spent more time on housework activities while men spent more time on leisure activities after work. For both men and women who dedicated more time after work to household activities, their evening cortisol levels were higher and they had weaker afternoon to evening recovery. Cortisol is a stress hormone and elevated end of day cortisol levels have been linked to burnout, depression and earlier mortality (Sephton, Sapolsky, Kraemer, & Spiegel, 2000).
5.5.2 Workaholism and Recovery

It has been reported that employees who report high work drive have difficulty in detaching from work (Schaufeli et al., 2008) and also fail to address their recovery needs (Taris et al., 2005b). A day reconstruction study of workaholics and non-workaholics (N=85) revealed that workaholic employees benefited more from engaging in physical activities after work in comparison with non-workaholics. In addition, workaholics who engaged in work during their evening time were less happy, less vigorous and less recovered at bedtime than the non-workaholics (Bakker, Demerouti, Oerlemans, & Sonnentag, 2013). Another study which employed an experience sampling methodology (N=65) over the course of week found that workaholics preferred work activity to leisure activity and workaholism was associated with more cognitive engagement with work (Snir & Zohar, 2008). The number of studies investigating workaholism and post-work recovery in the extant literature appear to be relatively few, with the majority of workaholism studies focusing on between subject differences in outcomes (Bakker et al., 2013), such as work hours, job satisfaction, work-life conflict, etc. Therefore, the relationship between recovery and workaholism appears to be under-researched.

5.5.3 Work factors facilitating recovery

A number of work-related factors have been identified as positively affecting recovery and detachment from work. Job control has been identified as a potential aid to recovery (Sonnentag & Zijlstra, 2006) and detachment from work. The ability to decide how and when work is done is positively related to the ability to switch off (Cropley et al., 2006). The opportunity to engage in learning opportunities at work has also been identified as aiding physiological recovery, but not self-rated recovery (Rau, 2006). Having high job control and having the ability to engage in learning opportunities could be classed as an ‘active job’ under Karasek’s job strain model, which theoretically is not linked to job stress, but a state of activation (Demerouti et al., 2009).

5.5.4 Factors inhibiting recovery

Job demands and working overtime have both been identified as important factors in the recovery literature. High work demands are negatively associated with ability to relax at home (Rau, 2006; Sonnentag & Bayer, 2005) and detach from work
High job demands are also positively related to work rumination (Cropley & Millward Purvis, 2003). Additionally, studies have shown that the higher the work intensity during the day, the longer it takes to unwind in the evening (Frankenhauser, 1981; Meijman et al., 1992). Working overtime can be considered a stressor as it curtails leisure time and time for household and childcare activities. It is negatively related to post-work recovery and positively related to sleep problems (Rau & Triemer, 2004).

Sonnentag & Niessen (2008) have also demonstrated that home workload was negatively related to accumulated recovery. Other factors from the home domain also have the potential to negatively affect recovery, typically referred to as ‘non-work hassles’. This refers to the changing events and stressors which can arise on a day to day basis e.g. the washing machine breaking down, a sick child, additional housework, and so on. Fritz & Sonnentag (2005) note that such hassles drain emotional resources and can significantly contribute to poorer well-being.

**5.6 Psychological detachment**

An inability to psychologically detach from work may be problematic as it may be responsible for the prolongation or reactivation of work stress-related physiological activation (Demerouti et al., 2009). Where psychological detachment from work is achieved it has been related to positive outcomes, such as low levels of fatigue and higher reported positive mood (Sonnentag & Bayer, 2005; Sonnentag, Mojza, et al., 2008), increased life satisfaction (Sonnentag & Fritz, 2007) and increased employee well-being (Fritz, Yankelevich, Zarubin, & Barger, 2010). However an inability to switch-off from work has been linked to sleeping problems (Cropley, Dijk & Stanley, 2006), poor social life (Cropley & Millward, 2009), and health problems such as dysphoria and cardiovascular disease (Pravettoni, Cropley, Leotta, & Bagnara, 2007; Suadicani, Hein, & Gyntelberg, 1993). Low psychological detachment from work is related to emotional exhaustion and need for recovery (Sonnentag, Kuttler, et al., 2010) and it has been suggested that an inability to detach from work may be the mechanism through which work stressors are translated into poor well-being. In longitudinal studies, lack of detachment has been found to moderate the relationship between high work demands and increased psychosomatic complaints, i.e. job demands lead to increased levels of psychosomatic complaints.
when detachment is low (Sonnentag, Binnewies, & Mojza, 2010); therefore, detaching from work can be regarded as a protective factor in the stressor-strain relationship. Sonnentag and colleagues also found that lack of detachment from work also drains energy resources over time (irrespective of the level of work demands), which ultimately may lead to problems like emotional exhaustion. As such, the ability to detach from work is regarded by some researchers as a strategy people can employ to aid their recovery from the demands of work.

Cropley and Millward (2009) classified people who normally find it difficult to switch off from work during their personal time as ‘high (work) ruminators’ and persons who normally find it easy to switch off from work as ‘low (work) ruminators’. Their qualitative interview study (N=8) on the process of post-work unwinding found that low work ruminators reported being able to switch off from work with ease, whereas the high ruminators had significant difficulty turning off their thoughts about work. In addition, low ruminators were found to be less emotionally involved in their work, which aided their ability to ‘switch-off’.

However, thinking positively about work during leisure time has been shown to be beneficial for well-being (Binnewies et al., 2009; Fritz & Sonnentag, 2005, 2006), therefore, it is necessary to elucidate the type of work-related thoughts a person is having. Worry and rumination are said to be common manifestations of what is known as perseverative cognition (Flaxman et al., 2012), which could be considered a form of negative thinking about work. Work rumination may prolong physiological activation and therefore interfere with recovery processes (Brosschot et al., 2005) and both worry and rumination tend to co-occur in individuals (Flaxman et al., 2012).

A number of work factors have been identified as contributing to inability to unwind following the working day. These include, working in a demanding environment; working long hours, and having a lack of perceived control at work and at home (Cropley & Millward Purvis, 2003). It has been established that high workloads are linked to poor ability to psychologically detach from work at the end of the working day (Cropley & Millward Purvis, 2003; Sonnentag & Bayer, 2005; Sonnentag & Fritz, 2007; Sonnentag, Kuttler, et al., 2010), even though those with heavy
workloads are probably most in need of recovery. High workloads are a feature of many contemporary jobs (LePine, Podsakoff, & LePine, 2005) and reducing workload is not always possible; therefore, it is important to understand how people switch off from work, even during periods of high work intensity.

Low spatial work-home boundaries have also been found to be linked with poorer detachment (Sonnentag, Kuttler, et al., 2010). It has been suggested that high work detachment is indicative of strong boundaries between work and home lives, and that this is positive for well-being (Fritz, Yankelevich, et al., 2010). Fritz et al., (2010) in a study of detachment in university (administrative) employees found that work detachment had a linear relationship with indicators of well-being (job satisfaction and emotional exhaustion), that is, high detachment was associated with high job satisfaction and low levels of emotional exhaustion. However, a curvilinear relationship was revealed between work detachment and co-worker reported job performance. It was concluded that a medium level of detachment was optimum for work performance as low work detachment can result in drained resources, while high work detachment may reduce productivity as the individual needs to spend time getting ‘re-started’ at work each day.

It has been reported that individuals high on job involvement and low on recovery related self-efficacy reported difficulties in detaching from work (Sonnentag & Kruel, 2006). Recovery related self-efficacy was defined as “an individual’s expectation of being able to benefit from recovery time and recovery opportunities” (p. 202) Sonnentag and Kruel also suggest that people high on job involvement may be less willing or less able to psychologically detach from work. It has been also shown that being engaged during work time, while being able to psychologically detach from work during off-work time is the most beneficial combination for employees’ affective states (Sonnentag, Mojza, et al., 2008) and in particular, switching off from work appears crucial for a person’s affective state over the course of a working week. Sonnentag et al., (2008) reported that being able to detach from work is particularly important for the well-being of highly engaged employees.

It has been shown that psychological detachment is an important factor in improving general well-being during long periods of respite e.g. a two week holiday (Etzion et
al., 1998). In addition, achieving detachment from work at the weekend has been linked to positive affect, in particular, joviality and serenity (Fritz, Sonnentag, Spector, & McInroe, 2010). Achieving detachment on a daily basis is also important as it has been linked to lower levels of fatigue and positive mood (Sonnentag & Bayer, 2005).

Detachment as a method to achieve recovery has also been found to be important with regard to work-life conflict. Specifically, it has been found that achieving detachment from work buffers against some of the negative effects associated with work-family conflict on well-being and therefore, detachment is an important method of coping with conflict between the work and home domains (Moreno-Jimenez, et al., 2009).

5.7 Recovery, detachment and boundaries in academia
It has been reported that academics have difficulty in maintaining boundaries between work and the home domain due to high work demands, long working hours, high levels of job involvement and the ‘unbounded nature’ of academic work (Kinman, 2012). This is supported by Gornall & Salisbury (2012) who noted that traditionally academics have maintained blurred boundaries between the work and home domains; while Ylijoki (2013) states that traditionally academics have no boundaries between work and life. In a study of 291 work-linked academics (i.e. both partners worked in third level education), it was found that work-linked academics reported weaker work-home boundaries and greater levels of work-life conflict than non-work linked academics. Furthermore, a follow up interview study (N=32) revealed that while schedule flexibility was regarded as useful with regard to caring responsibilities, it was also reported that there was a risk of the work-home boundaries becoming blurred (Kinman, 2012).

In a Finnish interview study with 30 academics focused on work-home boundaries, it was found that some academics adhered to the traditional and idealised view of academia, whereby total commitment was given to one’s research, which necessitated long working hours and a lack of boundaries between home and work. However, a subset of academics did not ascribe to this ideal and instead had firmer boundaries between their academic work and their private lives. Their viewpoint was
that there was time for work and also time for a private life and it was up to the person to decide on the balance. This group was mainly comprised of younger academics, female academics with children, but also some older academics. Many younger academics who maintained firmer boundaries between work and home also viewed academic work as a job for which they were paid; and they were willing to work hard during their normal working hours but were unwilling to sacrifice their private lives (Ylijoki, 2013).

Academics generally enjoy the ability to work from home and report doing a considerable proportion of their work from the home domain (Gornall & Salisbury, 2012), however, this ability to work remotely from the university setting, while aiding productivity may have negative repercussions for recovery and detachment from work and maintaining home-work boundaries. It has been noted that the work undertaken by academics at home is intensive, unseen, and unmonitored (Gornall & Salisbury, 2012). Notably, the work completed outside the office is generally not discussed in terms of academic workload planning.

As evidenced in previous chapters, academic work is becoming increasingly demanding and a long hours culture exists. Having too much work to do during ‘normal working time’ has been linked with working overtime and consistent overtime is postulated to be negatively related to recovery from work (Härmä, 2006). On the other hand, we must take into consideration the level of work time control afforded to academics, defined as “an employee’s possibilities to control the duration, position, and distribution of his or her work time, that is, autonomy with regard to work time” (Härmä, 2006, p.503) . Härmä (2006) concluded that job control may act as a powerful buffer against long working hours. Academics typically have a large degree of control over their working time and their working hours are largely self-regulated and therefore are flexible (Bailyn, 2003; Gatta & Roos, 2004). Furthermore, while there is considerable scope for overwork given the heavy demands associated with academic work, this ability to regulate one’s own working hours allows significant flexibility in the way work is conducted and should theoretically help to buffer academic workers from the demands of their jobs. As discussed in Chapter 3, the job-demand control model (Karasek, 1979) states that engaging and stimulating jobs are classed as those with both high demands and high
decision latitude (job control) which is the combination previously found to occur for Irish academics in a single institution study (Hodgins et al., 2005). Previous findings of low self-reported stress levels in Irish academics were explained by the high level of control experienced when it came to how, where and when one works (Hodgins et al., 2005).

While it is assumed that academics still retain considerable flexibility about how and where they work, rising work demands may in fact preclude schedule flexibility, therefore negating the effects of job control, potentially leading to insufficient recovery and related problems. This is supported by the view of Gornall & Salisbury (2012) that for academics there is no upper limit to their working time and that the average working hours of academics is estimated to be approximately 55 hours per week (Tight, 2010).

This view is also supported by a quantitative diary study of work-related effort and recovery conducted within a Dutch university setting (N=133 academic staff) (van Hooff et al., 2007). The academics in the study were grouped into high versus low work effort groups based on a pre-diary questionnaire. Diary questionnaires were completed three times per day (morning, afternoon, evening) over the course of a week. Analyses were conducted to compare the two groups on their activities, experiences and health during the three time periods. When the high and low effort group were compared, it was found that academics who were classed as ‘high effort’ were less likely to engage in active leisure pursuits during the week and were also more likely to do work on the weekends. In addition, the high effort group reported more sleep problems, greater preoccupation with work and being less ready for the new working week than the low effort group. The low effort group perceived both home and work activities to be less effortful than the high effort group. This study concluded that workers in the high effort group were more likely to be at risk of negative health outcomes.

Cropley and Millward (2009) note that teaching and medical professions have been singled out as occupations that have a high proportion of workers who find it difficult to ‘switch-off’ from work. Due to the large element of teaching in academic work, it is presumed that this trend also applies to third level education.
Furthermore in a study investigating psychological detachment in teachers, it was reported that individuals who were highly job involved had greater problems detaching from work when compared with individuals who reported lower levels of job involvement (Sonnentag & Kruel, 2006).

Detaching from academic work may be particularly difficult due to the vocational nature of the work (Gornall & Salisbury, 2012) and the propensity of academics to become absorbed in their work (Bailyn, 2003). Total commitment to one's research remains an ideal in academia and is a reflection of the person's enthusiasm and internal motivation; however, it also necessitates long working hours which can prove problematic for some academics, particularly females (Ylijoki, 2013). Detaching from academic work may also prove difficult due to the fact that academic work never gets fully done, as reflected in the statement “academic work, like housework, is never done” (Acker, 1994 p.126).

However, with regard to psychologically detaching from work, as noted by Flaxman et al., (2012) there is a differentiation to be made between positively reflecting on work and worrying or ruminating about work issues. In their study on the effects of self-critical perfectionism and perseverative thinking in British academics (N=77) in two institutions, they found that perfectionist academics reported poorer functioning on measures of well-being in the weeks following return to work after a holiday period, which was attributed to the greater propensity of the perfectionist academics to worry and rumination about work during their holiday period.

Chapter summary
As demonstrated in this chapter, post-work recovery and the ability to psychologically detach from work serve important functions in maintaining health and well-being. Quantitative diary studies predominate in recovery and respite research, however, some qualitative studies, observational studies, physiological and longitudinal studies have contributed to our knowledge of the causes and consequences poor recovery and low levels of work detachment. Blurred boundaries between work and home, heavy work demands and a long work hours culture pose barriers to recovery and detachment from work. Lack of recovery and detachment from work, and blurred work-home boundaries have also been linked to higher levels
of work-life conflict. Because of the long hours culture and high intensity nature of academic work, it is hypothesised there may be a lack of time for recovery and a propensity to not switch off or to continue to think about work while at home. The long-term negative effects on health and well-being due to insufficient recovery and detachment from work are beginning to be understood, but more research is needed to further clarify the causes and consequences of poor recovery and low levels of work detachment.
Chapter 6 – Rationale

6.1 Introduction
Three studies were conducted to quantitatively and qualitatively analyse factors related to work hours, work-life conflict and psychological strain amongst Irish academics. More specifically, Study 1 used multi-group structural equation modeling to examine factors hypothesised to impact on work hours, work-life conflict and psychological strain in Irish academics. Study 2 used a diary methodology to extend the focus of analysis into the home domain of academics, in particular examining daily levels of recovery and detachment from work over the course of a week in groups of academics who were categorized by workaholism type. Study 3 used a semi-structured interview methodology to further explore the nature of recovery and detachment from work amongst Irish academics and to investigate the role of boundary management in relation to post-work recovery and work-life conflict. Central to all three studies is an examination of gender differences. The impact of workaholism on outcomes is also a central focus of analysis, particularly in Study 2. A detailed rationale for each study is presented below.

6.2 Study 1 Rationale
Research to date highlights a pattern of long working hours in academia across a number of countries. However, data in relation to the working hours of Irish academics have not previously been published. It is important to examine work hours within the Irish setting as the Irish academic experience may differ from that of academics in other countries due to cultural, political, management and structural differences in third level education. For example, unlike the US, Ireland does not have a tenure track system and unlike the UK Ireland does not have the Research Assessment Exercise (RAE). Furthermore, it is important to examine predictors of long working hours in an Irish context. Notably, past research in the UK, North America, Australia and elsewhere has identified a number of antecedents of long working hours relevant to academics, and that long working hours can result in negative outcomes such as work-life conflict and stress. However, less is known about the Irish academic experience.
Study 1 advances knowledge in the area by employing multi-group structural equation modeling (SEM) to examine the direct and indirect effects of individual factors (e.g., workaholism; job involvement), organisational factors (e.g., organisation work time norms, organisational support, supervisor support, work intensity), and life circumstances (e.g., the presence of dependents) on work hours, work-life conflict, and psychological strain in male and female Irish academics. Separate from the SEM analysis, analysis of variance is also conducted to examine mean differences across a range of variables that are not included in the SEM model, for example, job control, family involvement, and job satisfaction. A focus on the impact of occupational status is included in the analysis in this study as a number of previous studies have shown mean differences on outcome measures when occupational status is considered, see for example, Leung et al., (2000); Thorsen, (1996) and Winefield et al., (2008).

Central to Study 1 is an analysis of the relationship between gender, working time and work-life conflict as it has been argued that gender differences are complex and warrant further investigation (Byron, 2005). General trends in the literature have shown that male workers tend to work longer hours than female workers (Lee et al., 2007), therefore, it is expected that this same effect will be observed amongst academics. Furthermore, although gender differences have also been observed in some of the antecedents of working time, it is unknown if similar differences exist amongst academics. For example, it has been found in one study that the long working hours of male employees was explained by high job involvement, whereas the long working hours of female employees was explained by multiple factors (Brett & Stroh, 2003). Furthermore, Byron (2005) has recommended that studies are required which investigate the role of gender in relation to antecedents and consequences of work-life conflict. On the basis of the available literature on gender differences in work hours, work-life conflict and psychological strain, it was predicted:

- **H1**: Male academics work longer hours than female academics
- **H2**: Long working hours predict higher levels of work-life conflict in both men and women
- **H3**: Higher levels of work-life conflict predict higher levels of psychological strain in both men and women
In light of Rationale Theory (Gutek et al., 1991) and Gender Role Hypothesis (Greenhaus et al., 1987) and the available evidence pointing to gender differences in work-life conflict (in academia) there are both theoretical and related empirical reasons for believing that gender differences will be observed in work-life conflict in this study. The key exogenous variables in the model have been detailed in the literature review, however, their relevance is reiterated below in relation to the aim and objectives of Study 1.

At a European level, combining paid work and family responsibilities has been identified as a concern, as many European employees report a lack of fit between working time and family commitments (EFIWLC, 2004). Research has shown that working parents tend to modify their working hours, normally reducing their hours, presumably, in order to attend to their caring responsibilities. Furthermore, women with children have been shown to be more likely to reduce their working hours than men with children. In academia, studies from other countries have also highlighted the challenge of integrating academic work and caring requirements, particularly for female academics (Drago et al., 2006; O' Laughlin & Bischoff, 2005). In this study, it is hypothesised that the presence of dependents (i.e., children) will decrease working hours and increase work-life conflict, and that this effect will be stronger for female academics.

\[ H4a: \text{Having dependents will result in shorter working hours} \]

\[ H4b: \text{Having dependents will predict higher levels of work-life conflict, and this effect will be larger for women when compared with men} \]

While some employees may voluntarily choose to work long hours, employees may also be influenced both formally and informally by organisational norms and expectations in relation to working hours. For example, Major et al., (2002) demonstrated that long work hours are influenced by organisational expectations, while other studies have shown that females may be more negatively affected by long work hours expectations than men (Posig & Kickul, 2004). It is hypothesised that higher organisational expectations in relation to long working hours will predict longer working hours, higher work-life conflict and higher psychological strain in
academics, with more significant direct and indirect effects of higher organisational expectations observed in female academics when compared with male academics.

*H5a* - *Higher organisational expectations in relation to long working hours will predict longer working hours, and this effect will be larger for female academics compared with male academics.*

*H5b* - *Even after controlling for the effects of work hours, the direct effect of expectations on work-life conflict and psychological strain will be stronger for female academics compared with male academics.*

Research highlights the importance of organisational support for non-work/family related issues, with supportive workplaces shown to facilitate the reduction of work-life conflict and stress experienced by employees (Eby et al., 2005). However, the uptake of support services is often low. Furthermore, there may be conflicting messages communicated from different levels of the organization, and academics may perceive negative outcomes associated with availing of such supports, for example, being regarded as less committed to ones work and career. In addition to organisational support, supervisor support for non-work issues can also help to reduce levels of work-life conflict experienced by employees (Kinnunen et al., 2005). Research suggests that females are more in need of social support in the workplace as a buffer against stress (Leiter, 1991) and due to their greater responsibility for home and caring duties. In the current study, we predicted direct and indirect effects (mediated by lower working hours) of higher perceived organisational and supervisor support on lower levels of work-life conflict and lower levels of psychological strain; and we predicted that these effects would be stronger in female academics when compared with male academics.

*H6a* – *Supportive organizations and supervisors predict shorter working hours, which in turn predicts lower levels of work-life conflict and psychological strain, and these effects, are stronger in female academics when compared with male academics*

*H6b* - *Even after controlling for work hours, higher perceived organisational and supervisor support predicts lower levels of work-life conflict and lower*
levels of psychological strain, and these effects are strong in women when compared with men.

Research has shown that academics are highly job involved and have a tendency to become absorbed in their work (Kanungo, 1982a). However, high job involvement has been found to predict long working hours (Mantler & Murphy, 2005) and work-life conflict (Michel et al., 2011). Byron (2005) has noted that highly job involved men experienced higher levels of work-life conflict than highly job involved women. Consistent with these findings, the current study hypothesised that high levels of job involvement would predict longer working hours and higher levels of work-life conflict in Irish academics. We predict that these effects will be higher in male academics than female academics.

**H7a - High levels of job involvement predict longer working hours and that this effect is stronger for male academics when compared with female academics.**

**H7b - Even after controlling for working hours, high job involvement will have a direct effect on work-life conflict.**

The extant literature has also shown that heavy workloads and the increasing pace of work (i.e. work intensity) strongly influences working hours and work-life conflict. Reports of high work intensity have increased over time in Europe (Parent-Thirion, et al., 2007). High work intensity is being driven by new forms of organization, new forms of management and improvements in information technology which has increased the speed at which work can be conducted (EFILWC, 2009). The pace of work in academia has accelerated and academics must manage new forms of work, for example, increasing levels of administration and managerial tasks (Ylijoki, 2013). However, many academics regard work overload as a significant source of stress (Cantano et al., 2010). In this study, it is hypothesised that higher work intensity will predict longer work hours, higher levels of work-life conflict, and higher psychological strain, and that these effects will be similar for both male and female academics.
**H8a -** Higher work intensity will predict longer work hours, and these effects will be similar for both male and female academics.

**H8b –** High work intensity will have significant direct effects on work-life conflict and psychological strain, even after controlling for the effect of work intensity on working hours.

Studies highlight a link between workaholism, long work hours, higher work-life conflict and psychological strain. It has been noted by Spence & Robbins (1992) that the competitive nature of the academic environment may foster workaholic type behaviour. In the current study it is hypothesised that higher work drive and higher work enjoyment predict longer work hours and higher work-life conflict in Irish academics. In addition, we allowed for the possibility that workaholism may have direct effects on work-life conflict that are not fully mediated by work hours. Because of the competitive nature of academia and Spence & Robbin’s (1992) findings of higher levels of work drive and work enjoyment in female academics, Study 1 explores gender differences in both mean levels of workaholism and in the relationship between workaholism and work hours, work-life conflict and psychological strain.

**H9a -** Higher workaholism (i.e. work drive and work enjoyment) will predict longer work hours.

**H9b – Even after controlling for the effects of long working hours, workaholism will have significant direct effects on both work-life conflict and psychological strain.**

In summary, the core aim of Study 1 was to identify and evaluate the impact of a number of personal, individual and organisational factors that are hypothesised to influence work hours, work-life conflict, and psychological strain in academics. Study 1 addresses the following research objectives:

- To examine self-reported work hours, work-life conflict, and psychological strain in Irish academics.
- To determine the impact of a hypothesised set of individual factors (number of dependents, personal factors (level of job involvement, workaholism), and organisational factors (organisational support, supervisor support, work
intensity, work hour norms) on work hours, work-life conflict and psychological strain.

- To examine the impact of gender and occupational level on all study variables (in line with previous studies of stress in academia).

6.3 Study 2 Rationale

Study 2 moves the focus of enquiry to the use of time after work. More specifically, in response to the calls in the literature for a greater focus on the non-work domain in work-life conflict research (Zijlstra & Sonnentag, 2006); Study 2 examines the after-work activities and experiences of Irish academics. Academics enjoy the privileges of largely being able to self-regulate their hours of work and to conduct work from home. However, research has shown that having the ability to work flexibly often leads to overwork and performing more hours of work rather than less. Study 2 examines the post-work activities of Irish academics and the degree to which post-work recovery, psychological detachment from work and work-life conflict is experienced. This study will add to the limited knowledge base on post-work recovery and detachment from work in academia and this knowledge may be of use in the design of programmes to increase recovery and detachment in the academic setting.

Study 2 makes use of a diary study design to examine the recovery and detachment experiences of academics in the evenings after work and at the weekend, over the course of a seven day period. Diary studies allow the analysis of fluctuating data such as activities, thoughts, feelings and behaviours (Alaszewski, 2006; Ohly, Sonnentag, Niessen, & Zapf, 2010). Diaries are useful as they allow the examination of on-going experiences, while taking into account the context in which events unfold (Bolger, Davis, & Rafaeli, 2003). A diary study can show “the little experiences of every day life that fill most of our working time and occupy the vast majority of our conscious attention” (Wheeler & Reis, 1991, p. 340).

While diary studies have been used extensively in scientific and medical research (Alaszewski, 2006), they have been relatively under-used in social science research (Elliot, 1997; Meth, 2003). However, in the last decade, diaries have been increasingly used in work and organisational research (Ohly, et al., 2010). Diary
methodology can be employed in isolation or as a supplement to other data collection
techniques. Diary studies offer advantages over other research designs in that they
allow the “examination of reported events and experiences in their natural,
spontaneous context, providing information complementary to that obtainable by
more traditional designs” (Bolger et al., 2003 p.580) and reduce the potential for bias
due to memory problems when time intervals between experiences of interest and
reports on experience are minimized. In addition, diary studies are very flexible, can
be tailored to the research objectives of the study and can be implemented using
either qualitative or quantitative data collection formats.

To date, most diary studies of post-work recovery have employed quantitative
designs, using highly structured diaries with standardized questions. Qualitative
diaries have not been used to the same extent in the areas of post-work recovery and
psychological detachment. Qualitative diaries offer some of the same design benefits
as quantitative diaries (i.e. minimizing memory effects and examination of changes
in events/behaviours over time), but also allow participants to provide more detail
with regard to the experiences of interest, and record their thoughts, feelings and
behaviours using their own words (Poppleton, Briner, & Kiefer, 2008). Therefore, in
this study, a diary instrument was designed consisting of both standardized questions
that allowed for quantitative analysis of experiences of recovery, detachment,
cognitive intrusion, work-life conflict and well-being and open-ended questions that
provided content for qualitative analysis of experience.

By examining the post-work activities of academics Study 2 aims to provide insight
into the way in which academics manage their work schedules and workloads and to
determine whether or not recovery from work is affected by post-work activities.
Study 2 extends Study 1 by refocusing on a number of the variables examined in
Study 1, but in relation to their effects on post-work recovery. Specifically, work
hours and work intensity are examined on a daily basis. This study also investigates
whether there are gender differences in the post-work activities of academics, in line
with the general trend for women to undertake a greater proportion of caring and
household duties. In addition, following on from the findings of Study 1, the
construct of workaholism is examined in relation to post-work activities, recovery,
detachment and work-life conflict.
It has been noted that academics in particular may experience difficulties in detaching from work (Gornall & Salisbury, 2012), which may in turn impede their recovery from work when home in the evenings. This study aims to evaluate the extent to which academics experience cognitive intrusion from work-related thoughts in the home environment on a daily basis and what types of thoughts prevail, thereby adding to the research on detachment from work. It has also been noted that the relationship between gender and detachment has not been addressed in the literature (Cropley & Millward, 2009). It has yet to be determined if there are any significant differences between men and women in terms of how they detach from work, the extent to which they achieve detachment and the barriers they face to detaching and recovering from work. This study aims to investigate whether or not there are significant gender differences in levels of detachment and recovery from work in a sample of Irish academics. Gender differences in work-life conflict are examined again in this study in order to corroborate the findings of Study 1.

Also, although many studies of recovery have been conducted indicating the importance of both post-work recovery and detachment for well-being, for example, see Fritz, Yankelevich, et al., (2010) and Sonnentag (2001), it has been noted that a gap in the literature exists with regard to the impact of personality variables on recovery (Flaxman et al., 2012). Recently, two studies have been published which have investigated the relationship between post-work recovery and workaholism (Bakker, et al., 2013; van Wijhe, Peeters, Schaufeli, & Ouveneel, 2012) using diary designs, however, only one diary study to date has examined the impact of a personality variable (i.e. self-critical perfectionism) on post-work recovery in academics (Flaxman et al., 2012) therefore, this study is timely and will aid in examining the recovery and detachment patterns and trends in differing workaholic types. Research has shown that workaholics prefer work activity to leisure activity (Snir & Zohar, 2008) therefore it is hypothesised that workaholics will spend greater time in the evenings engaged in work than low drive workers and that workaholics will experience poorer recovery due to their poorer ability to detach from work than non-workaholics (Schaufeli, et al., 2008).
The literature available on the relationship between workaholism and work-life conflict is also relatively sparse and consists mainly of cross-sectional survey designs. By employing a diary design, this study has responded to calls within the literature to employ other types of study design in work-life conflict research. This study is also innovative in that it explores not only work-life conflict, but also life-work conflict, work-life facilitation and life-work facilitation among workaholics and non-workaholics. It is hypothesised that in line with previous findings such as Andreassen et al., (2013) and Brady et al., (2008) that workaholics will experience greater levels of work-life conflict than either enthusiastic workaholics or low drive workers.

By employing quantitative and qualitative items in the diary instrument a deeper level of analysis of the complex set of relations between home and work life can be achieved, and ultimately may provide a starting point for advancing research on gender differences and workaholism differences in recovery and psychological detachment. Furthermore, by investigating post-work recovery and psychological detachment in academics we can gain greater insight into this complex and multi-faceted issue and increase our understanding of the role of cognitive detachment in relation to work-life conflict and recovery problems in academia. The use of a diary instrument in this study, allows the dynamic nature of the variables of interest to be examined and allows for the examination of differences in patterns by both gender and workaholism type. The diary method is useful as information not only on patterns of activities can be examined, but also the thoughts and feelings of the participants can be recorded in relation to the variables of interest.

**Study Aim**

The aim of Study 2 was to examine the post-work activities of academics over the course of a week and to determine the extent to which academics achieved recovery and detachment from work during their non-work time. Four specific research questions were explored during the analysis of the data:
Research Questions

1. What activities are used by academics to ‘recover’ and ‘detach’ from work?
2. Which activities do academics report as being more or less successful?
3. Are there gender differences and workaholism differences in post-work recovery and detachment activities used by Irish academics?
4. What are the barriers to successful recovery and detachment from work?

6.4 Study 3 - Rationale

Most studies to date on academia and its relationship with stress and work-life conflict have employed quantitative study designs, as have the majority of studies exploring post-work recovery and detachment from work. The aim of this study is to advance upon research in the area and the findings from Study 1 and Study 2 in particular by analysing more in-depth qualitative reflections from academics on the interface between their work and home lives. Study 3 made use of an interview methodology as it allowed academics to provide in-depth opinions and reflections on their work and its impact on post-work recovery and detachment in the home domain, thereby, ultimately enhancing the overall project findings. Study 3 consists of post diary semi-structured interviews which focus on the constructs of post-work recovery and detachment and the management of boundaries between work and home in academia.

Study 3 also follows up on the exploration of gender differences in post-work recovery and detachment from work. Trends in the extant literature reveal that academic work is associated with long working hours, heavy workloads, and high work intensity, all of which have been associated with poor detachment from work. In addition, many academics are also highly job involved which also has been shown to be a barrier to detaching from work. Given the differing post-work activities of males and females, it is unclear as to whether or not male and female academics achieve detachment from work in different ways. Study 3 examines the extent to which academics detach from work and whether detaching from academic work poses difficulties, and if so, do male and female academics report different challenges and strategies as part of their work detachment experiences. Given the lack of theory and empirical data on gender differences in post-work recovery and
psychological detachment, by using qualitative methods a full exploration of this issue can be undertaken in this study.

In this study boundary management between work and home is also examined, as the level of segmentation between work and home has been linked to work-life conflict and recovery from work. An understanding of individual preferences towards the degree of integration/segmentation between the home and work domains may aid in the development of practical work-life balance strategies/policies, thereby, avoiding the problems inherent in a ‘one size fits all’ approach to the integration of home and work. Aspects of academic work and culture which may possibly contribute boundary management problems and poor recovery may also be examined. One question of interest in this study is the degree to which academics maintain boundaries between their work and home lives, and whether or not this boundary aligns with the preference of the person for more or less boundary permeability.

By investigating post-work recovery and psychological detachment in academics we can better understand the nature of these processes and use this knowledge in the design of programmes that facilitate recovery and detachment in those academics that are experiencing high levels of distress as a result of poor recovery and detachment skills.

The integration of this qualitative method with the quantitative methods employed in Study 1 and Study 2 serves a number of purposes. First, the themes from the interview data can be cross-compared with the findings of Study 1 and Study 2 in order to corroborate findings. Second, the interview data will aid in illustrating some of the findings from the two quantitative studies, ultimately enhancing the overall project findings. The use of mixed-method research designs (i.e. studies which contain both a quantitative element and a qualitative element) is also regarded as a way of improving the usefulness of results (Bryman, 2008). This is important from a health promotion perspective, as the study results should be used to inform policy and potentially change practice.
Study Aim

The aim of this study was to explore post-work recovery, detachment from work and boundary management to gain a greater understanding of the strategies used by academics to protect and enhance their well-being and family functioning. A number of research questions were explored in this study:

Research Questions

The research questions were as follows:

1. How is detachment from work achieved and how does this impact on recovery and the home domain?
2. Is there a gendered nature to interviewees’ accounts of recovery, detachment and boundary management?
3. How do academics manage boundaries between work and home and are their boundaries perceived as facilitating the desired level of integration/separation?
Chapter 7 - Study 1 Methodology

7.1 Introduction
This section describes the methodology for the electronic quantitative questionnaire survey of Irish academics. The study consisted of a cross-sectional survey of a sample of Irish academics across three institutions. A detailed account of the questionnaire design, survey strategy, and other methodological issues is provided.

7.1.1 Sample Selection
The seven universities in Ireland were chosen for inclusion in this study. In advance of conducting the study, permission to contact staff and conduct the study was sought. A letter was sent to the Registrar of each university. The letter (contained in Appendix 1) requested permission to send the questionnaire survey via email to a sample of the university’s academic staff. In total, three universities granted permission, three refused and one did not reply to the request.

The target population for this study was academic staff employed in the Irish university sector. This included both full time and part time academics. An approximate population number of 4223 academics working across the seven Irish universities was provided by the Higher Education Association (HEA) of Ireland for 2008. Of the three universities who agreed to participate in this study, two provided a breakdown of their academic staff numbers by gender and occupational grade. For the third university an academic staff list was developed using information available on the university website. This was completed by systematically identifying academic staff from every departmental webpage and creating an MSExcel spreadsheet containing a staff list with details on occupational category, gender and department. It must be noted however, that this method of obtaining a staff information was not precise, as the final academic staff number differed slightly from the number published by the HEA (2008). For example, a decision was made not to include academics on the staff list if their email details were not available on their departmental webpage. Across the three participating universities the population size was approximately 1889 academics. In the interest of protecting the participants and
universities, the institutions which agreed to participate in the study are not named in this document.

Of the 1889 surveys distributed, 477 responses were received, which equates to a response rate of 25.25%. The response rate that had been targeted was 30%. A total of 67 responses were deemed incomplete for various reasons, for example, because gender identification data was missing or because a significant number of questionnaire items were left blank. Thus a total of 410 surveys were usable. There was an even distribution of men (N = 206) and women (N = 204) in the sample. The majority of the sample (69%) were between the ages of 30 and 49. The majority of the sample (77%) were married or co-habiting and 53% had children. The median number of children was two, with a range of one to five. 79% reported that their partner also worked in paid employment. Only 6% reported caring for adult dependents in the home. The sample was largely composed of full-time employees (96%) on permanent contracts (89%). The sample fell into four job categories; professors (14%), senior lecturers (16%), college lecturers (47%), and junior lecturers (23%). The occupational positions of the study respondents are broadly in line with the staff distribution across the three universities. (See Table 7.1) The majority of respondents (64%) worked in the university sector for over 5 years,

Table 7.1: Occupational distribution of Irish academic population versus study sample

<table>
<thead>
<tr>
<th>Job category</th>
<th>Percentage of total population</th>
<th>Percentage of study sample</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N %</td>
<td>N %</td>
</tr>
<tr>
<td>Professor/Associate Prof</td>
<td>17%</td>
<td>55</td>
</tr>
<tr>
<td>Senior Lecturer</td>
<td>18%</td>
<td>60</td>
</tr>
<tr>
<td>Lecturer</td>
<td>36%</td>
<td>182</td>
</tr>
<tr>
<td>Junior Lecturer</td>
<td>16%</td>
<td>83</td>
</tr>
<tr>
<td>Fixed term Lecturer</td>
<td>12%</td>
<td>12</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>392</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>
7.1.2 Questionnaire Design

A quantitative multivariate electronic survey questionnaire was employed for this study. An electronic survey was chosen as it offered a number of methodological advantages over traditional paper based questionnaires, i.e. electronic questionnaires are more cost effective as photocopying and postage costs are removed, the responses to an electronic survey are received more quickly as postage time is not required. Data entry is not required as the survey technology directly collects and collates all questionnaire data into MSExcel. Response rates could be tracked on a daily basis and reminder emails were easily sent to all participants. This method was suitable for this study as all potential respondents had email access.

The online questionnaire survey website ‘Survey Monkey’ was used to develop the electronic questionnaire survey. The finalized electronic questionnaire survey was user friendly, in that, it indicated how far the participant had progressed in the task; it allowed the use of logic to skip unnecessary questions. The sections and measures employed in the questionnaire are now described in detail.

The survey questionnaire was divided into 16 sections. (See Table 7.2 for details). There were a total of 115 questions in the survey instrument. The questionnaire generated at pilot stage consisted of 12 standard A4 pages of questions and when this was translated into the electronic version, it amounted to 15 electronic pages of questions. (See Appendix 3 for complete questionnaire).

In order to ensure the reliability and validity of the results of this study, only subscales and questions from previous published research studies were employed. Validated questionnaire subscales were chosen in preference to non-validated subscales, and written confirmation of reliability was investigated via the published findings of the authors of the subscales. To reduce response burden a number of existing scales were shortened. Scale items were selected in most cases based on the results of previous factor analyses (items with the highest factor loadings were considered to be the best indicators of the scale construct in each case) and from studies which had previously used shortened scales. Internal consistency (Cronbach’s alpha) statistics for all multi-item measures are reported. Internal consistency values were only generated for scales with greater than two items.
Section 1 – Informed Consent

One question asked the respondent to confirm that they consented to participate in the study, after which the participant proceeded onto the questionnaire proper. A check box response format was used, where the participant checked that “Yes, informed consent granted”.

Table 7.2: Questionnaire sub-section headings

<table>
<thead>
<tr>
<th>Questionnaire Section Number</th>
<th>Section Title</th>
<th>Number of questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Informed Consent Item</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>Your Job</td>
<td>11</td>
</tr>
<tr>
<td>3</td>
<td>Your Level of Job Involvement</td>
<td>5</td>
</tr>
<tr>
<td>4</td>
<td>Your Job and Stress*</td>
<td>9</td>
</tr>
<tr>
<td>5</td>
<td>Your Job and Commitment</td>
<td>6</td>
</tr>
<tr>
<td>6</td>
<td>Job Control</td>
<td>5</td>
</tr>
<tr>
<td>7</td>
<td>Time spent at Work</td>
<td>5</td>
</tr>
<tr>
<td>8</td>
<td>Job Satisfaction</td>
<td>10</td>
</tr>
<tr>
<td>9</td>
<td>Workaholism</td>
<td>14</td>
</tr>
<tr>
<td>10</td>
<td>Your Level of Family Involvement</td>
<td>4</td>
</tr>
<tr>
<td>11</td>
<td>Your Job and your Home Life</td>
<td>8</td>
</tr>
<tr>
<td>12</td>
<td>Your Work-Life Fit</td>
<td>8</td>
</tr>
<tr>
<td>13</td>
<td>Organisational Support</td>
<td>4</td>
</tr>
<tr>
<td>14</td>
<td>Your Health</td>
<td>15</td>
</tr>
<tr>
<td>15</td>
<td>Demographic information</td>
<td>4</td>
</tr>
<tr>
<td>16</td>
<td>Your Family</td>
<td>6</td>
</tr>
</tbody>
</table>

* Section 4 on ‘Your Job and Stress’ includes a measure of work intensity and a measure of work rewards

Section 2 – Your Job

This section contained 11 questions. Four questions employing categorical response options were used to obtain relevant occupational data, that is, the person’s academic position (e.g. professor, senior lecturer, etc.), the permanency of their position (i.e. permanent versus fixed-term contract), their length of service, and whether or not the respondent had a full or part time position. Question five in this section asked “How
Section 3 – Your level of Job Involvement

This section contained an amended version of the Job Involvement Scale (Kanungo, 1982a). The original scale contained 10 items, however, a five item format was chosen, as previously used in other studies (Frone & Rice, 1987a; Kinman & Jones, 2004). An example of an item from this measure is “My job is a very important part of my life”, to which responses were provided on a five point Likert scale ranging from “strongly disagree” to “strongly agree”. Internal consistency for the scale was $\alpha = .79$

Section 4 – Your job and stress

In order to measure the level of work intensity perceived by academics in this study, the Extrinsic Effort Subscale from the Effort-Reward Imbalance (ERI) (23-Item) at Work Questionnaire (Version 29.08.07) (Siegrist, 1996) was employed. Extrinsic effort was measured by five items (ERI1 – ERI6). One item referring to the physical nature of the work (ERI5) from the Extrinsic Effort Subscale was omitted as it was not applicable to the target population. The five item version has been found to be...
psychometrically appropriate for white collar worker samples (Siegrist, 2006). The five items refer to the nature of the demands in the workplace and respondents are asked to indicate the degree to which the statements reflect their current situation, for example, “I have many interruptions and disturbances while performing my job”. The responses are scored on a five point Likert scale which ranges from “Disagree” to “Agree, and I am very distressed”. A sum score for the five items on the extrinsic effort subscale can be computed which can range from a score of five to 25. A higher score on the measure reflects higher efforts. Internal consistency for the scale was $\alpha = .871$

Four of the eleven reward questions from the ERI were also employed in this section. ERI 11 examined financial/status rewards received “My job promotion prospects are poor”. ERI 10 examined esteem rewards “I am treated unfairly at work” and two questions (ERI 12 and ERI 13) were employed to investigate job security rewards, for example, “I have experienced or I expect to experience an undesirable change in my work situation”. All items were scored similar to the Extrinsic Effort items on a five point Likert scale ranging from “Disagree” to “Agree, and I am very distressed”.

Section 5 – Work-Over Commitment
The ERI at Work Over-Commitment subscale was employed in this section. This sub-scale consisted of six questions (OC1-OC6). Responses were scored on a five point Likert scale ranging from “strongly agree” to “strongly disagree”. An example from this sub-scale is “Work rarely lets me go; it is still on my mind when I go to bed”. A sum score was computed by adding the scale items together, with one item (OC3) requiring reverse scoring. Internal consistency for the scale was $\alpha = .819$.

Section 6 – Job Control
A shortened measure of job control was employed in this section (Smith, Frank, Mustard, & Bondy, 2008). The scale consisted of five items taken from the Job Content Questionnaire (Karasek, 1985), for example, “You have a lot of say about what happens in your job”. A five point Likert scale was employed, where respondents indicated their level of agreement on a scale ranging from “strongly agree” to “strongly disagree”. This measure was included in the finalised
questionnaire after the pilot in order to assess control issues relevant to occupational stress. Internal consistency for the scale was \( \alpha = .512 \)

**Section 7 - Time spent at Work**

A five item subscale was employed to investigate organisational norms with regard to time spent at work. The five items were developed and previously used in research by Major et al. (2002). Factor analysis had shown that the five item subscale loaded onto two distinct factors: Organisational Rewards and Organisational Expectations. Two items were used to measure organisational rewards for example, “If I work long hours I will probably be promoted” and three items were used to measure organisational expectations around working time for example, “My supervisor often expects me to work at home in the evenings and on weekends”. A five point Likert scale was used to indicate level of agreement, ranging from “strongly disagree” to “strongly agree”. Internal consistency for the organisational expectations scale was \( \alpha = .807 \). Internal consistency analysis was not conducted on measures with two items or less.

**Section 8 - Job Satisfaction**

A ten item measure of job satisfaction was employed in this section (Warr, Cook, & Wall, 1979). A seven point Likert scale was employed which ranged from “extremely dissatisfied” to “extremely satisfied”. For example, respondents indicated their level of satisfaction with their overall job, hours of work, intellectual stimulation, etc. Internal consistency for the scale was \( \alpha = .805 \)

**Section 9 - Workaholism**

A 14 item measure of Workaholism, the WorkBat-R (McMillan, Brady, O'Driscoll, & Marsh, 2002) was employed in this section. The measure is a refined version of the original 25 item Work Battery questionnaire (Spence & Robbins, 1992). Unlike the original three factor WorkBat, the WorkBat-R developed by Mcmillan et al., (2002) contains only two factors which are work enjoyment and work drive. Work involvement is omitted from the WorkBat-R. McMillan et al., (2001) have reported that work drive and enjoyment are the two most supported elements of workaholism, with low support in the literature for work involvement as a component of workaholism. The WorkBat-R is one of only two widely used workaholism
measures, the other being the Work Addiction Risk Scale (WART) (Taris et al., 2005a). Seven items are used to measure each factor, for example, “My job is more like fun than work” is an example of a work enjoyment item, while “I often feel there is something inside me that drives me to work hard” is an example of a work drive item. Responses were scored on a five point Likert scale ranging from “strongly disagree” to “strongly agree”. Internal consistency for the two subscales was $\alpha = .83$ and .75, for enjoyment and work drive, respectively.

Section 10 - Family Involvement
A four item measure of family involvement was employed in this section (Frone & Rice, 1987) for example, “Most of my interests are centred around my spouse/family”, to which respondents indicated their agreement on a five point Likert scale ranging from “strongly disagree” to “strongly agree”. Internal consistency for the scale was $\alpha = .928$

Section 11 - Your job and your home life
Eight items were employed in this section from an original 16-item scale (Wayne, Musisca, & Fleeson, 2004b). Two questions were used to measure work-family conflict, for example “Stress at work makes you irritable at home”. Two questions were used to measure work-family facilitation, for example, “Having a good day on your job makes you a better companion when you get home”. Two questions were used to measure family-work conflict, for example, “Personal or family worries and problems distract you when you are at work”. And two items were used to measure family-work facilitation, for example, “Your home life helps you relax and feel ready for the next day’s work”. Response options were on a five point Likert scale which measured the frequency with which the respondent had experienced the issue in the last year. The response options ranged from “never” to “all the time”.

Section 12 - Work-life fit
A six item measure of work-life fit was employed to investigate how well the person’s workday and hours met their current needs. The six items were taken from a nine item scale previously used (Barnett, et al., 1999) to assess the fit between a respondent’s working life and their home life. For example, “Taking into account your current work hours and schedule, how well is your work arrangement working
for you?” Respondents used a six point Likert scale to respond to the six items ranging from “very poorly” to “very well”. Internal consistency for the scale was $\alpha = .788$

Two additional questions were included in section 12 which investigated the boundaries people had between their work and home lives. Specifically, persons were asked how integrated their work and home lives were on a scale ranging from “My work and home lives are completely separate” to “There is no separation between my work and home lives”. The second question asked ideally how the respondents would like this relationship to be, responses ranged from “My work and home lives would be completely separate” to “There would be no separation between my work and home lives”. These two questions were amended versions of questions developed and used by Kinman & Jones (2004).

**Section 13 - Support**

Two items from the ‘Perceived Organisational Family Support’ (POFS) subscale (Jahn et al., 2003) were used to measure organisational support. An example of an organisational support item is “It is easy to find out about family support programmes within my organisation” An additional two items were used to measure supervisor support, which were taken from the Perceived Supervisory Family Support Scale (PSFS) (Fernandez, 1986). The two items used in this study were the amended versions as used by Jahn et al. (2003). An example of a supervisor support item is “My supervisor measures people on their overall productivity, not simply hours spent in the office.” The four items employed a five-point Likert scale with which respondents indicated their level of agreement, ranging from “strongly disagree” to “strongly agree”.

**Section 14 - Health**

(Friel, Nic Gabhainn, & Kelleher, 1998) and used to measure general, physical and mental health functioning. The first item measured overall health status, which used a scale ranging from “excellent” to “poor”. Item two measured physical health. Respondents were asked to indicate for how many days in the last month that their
physical health was not good. The third item investigated the number of days over the past month during which the person’s mental health was not good.

A subscale from the General Well-Being Questionnaire was also included in this section (Cox, et al., 1983). The 12 items from the Worn Out subscale were used. This subscale measures symptoms relating to tiredness, emotional liability and cognitive confusion (Cox & Griffiths, 2005). For example, a respondent indicated the degree to which he/she has “become annoyed and irritated easily” and “has it been hard for you to make up your mind” over the past six months. The symptoms in this subscale are regarded as having implications for problem solving and coping (Cox & Griffiths, 2005). This measure was scored on a Likert scale ranging from “never” to “all the time”. Composite scores on this measure range from 12 to 60. A higher score indicates poorer health functioning over the past six months. Internal consistency for the scale was $\alpha = .71$.

Section 15 - Demographics
Demographic information was sought in this section, in particular, gender, age, marital status and whether one’s spouse was in employment. All response formats were categorical.

Section 16 - Family
This section investigated the level of caring demands the respondents experienced. Respondents were asked the question “Are there any children in your household?” to which they responded yes or no. The numbers and ages of children in the household were also recorded. The presence of children within the household is taken as a crude indicator of additional work, or care duties, outside the work setting. Respondents were also questioned in relation to the presence of adult dependents in the household.

A yes/no response question was posed in relation to the need for arranging childcare and respondents were asked to indicated their level of satisfaction with their childcare arrangements on a scale ranging from “very dissatisfied” to “very satisfied”. The last question requested details on the frequency of interrupted sleep a person experienced as the result of children waking. This was scored on a scale ranging from “never” to “every night”.

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7.1.3 Questionnaire Pilot

Two third level institutions were used in the pilot of the questionnaire. These institutions were chosen due to the similarity of their academic staff with the population of interest, and because these two institutes would not be included in the final survey.

Convenience sampling was employed for the pilot. The pilot survey was sent via email to two contact persons within the institutes and then distributed to academic staff in two departments. A total of 24 surveys were returned, however, only 20 persons fully completed the whole questionnaire. Of the 20 respondents, eight provided written feedback, which was used to amend the questionnaire for the distribution proper. From the pilot it was estimated that completion of the questionnaire survey would take approximately 15-20 minutes on average.

In addition to conducting the pilot study, additional feedback on the questionnaire structure and format were received from a subject matter expert and an experienced researcher within the educational sector. The main issues that arose during the pilot which were addressed included: structure and format of questions and scales within the electronic questionnaire that is, response formats and layouts, readability of questions, length of particular subscales and problem questions.

7.1.4 Procedure

A full population survey (N=1889) was conducted over three phases of data collection. Data was collected from December 2008 to April 2009. The questionnaire was first sent via email to randomly selected academic staff from the listing in December 2008 (See Appendix 2 for the text used in the email). A reminder email was sent within three weeks to encourage participation. The response rate for the first round of data collection was low; therefore, a second group of academics were targeted in February 2009. Reminder emails were sent to the second group within a three week period. The questionnaire was sent to another group of academics in March 2009 and the data collection effort was closed in April 2009.

Owing to the low response rate, the sampling strategy changed during data collection period. The original sampling plan was to implement quota sampling, (a method of
non-probability sampling) to obtain a 30% (N=537) sample from the academic population, stratified by gender and occupational level. However, after the first round of data collection, it became evident based on the response rate to the questionnaire that a full population survey would be required in order to ensure a sufficient number of respondents in order to conduct data analysis.

7.1.5 Data analysis
Data was downloaded from Survey Monkey into an MSExcel spreadsheet and then transferred into SPSS. All descriptive and inferential statistics were conducted using SPSS, Version 17. Data was transferred from SPSS to AMOS Version 20.0 for structural equation modeling. In order to address the first objective of this study, descriptive statistics on all subscale measures were conducted. In order to address the second objective of the study a path analysis was conducted using AMOS. A number of statistical tests were employed to address the third objective of the study, including: independent t-tests, ANOVA, MANOVA, Chi² and Mann Whitney. Hypothesis 1 of the study that male academics worked longer hours than female academics was tested using the Mann-Whitney test. Hypotheses 2 – 9b were all tested using the path analysis.

7.1.6 Ethical Considerations
Ethical approval was received from the NUI Galway Ethics Committee (29/02/2008) prior to data collection. All study participants were required to provide informed consent prior to beginning the questionnaire. The data collection was anonymous, whereby it was not possible to link individuals to their responses. Only the researcher had access to the staff lists provided/generated for the purpose of sampling. Furthermore, the three participating universities are not named in this document.
Chapter 7 – Study 1 Results

7.2 Introduction
The results from the questionnaire survey are presented in three parts. Descriptive statistics and inter-correlations for the major variables are presented initially. Analysis of one open-ended question is presented within the descriptive statistics section. Next quantitative statistics are presented which examined mean differences on all measures, considering the effects of gender and occupational category. Finally, the results of structural equation modeling path analysis employed to determine the impact of a number of individual, organisational and personal variables on work hours, work-life conflict and psychological strain are presented.

7.2.1 Descriptive Statistics

Childcare
Table 7.4 shows the distribution of children by gender and occupational level within the sample. A Chi² analysis revealed that male academics were more likely to have children than female academics (Pearson χ² (1, N= 407) = 7.993, p = .005, Cramer’s V = .14). 43% (N= 139) of academics availed of childcare arrangements and over half (56%) were satisfied with their childcare arrangements. A minority were dissatisfied with their childcare arrangements (8%, N=18). Almost half of the academic parents had uninterrupted sleep (48%, N=123), however, 52% (N=134) had sleep interruptions to various degrees. Respondents were also questioned in relation to the presence of adult dependents in the household, but due to the low number (6%), they were omitted from the analysis.
Table 7.3: Child status by gender and occupational level

<table>
<thead>
<tr>
<th></th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Children</td>
<td>No children</td>
</tr>
<tr>
<td>Professor</td>
<td>27</td>
<td>13</td>
</tr>
<tr>
<td>Senior Lecturer</td>
<td>27</td>
<td>10</td>
</tr>
<tr>
<td>College Lecturer</td>
<td>48</td>
<td>28</td>
</tr>
<tr>
<td>Junior Lecturer</td>
<td>11</td>
<td>21</td>
</tr>
<tr>
<td>Fixed term</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Lecturer</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Hours worked
The numbers of hours worked is consistent with most respondents reporting that they work in a full time position. 19% (N=76) reported working more than 60 hours per week, 28% (N=113) worked between 51-60 hours per week. 38% (N=154) worked between 41-50 hours per week, 12% (N=50) worked between 31-40 hours per week, while 12 academics (3%) worked less than 30 hours per week. A Mann–Whitney U test comparison of males and females was used to test Hypothesis 1. In line with the hypothesis, it was revealed that males worked more hours per week than females (Mann Whitney U = 17668, z = 2.92, p < .01).

Most of the respondents (83%) regularly worked either before 9am or after 5pm on a daily basis (See Table 7.4). Only 2% of respondents reported that they never worked outside normal office hours. Over half of the respondents also frequently engaged in work at the weekends; 17% (N=70) always worked weekends, 39% (N=161) often worked on weekends, and 32% (N=130) sometimes worked on weekends. Only seven respondents (2%) reported that they never worked weekends and 10% (N=41) stated that they rarely worked on weekends.
Table 7.4: Non-standard working hours

<table>
<thead>
<tr>
<th>Non-standard work hours</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never</td>
<td>8</td>
<td>2</td>
</tr>
<tr>
<td>1-2 times per week</td>
<td>61</td>
<td>15</td>
</tr>
<tr>
<td>3-4 times per week</td>
<td>159</td>
<td>39</td>
</tr>
<tr>
<td>Every day</td>
<td>178</td>
<td>44</td>
</tr>
</tbody>
</table>

Commute Times
Distance and commute times to and from work were also examined as this time could be considered to add to the length of the working day. Just over half of the academics (51%, N=208) lived within a five mile radius of their institution, 36% (N=149) lived within a 20 mile radius, while 12% (N=51) lived greater than 20 miles away. Table 7.5 shows the length of journey times to and from work. The majority of academics lived within between 15-60 minutes journey time to work (67%), with only a minority living in excess of 60 minutes journey time from work.

Table 7.5 Journey times to and from work

<table>
<thead>
<tr>
<th>Journey time</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;15 minutes</td>
<td>106</td>
<td>26</td>
</tr>
<tr>
<td>16-30 minutes</td>
<td>179</td>
<td>44</td>
</tr>
<tr>
<td>31-60 minutes</td>
<td>95</td>
<td>23</td>
</tr>
<tr>
<td>&gt;1 hour</td>
<td>26</td>
<td>7</td>
</tr>
</tbody>
</table>

Rewards
Respondents were asked if they were rewarded for working longer hours, only a minority of 8% (N= 34) reported receiving rewards, with the remaining 92% (N=369) stating that they were unrewarded. In response to ERI11 in relation to promotional prospects, 60% (N=240) believed that their promotional prospects were poor and this was a cause of distress (to varying degrees) for 44% (N=177). Almost three quarters of respondents (74%, N=301) reported that they were treated fairly at work, while 83% (N=335) reported that they had good job security. However, 45%
were distressed (to varying degrees) as they felt that they had experienced or would experience in the future undesirable changes to their work situation.

Where respondents indicated that they were rewarded for working long hours, they were given the opportunity to detail the rewards received in an open-ended question. Responses to the open-ended question on perceived rewards associated with working long hours were evaluated and then grouped into categories (See Table 7.6 for a listing of response categories). Participant responses that fit more than one category were scored as 1 for each category, thus the total of responses sum is greater than the 42 responses received (20 males and 22 females). See Appendix 4 for all comments in detail.

Table 7.6: Responses to Open-Ended Question Grouped by Gender (N=42)

<table>
<thead>
<tr>
<th>Rewards received for working long hours</th>
<th>Gender of Respondent</th>
</tr>
</thead>
<tbody>
<tr>
<td>response category</td>
<td>Male</td>
</tr>
<tr>
<td>Ability to keep up with workload</td>
<td>2</td>
</tr>
<tr>
<td>Improves quality of work</td>
<td>2</td>
</tr>
<tr>
<td>Financial rewards</td>
<td>2</td>
</tr>
<tr>
<td>Promotion / career progression</td>
<td>3</td>
</tr>
<tr>
<td>Research output</td>
<td>3</td>
</tr>
<tr>
<td>Work enjoyment / personal fulfilment</td>
<td>3</td>
</tr>
<tr>
<td>Flexibility of working hours</td>
<td>1</td>
</tr>
<tr>
<td>Miscellaneous / General</td>
<td>5</td>
</tr>
</tbody>
</table>

Work-home boundaries

Two questions were employed to measure actual and ideal levels of work-home boundary permeability. Table 7.7 compares the responses on the degree to which work and home are currently separated and the degree to which ideally the respondents would like to separate home and work. A paired t-test revealed that the participants would prefer more work-life separation than they currently had (t = 12.328, df=395, p < .0005).
Table 7.7: Boundary Separation; actual versus desired.

<table>
<thead>
<tr>
<th>Current Separation Level</th>
<th>Desired Separation Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Completely separate</td>
<td>39 (10%)</td>
</tr>
<tr>
<td>Mostly separate</td>
<td>133 (33%)</td>
</tr>
<tr>
<td>Somewhat separate</td>
<td>181 (46%)</td>
</tr>
<tr>
<td>No separation</td>
<td>45 (11%)</td>
</tr>
</tbody>
</table>

Health

A single question was used to measure a person’s general health level on a Likert scale ranging from excellent to poor. Table 7.8 presents the reported health functioning of the sample, showing that the majority of academics rated their health between good and excellent (90%). The mean number of days that the participants’ physical health was not good within the last month was 3 (ranging from zero to 30 days) and the mean number of days that the participants’ mental health was not good within the last month was 4 (ranging from zero to 30 days).

Table 7.8: General Health of Sample

<table>
<thead>
<tr>
<th>Health Rating</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Excellent</td>
<td>73</td>
<td>23</td>
</tr>
<tr>
<td>Very good</td>
<td>119</td>
<td>38</td>
</tr>
<tr>
<td>Good</td>
<td>90</td>
<td>29</td>
</tr>
<tr>
<td>Fair</td>
<td>23</td>
<td>7</td>
</tr>
<tr>
<td>Poor</td>
<td>9</td>
<td>3</td>
</tr>
</tbody>
</table>

Composite scores for all subscales employed in the survey are presented in Table 7.9 and inter-correlations between all subscale measures are presented in Table 7.10.
Table 7.9: Descriptive statistics on all subscale measures.

<table>
<thead>
<tr>
<th>Subscale</th>
<th>Whole group</th>
<th>Males only</th>
<th>Females only</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
<td>Mean</td>
</tr>
<tr>
<td>Job involvement</td>
<td>18.14</td>
<td>3.42</td>
<td>18.66</td>
</tr>
<tr>
<td>Over-commitment</td>
<td>19.00</td>
<td>4.80</td>
<td>19.23</td>
</tr>
<tr>
<td>Extrinsic Effort</td>
<td>13.78</td>
<td>4.29</td>
<td>13.19</td>
</tr>
<tr>
<td>Job Control</td>
<td>19.46</td>
<td>2.31</td>
<td>19.50</td>
</tr>
<tr>
<td>Organisational rewards</td>
<td>5.40</td>
<td>2.30</td>
<td>5.41</td>
</tr>
<tr>
<td>(time)</td>
<td>9.42</td>
<td>2.64</td>
<td>9.04</td>
</tr>
<tr>
<td>Job satisfaction</td>
<td>49.99</td>
<td>9.15</td>
<td>50.71</td>
</tr>
<tr>
<td>Workaholism – Enjoyment</td>
<td>23.45</td>
<td>4.72</td>
<td>24.15</td>
</tr>
<tr>
<td>Workaholism – Drive</td>
<td>25.23</td>
<td>4.39</td>
<td>24.87</td>
</tr>
<tr>
<td>Family involvement</td>
<td>13.52</td>
<td>5.72</td>
<td>13.83</td>
</tr>
<tr>
<td>Work-family conflict</td>
<td>6.69</td>
<td>1.44</td>
<td>6.60</td>
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<tr>
<td>Work-family facilitation</td>
<td>5.72</td>
<td>1.21</td>
<td>5.64</td>
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<td>1.37</td>
<td>5.09</td>
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<td>Family-work facilitation</td>
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<td>6.75</td>
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<td>14.08</td>
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<td>1.88</td>
<td>5.78</td>
</tr>
<tr>
<td>Supervisor support</td>
<td>6.59</td>
<td>1.74</td>
<td>6.57</td>
</tr>
<tr>
<td>GWBQ</td>
<td>31.00</td>
<td>6.68</td>
<td>30.49</td>
</tr>
</tbody>
</table>
Table 7.10: Inter-correlations for Major Study Variables

|     | OC   | JS  | OR  | FI  | SS  | OS  | WLC | WLF | FWC | FWF | WE  | WD  | GWB | JC  | OE  | FIT | JI  | EE  | W   |
|-----|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| OC  |      |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| JS  | -.373** |    |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| OR  | .050  | .264** |    |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| FI  | -.045 | .095  | .068 |    |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| SS  | -.190** | .431** | .176** | .031 |    |     |     |     |     |     |     |     |     |     |     |     |     |     |
| OS  | -.204** | .260** | .078  | -.061 | .375** |    |     |     |     |     |     |     |     |     |     |     |     |     |
| WLC | .599** | -.369** | .012  | -.006 | -.241** | -.282** |    |     |     |     |     |     |     |     |     |     |     |     |
| WLF | .031  | .218** | .164** | .107* | .097  | .161* | .105* |    |     |     |     |     |     |     |     |     |     |     |
| FWC | .089  | -.085 | .044  | .210** | -.053 | -.076 | .174** | .146** |    |     |     |     |     |     |     |     |     |     |
| FWF | -.116* | .153** | .132** | .325** | .060  | .082  | -.033 | .281** | .027 |    |     |     |     |     |     |     |     |     |
| WE  | -.093 | .509** | .158** | .056  | .260** | -.165** | -.286** | -.019 | .141** |    |     |     |     |     |     |     |     |     |
| WD  | .529** | -.231** | .069  | -.035 | -.164** | -.100* | .418** | .008  | .055  | -.120* | .020 |    |     |     |     |     |     |     |
| GWB | .491** | -.421** | -.044 | -.058 | -.195** | -.116* | .416** | -.010 | .264** | -.132** | -.179** | .342** |    |     |     |     |     |     |
| JC  | -.184* | .469** | .160** | -.090 | .223** | .028  | -.127* | .157** | -.110* | .241** | .454** | -.114* | -.249** |    |     |     |     |     |
| OE  | .352** | -.321** | .035  | -.114* | -.234** | -.163** | .343** | -.018 | -.042 | -.051  | -.163** | .337** | -.151** | -.124* |    |     |     |     |
| WLF | -.382** | .463** | .135** | -.390** | .225** | .205** | -.451** | .130* | .072  | .188** | .319** | -.277* | -.353** | .266** | -.378** |    |     |     |
| JI  | .307** | .110* | .113* | -.153** | .096  | .055  | .204** | -.199** | -.066 | -.119* | .410** | .275** | .069  | .175** | .075  | .042 |    |     |
| EE  | .538** | -.464** | -.084 | -.106* | -.268** | -.160** | .527** | -.010 | .008  | -.074 | -.237** | .407** | -.380** | -.238** | .374** | -.538** | .137** |    |
| W   | .296** | -.105* | .041  | -.164** | -.100* | -.120* | .307** | -.003 | -.073 | -.048 | .090  | .236** | .055  | .015  | .335** | -.371** | .284** | .279** |

Note: * p ≤ .05, ** p ≤ .01; OC= Over Commitment, JS= Job Satisfaction, OR= Organisational Rewards, FI= Family Involvement, SS= Supervisor Support, OS = Organisational Support, WLC= Work-Life Conflict, WLF= Work-Life Facilitation, FWC = Family Work Conflict, FWF= Family Work Facilitation, WE = Work Enjoyment, WD = Work Drive, GWB = General Well Being, JC= Job Control, OE= Organisational Expectations, WLF= work-life fit, JI = Job involvement, EE = Intensity, W = Work Hours
Table 7.10 shows a number of statistically significant inter-correlations between the survey measures. The correlations range from weak to moderate in strength. For example, in line with the study hypotheses, work hours were positively correlated with work-life conflict and psychological strain. Work hours were found to be negatively correlated with job satisfaction, family involvement and work-life fit.

Work-life conflict was correlated with higher levels of over-commitment, job involvement, work intensity, work hours, work drive, family-work conflict, and psychological strain. Conversely, work-life conflict was negatively correlated with job satisfaction, supervisor and organisational support (for work-home integration), work enjoyment, job control and work-life fit.

Psychological strain was correlated with higher levels of work over-commitment, work-life conflict, family-work conflict, work drive, organisational expectations (to work long hours) and work intensity. Psychological strain was negatively correlated with job satisfaction, supervisor and organisational support (for work-home integration), family-work facilitation, work enjoyment, job control and work-life fit.

Job satisfaction was positively correlated with work enjoyment, job control and support (organisational and supervisor), but negatively correlated with work hours, intensity and work drive.

7.2.2 Statistical Analyses

Two of the occupational groups were amalgamated; junior and fixed term lecturers due to low numbers of fixed term lecturers (N=12) in the sample. This gave the junior lecturer group a total of 95 participants which was deemed necessary to allow statistical analysis and comparison of occupational groups.
Gender Differences

In order to address the third objective of this study, a series of t-tests were conducted to determine gender differences on all variables. There were significant gender differences on a number of subscale scores. It was found that males enjoyed their work more than females, $t$ (399) = 2.613, $p < .01$. Females perceived higher levels of organisational support than males, $t$ (406) = -2.189, $p < .05$, and females also reported poorer psychological well-being than males, $t$ (405) = -2.003, $p < .05$. There were also significant differences in perceptions of organisational expectations (in relation to working time) between men and women, $t$ (405) = 3.295, $p < .005$, with women scoring higher on perceived organisational expectations. Men reported higher levels of job involvement than women, $t$ (397) = 2.198, $p < .05$. Women reported higher perceived effort in their work than men, $t$ (389) = -2.680, $p < .01$. Table 7.11 presents the significant t-test results.

Table 7.11: Gender differences on subscale measures

<table>
<thead>
<tr>
<th>Subscale Measures</th>
<th>Mean</th>
<th>SD</th>
<th>t-value</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organisational expectations</td>
<td>male</td>
<td>9.04</td>
<td>2.53</td>
<td>3.295</td>
</tr>
<tr>
<td></td>
<td>female</td>
<td>9.89</td>
<td>2.69</td>
<td></td>
</tr>
<tr>
<td>Organisational support</td>
<td>male</td>
<td>5.78</td>
<td>1.92</td>
<td>2.189</td>
</tr>
<tr>
<td></td>
<td>female</td>
<td>6.19</td>
<td>1.83</td>
<td></td>
</tr>
<tr>
<td>Job involvement</td>
<td>male</td>
<td>18.66</td>
<td>3.45</td>
<td>2.198</td>
</tr>
<tr>
<td></td>
<td>female</td>
<td>17.87</td>
<td>3.51</td>
<td></td>
</tr>
<tr>
<td>Work Effort</td>
<td>male</td>
<td>13.19</td>
<td>4.31</td>
<td>2.680</td>
</tr>
<tr>
<td></td>
<td>female</td>
<td>14.36</td>
<td>4.31</td>
<td></td>
</tr>
<tr>
<td>Workaholism – Enjoyment</td>
<td>male</td>
<td>24.15</td>
<td>4.65</td>
<td>2.613</td>
</tr>
<tr>
<td></td>
<td>female</td>
<td>22.92</td>
<td>4.72</td>
<td></td>
</tr>
<tr>
<td>Psychological Strain</td>
<td>male</td>
<td>30.49</td>
<td>6.87</td>
<td>2.003</td>
</tr>
<tr>
<td></td>
<td>female</td>
<td>31.75</td>
<td>6.45</td>
<td></td>
</tr>
</tbody>
</table>
The impact of children

The results of a 2 (Gender) x 2 (Child status) between subjects MANOVA revealed a main effect for having children \( (F(1, 402) = 16.972, p < .001, \text{partial } \eta^2 =.04) \) on the family-work conflict measure. Independent t-tests revealed that academics with children reported a higher mean level of family-work conflict (5.28) than academics without children (4.72), \( (t=4.220, \text{df} =405, p < .001) \). An interaction effect between child status and gender was also observed, an independent t-test revealed that female academics with children experienced higher mean levels of family-work conflict (mean = 5.40) than female academics without children (4.54), \( (t =4.600, \text{df} =202, p < .001) \). There was no difference between males with and without children on the family work conflict measure. In addition, a main effect for children \( (F(1, 396) = 10.57, p < .05, \text{partial } \eta^2 =.01) \) on the family work-facilitation measure was observed. Independent t-tests showed that academics with children reported a higher mean level of family-work facilitation (6.95) than academics without children (6.57), \( (t=2.274, \text{df} =401, p < .05) \).

Effects of Gender and Occupational Status

In order to address the third objective of this study, a series of ANOVAs and MANOVAs were employed to investigate mean differences on subscale measures, taking gender and occupational status into consideration. These analyses confirmed the previously outlined gender differences on the subscale measures, therefore, only the main effects for occupational status and interaction effects between gender and occupational status are outlined in this section.

A 2 (Gender) x 4 (Occupational Level) two-way between subjects ANOVA revealed a significant main effect for occupational level, \( (F(3,383) = 7.403, p<.001, \text{partial } \eta^2 = .05) \) on job satisfaction. A main effect for gender was not found. Post hoc analysis revealed that professors reported significantly higher job satisfaction \( (M = 56.15) \) than senior lecturers \( (M = 49.90, p < .001) \), college lecturers \( (M = 49.70, p < .0005) \) and junior lecturers \( (M = 47.13, p < .0005) \). There were no other significant differences found between any of the other job categories.
Employing a 2 (Gender) x 4 (Occupational Level) two-way between subjects ANOVA, a main effect for occupational level on family involvement was found, \( F(3, 378) = 2.937, p< .05, \text{partial } \eta^2 = .02 \). A main effect for gender was not found. Post hoc analysis revealed that professors (M= 14.75) and senior lecturers (M = 14.52) reported significantly \((p< .05)\) higher mean levels of family involvement than junior lecturers (Mean =12.03). There was no difference observed between any of the other occupational levels on the family involvement measure.

A main effect for occupational level was observed, \( F(3, 374) = 5.061, p< .01, \text{partial } \eta^2 = .03 \) on levels of reported job involvement, using a 2 (Gender) x 4 (Occupational Level) two-way between subjects ANOVA. Post-hoc analysis revealed a number of significant differences between occupational levels. Professors reported significantly higher levels \((p<.005)\) of job involvement (M=20.24) than senior lecturers (M=17.87), college lecturers \((p<.001, M=17.86)\) and junior lecturers \((p < .001, M = 17.92)\).

A 2 (Gender) x 4 (Occupational Level) between subjects MANOVA revealed a main effect for occupational level on the work enjoyment measure \( F(3, 370) = 6.321, p< .001, \text{partial } \eta^2 = .04 \). Post hoc analysis revealed that the professors reported significantly higher \((p <.005)\) levels of work enjoyment (M=26.54) than senior lecturers (M = 23.44), college lecturers (M = 23.04, \(p< .001\)) and junior lecturers (M = 22.46, \(p<.001\)).

The results of a 2 (Gender) x 4 (Occupational level) two-way between subjects ANOVA revealed a main effect for occupational level on the reported levels of job control, \( F(3, 377) = 3.991, p<.01, \text{partial } \eta^2 = .03 \). No interaction effects occurred between the fixed factors. Bonferroni post hoc tests showed that professors reported higher mean levels of job control (M = 20.33) than college lecturers (M = 19.21) and junior lecturers (M = 19.20). The differences in levels of job control were significant at \(p < .01\) for professors and college lecturers and at \(p<.05\) for junior lecturers.
**Effects of Gender and hours worked on Work-life Fit**

Results from a 2 (Gender) x 4 (Hours worked) between-subjects ANOVA found a main effect for hours worked ($F (3, 387) = 16.035, p<.001$, partial $\eta^2 =.11$) on reported levels of work-life fit. Bonferroni post hoc tests revealed that academics who worked <40 hours per week reported higher mean levels of work-life fit ($M = 16.25$) than any of the other three work hours groups: academics who worked 41-50 hours per week ($M = 14.46, p<.05$), academics who worked 51-60 hours ($M=12.97, p<.001$) and academics who worked >60 hours per week group ($M=12.40, p<.001$). Academics who worked >60 hours also differed significantly ($p<.005$) from academics who worked between 41-50 hours per week ($M = 14.16$). Academics who worked between 51-60 hours also scored significantly lower ($p<.01$) on the work-life fit measure than those competing between 41-50 hours per week. There was no statistical difference between the two longest working hours groups on this measure.

**7.2.3 Structural Equation Modelling (SEM)**

The current study used multi-group structural equation modeling (SEM) to examine the relationship between job involvement, workaholism, having children, extrinsic effort, organisational expectations, organisational support and supervisor support on work hours and work-life conflict and psychological strain in male and female academics working in the Irish University sector. AMOS Version 20.0 was used to conduct the structural equation modeling. A multi-group path analysis was employed to address hypotheses 2 – 9b. Figure 7.1 illustrates the basic structure of the initial model tested.

Following on from the findings of O’Laughlin & Bischoff (2005) that number of work hours predicted levels of academic stress; in this study an extended version of the rational model of work-life conflict was tested, which proposes that number of working hours are the best predictor of work-life conflict (Gutek, Searle & Klepa, 1991). The model in this study also builds upon the work of Major et al., (2002) who expanded the rational model of work-life conflict by examining the relationship between a number of predictors and consequences of long working hours in American corporate workers. The current study extended this line of research by examining the the moderating role of
gender in relation to predictors and consequences of work-life conflict in an academic working context.

The eight variables in the model were included based on a review of the extant literature and in particular, based on the findings of Major et al., (2002), Hodgins et al., (2005) and O’Laughlin & Bischoff (2005). Specifically, having children, work intensity organisational expectations around working hours and job involvement have been shown to significantly affect working hours (Major et al., 2002). Organisational and supervisor support were identified by Hodgins et al., (2005) as deserving research attention, as qualitative findings with Irish academics highlighted the importance of these elements of support with regard to both working hours and work-life conflict. Furthermore, Burke et al., (2008) reported that academics who regarded their organisations as not supportive of work-life balance worked longer hours than academics who regarded their organisations as supportive. Finally, work enjoyment and work drive, the two workaholism factors were included in the model, to elucidate the relationship between workaholism, long working hours and work-life conflict in academia. Eby et al., (2005) have previously noted that research on the work-home interface has largely omitted the inclusion of personality variables; therefore, the inclusion of these variables within the model addressed a noted gap in the literature.

A number of variables measured in the survey questionnaire were not included in the model, in order to reduce the complexity of the model and also to avoid redundancy across measures. For instance, work over-commitment, family involvement and job control were not included in the path analysis. Work over-commitment and family involvement were omitted from the model due to their similarity with two variables included in the model, that is, job involvement and having children, respectively. The measures of work over-commitment and job involvement were significantly correlated in this study and having children is often taken as a proxy for levels of family involvement. Job control was omitted from the model for two reasons. It had not been investigated by Major et al., (2002) in relation to the rational model of work-life conflict, the starting point for the model employed in this study. In addition, the job control measure was
found to have poor internal consistency with a Chronbach alpha of .512; therefore, was not regarded as an adequate measure of control.

In line with the approach taken by both Major et al., (2002) and O’Laughlin & Bischoff (2005), two competing models were tested; a fully mediated model and a partially mediated model. Figure 7.1 shows the fully mediated model initially tested, while Figure 7.2 shows the partially mediated model. The partially mediated model allowed for direct effects from the exogenous variables to work-life conflict and psychological strain.

**Structural Equation Models**

Following the guidelines suggested by Hoyle and Panter (1995), the goodness of fit for each model (both measurement and structural) is assessed using the chi-square, the Goodness of Fit Index (GFI: Jöreskog & Sörbom, 1981), the Incremental Fit Index (IFI: Bollen, 1989), and the Comparative Fit Index (CFI: Bentler, 1990). A non-significant chi-square (p ≤0.05 level) and values greater than 0.95 for the GFI, IFI and CFI are considered to reflect acceptable model fit. In addition, the Root Mean Square Error of Approximation (RMSEA: Steiger,1990) with 90% confidence intervals (90%CI) was reported, where a value less than 0.05 indicates close fit and values up to 0.08 indicate reasonable errors of approximation in the population (Jöreskog & Sörbom, 1993).

**Measurement models**

A series of measurement models examined the dimensional structure and gender invariance of 1) organisational expectations (one-factor model), 2) organisational and supervisor support (two-factor model) and 3) job involvement (one-factor model), 4) work effort (one-factor model), 5) enjoyment-related and drive-related workaholism (two-factor model), 6) work-life conflict (one-factor model), and 7) psychological well-being (one-factor model). The results indicated good measurement properties and factorial invariance for our measurement models (CFI range = 0.97 – 1.00; IFI range = 0.98 – 1.00; RMSEA range = 0.00 - 0.06) and suggested that it was reasonable to use composite indexes for each within a path analytic structure examining the relations between exogenous and endogenous variables in our model. Composite scores for each
measure were generated, separately, by computing the sum of scores of items on the scale.

Figure 7.1. A model describing factors hypothesised to impact on work hours, work-life conflict, and psychological strain in academics.
Structural models

An analysis was undertaken of the direct and indirect effects on work-life conflict and psychological strain, of the eight exogenous variables (See Figure 7.1). In order to maximise statistical power a multi-group approach was taken to the analysis of gender, and a large number of measurement invariant restrictions were placed on the model. These included intercepts, variances and covariances and regression effects. Constraining these parameters not only permits a test for invariance but also enhances the statistical power of the model. In the first path model all direct effects, covariances, means and variances for the exogenous measures, and intercepts relating to endogenous structural measures were constrained to be equal across the groups. All sources of residual variance relating to endogenous structural measures were permitted to vary across genders. This model failed to adequately describe the data ($\chi^2(df = 91, N = 410) = 329.84, p = 0.001$, IFI = 0.714, CFI = 0.708; RMSEA = 0.080 (90%CI, 0.071 - 0.090). Following an examination of the residuals, parameter estimates and fit statistics a number of modifications were introduced. First, we allowed a number of structural means and intercepts to differ across the groups (i.e., organisational support mean and work hours intercept). Women reported higher organisational support and lower work hours when compared with men ($p < .05$ for both comparisons). Second, we allowed paths from children, organisational support, organisational expectations, and work intensity to differ across the groups. Finally, we allowed a number of direct effects on work-life conflict and psychological strain (see Figure 7.2). This model provided a good fit for the data ($\chi^2(df = 29, N = 410) = 36.09, p = 0.171$, TFI = 0.99, CFI = 0.99; RMSEA = 0.024 (90%CI, 0.000 – 0.047). Model estimates are presented in Table 7.14. The results of the path analysis supported hypotheses H2 and H3 that long working hours predicted greater work-life conflict in both males and female academics, and that higher work-life conflict in turn predicted higher strain in both male and female academics. The hypotheses that having children would decrease working hours and lead to higher levels of work-life conflict, particularly for females was not supported by the model findings. Having children was found however, to predict longer working hours in male academics. Although organisational expectations around working hours were found to significantly predict working hours, contrary to the hypothesis H5a, the
relationship between expectations and work hours was opposite to the hypothesis, i.e. higher organisational expectations predicted lower working hours for both males and females. Hypothesis 5b was not supported by the modeling results. Contrary to Hypothesis 6a, there was no relationship observed between organisational support and supervisor support and working hours. However, Hypothesis 6b was partially supported by the model findings, in that organisational support was found to predict lower work-life conflict, however, this effect was equal for males and females and not stronger in female academics as predicted. The hypothesis 7a that higher work involvement predicted longer working hours, and that the effect would be stronger for male academics was only partially supported, as high job involvement equally predicted long working hours in both males and females. Hypothesis 7b also, was partially supported by the findings, as high job involvement was found to predict higher levels of work-life conflict for male academics only. Contrary to Hypothesis 8a, high work intensity predicted longer working hours only for male academics. However, Hypothesis 8b, that high work intensity would predict higher levels of work-life conflict and strain in both male and female academics was fully supported. Hypothesis 9a that the two workaholism factors (i.e. work drive and work enjoyment) would predict longer working hours was not supported. Finally, Hypothesis 9b was partially supported by the modeling results, in that high work drive was found to predict higher work-life conflict and psychological strain in both males and females. However, low work enjoyment predicted higher work-life conflict in males only and high work enjoyment predicted less psychological strain in male academics only. See Figure 7.2 which illustrates the partially mediated model, with gender differences in the significant paths between the exogenous and outcome variables.
Figure 7.2: Structural equation modeling results: Significant paths in final best-fitting model.

Note: * p ≤ .05, ** p ≤ .01 *** p ≤ .001. Solid lines indicate paths where women and men differ; dashed lines indicate paths where women and men are the same (see Table 7.12). The factor loadings are shown between the exogenous and endogenous variables. The final structural equation model includes addition indirect and direct paths from exogenous variables to work-life conflict and general well-being.
Table 7.12 Model estimates for females and males for best-fitting model

<table>
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<tr>
<th>Constrained direct effects</th>
<th>Estimate</th>
<th>SE (est)</th>
<th>Critical Ratio</th>
<th>p-value</th>
</tr>
</thead>
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<td>Work Hours</td>
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</tr>
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<td>-5.702</td>
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<td>0.024</td>
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<tr>
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<td>0.027</td>
<td>0.183</td>
<td>0.885</td>
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<td>0.015</td>
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</tr>
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<td>0.033</td>
<td>-3.992</td>
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<tr>
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<td>4.682</td>
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<td>3.431</td>
<td>0.001</td>
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<tr>
<td>General WellBeing</td>
<td>0.259</td>
<td>0.080</td>
<td>3.232</td>
<td>0.001</td>
</tr>
</tbody>
</table>

Unconstrained direct effects for males

| Work Hours                 | 0.048    | 0.015    | 3.269          | .001    |
| Work Hours                 | 0.284    | 0.121    | 2.341          | 0.019   |
| Work Life conflict         | -0.063   | 0.020    | -3.180         | 0.001   |
| Work Life conflict         | 0.059    | 0.026    | 2.311          | 0.021   |
| General WellBeing          | -0.237   | 0.098    | -2.422         | 0.015   |

Unconstrained direct effects for females

| Work Hours                 | 0.020    | 0.015    | 1.389          | 0.162   |
| Work Hours                 | 0.187    | 0.115    | 1.625          | 0.104   |
| Work Life conflict         | -0.035   | 0.021    | -1.622         | 0.105   |
| Work Life conflict         | 0.036    | 0.025    | 1.440          | 0.150   |
| General WellBeing          | -0.144   | 0.099    | -1.452         | 0.146   |
Table 7.12 Continued: Model estimates for females and males for best-fitting model
Constrained correlations between the exogenous measures (standardized)

<table>
<thead>
<tr>
<th>Correlation</th>
<th>Estimate</th>
<th>SE (est)</th>
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<th>p-value</th>
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<tr>
<td>Work Intensity &lt;-- Children</td>
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<tr>
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<td>0.043</td>
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<tr>
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</tr>
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<td>Work Intensity &lt;-- Job Involvement</td>
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<tr>
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<tr>
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<td>Job Involvement &lt;-- Organisational Support</td>
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<tr>
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<tr>
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<td>***</td>
</tr>
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<td>Variables</td>
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<td>Job Involvement</td>
<td>Supervisor Support</td>
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<tr>
<td>--------------------</td>
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</tr>
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<td>Work Drive</td>
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*** indicates statistical significance at the 0.001 level.
Chapter 7 – Study 1 Discussion

7.3 Introduction
The aim of this study was to examine self-reported working hours, work-life conflict and psychological strain in Irish academics. In addition, an examination of a number of individual, personal and organisational factors hypothesised to potentially influence work hours, work-life conflict, and psychological strain in academia was conducted. The moderating role of gender in the antecedents and consequences of long working hours was also explored. In this discussion, findings in relation to occupational stress, the presence of dependents, occupational level and effort-reward imbalance in academia are also discussed.

7.3.1 Work Hours
It has been established that academics in other countries such as Britain, Australia, and America work long hours and that one of their most significant stressors is workload. Objective 1 of this study aimed to ascertain levels of self-reported work hours in Irish academics. The self-reported work hours of academics in this Irish study were comparably long, with the majority of academics working in excess of the average Irish 40 hour working week. Almost half of the sample (47%) worked in excess of the 48 hour per week legal limit, with a fifth working far in excess of this. The fact that almost half of the academics surveyed worked over 50 hours is notable, given that Lee et al., (2007) have reported that only 5.5% of Irish employees engage in hours in excess of 48 per week. The trend towards long hours in academia is worrying as such long working hours have previously been shown to put workers at risk of stress, fatigue, work-life conflict, and health problems. The results from this study indeed revealed that long working hours predicted higher levels of work-life conflict, which in turn predicted higher psychological strain for both male and female academics, in line with hypotheses H2 and H3. Furthermore, academics who worked lower hours reported better work-life fit than those who worked longer hours.
Commute times to and from work may require significant amounts of time that may contribute to the perceived length of the working day. For most of the academics in this study (70%) commute times to and from work were less than 30 minutes which is in line with the national average (CSO, 2009). The majority of academics (83%) reported that they regularly worked outside of normal office hours (i.e. 9am-5pm) and weekend working was also commonplace. This is consistent with previous research where academics reported that they regularly brought work home (Kinman, 2001; Leung et al., 2000) and do a significant portion of their work outside of the office (Gornall & Salisbury, 2012). However, the flexibility inherent in academic work which allows work to be conducted remotely from the university may cause the boundaries between work and home to become blurred. Blurred boundaries may impede detachment and recovery from work (Sonnentag & Zijlstra, 2006) and have negative implications for work-life balance (Hyman et al., 2004). Notably in this study the academics reported that they desired a greater degree of separation between their home and work lives than what they currently had in place. This desire for greater separation from work is important as previous research has shown that employees who desire more work-home segmentation are less committed and less satisfied than workers who desired greater integration (Rothbard et al., 2005).

7.3.2 Effort-Reward Imbalance

Most of the academics (92%) stated that they were unrewarded for their long working hours. Furthermore, over half of the respondents felt that their promotional prospects were poor. Promotional prospects are considered to be an indicator of financial rewards within the workplace (Siegrist, 2006). Conversely security rewards were found to be high in that the majority of participants (83%) felt that their job security was good. This finding corresponds with the fact that the majority of respondents held full-time, permanent positions. However, a significant subsection of the respondents reported that they had experienced or expected to experience negative changes to their work situation. The majority of respondents felt that they were treated fairly at work, which is an indicator of esteem rewards in the workplace. Siegrist (2006) has noted that effort-reward imbalance occurs if there is a lack of alternative employment options and if
employees accept imbalance in order to improve future work prospects. Imbalance at work is also frequently noted in over-committed employees. It cannot be ascertained definitively from this study, which of these conditions was specifically driving perceptions of imbalance between extrinsic effort (i.e. long work hours) and rewards. Lack of alternative employment options may be a factor given the impact of the global recession on availability of academic positions and a general propensity for academics not to move positions, once they have become established (Doherty & Manfredi, 2006a). If Cropley and Millward’s (2009) definition of over-commitment (i.e. working outside one’s normal contractual hours) is applied to academia and normal hours are taken to be a 40 hour week, then half of the participants in this study could be regarded as over-committed to their work. Academics are known to be highly job involved (Kanungo, 1982a) and in this study job involvement was significantly correlated with over-commitment to work, so over-commitment may be a contributory factor in the effort-reward imbalance relationship.

Overall, it was concluded that in this study the majority academics did not feel rewarded for long hours at work and perceived that their promotional prospects were poor. This is problematic for the university sector as Kinman & Jones (2007) have shown that academics who perceived that their work-related efforts were not adequately rewarded had poorer psychological and physical health than those whose efforts were rewarded. In this study it was also observed that being rewarded for working longer hours was positively correlated with job satisfaction. Given the series of pay cuts enforced across the public sector in recent years and the decreases in personnel numbers as a result of the economic climate in Ireland it is possible that perceptions of a lack of reciprocity between efforts and rewards may have increased since this study was conducted in 2008/2009. Furthermore, as suggested by Kinman & Jones (2008) workplaces which are regarded as inequitable (with regard to efforts and rewards) may be perceived as unattractive places to work, which may in the long term influence students away from pursuing academic careers.
7.3.3 Gender differences and child status differences

The third objective of this study was to examine gender differences across all study variables. Consistent with general trends (Lee, McCann & Messenger, 2007) and as hypothesised (H1) the study revealed that male academics worked longer hours than female academics. This finding differs from at least one other recent study of academic work hours which found no difference in male and female work patterns (Misra et al., 2012). The finding in this study may be explained by reference to a number of studies that have shown that the working time of females tends to be constrained due to their greater involvement in household and caring duties in the home (Darcy & McCarthy, 2007; Mason & Goulden, 2004; OECD, 2011; Probert, 2005), therefore, female academics may not be in a position to work to the same extent as male academics. Indeed, it has been put forth that academic men tend to use their discretionary time to pursue their research (Doherty, 2010), thereby working longer hours than female academics.

Although men in this study worked significantly longer hours and reported significantly higher job involvement than women, there was no mean difference in levels of work-life conflict reported by men and women. The finding of no gender difference in mean levels of work-life conflict differs from other studies of work-life conflict in academia, such as Winefield et al., (2008) and Cantano et al., (2010). The finding that men reported higher job involvement than women also differs from a previous study where no gender differences in job involvement in academia were observed (Mantler & Murphy, 2005). In addition, the current study also found lower work enjoyment in female academics when compared with male academics, which differs from the findings of Spence & Robbins (1992). Notably, women in the current study reported significantly higher psychological strain than men. Eby et al. (2005) have noted that research has shown that professional women tend to report higher stress levels than men and also report more difficulty in relaxing after work. Furthermore, although women reported higher levels of organisational support than men, they also reported higher work intensity and higher organisational expectations in relation to long working hours when compared with men. This pattern of findings is interesting, as it suggests that although women were working
fewer hours and felt more supported than men they were also reporting lower work enjoyment, and higher psychological strain in the context of reporting higher work intensity and organisational expectations in relation to working hours.

Although the male and female academics did not differ on mean levels of work-life conflict experienced in this study, a number of significant findings in relation to the work-home interface were observed when the presence of children in the home was taken into consideration. It was found that academics with children reported higher mean levels of family-work conflict than academics without children and level of family involvement was positively correlated with level of family-work conflict. Probert (2005) noted that academic women with children reported that their childcare responsibilities constantly were in conflict with their work responsibilities. Finding time to attend to the needs of children in the face of a demanding work schedule is one such form of conflict, but in addition there is the stress associated with juggling childcare and academic work schedules, for example, school-drop offs and collections have to be organised and childcare arrangements must be in place. Irregular events such as parent-teacher meetings, school plays, a sick child, require time and attention and therefore may conflict with the time and attention needed to be spent at work. Furthermore, the female academics with children in this study reported higher mean levels of family-work conflict than females without children, while there was no difference in levels of family-work conflict between men with and without children. Research shows that academic women generally take greater responsibility for childcare and household responsibilities (Mason & Goulden, 2004), therefore, it follows that they would experience greater levels of family-work interference than women without children.

This study has also contributed to the work-life interface research within academia as it was shown in this study that academics with children experienced higher levels of family-work facilitation than academics without children. Research has shown that engaging in family time is perceived as positive by parents and that good family relationships can emotionally help parents deal with work-life conflict (Offer & Schneider, 2008). Indeed, it has been suggested that engaging in family activities can
promote recovery (Offer & Schneider, 2008) and provide a psychological buffer between the work and home domains (Reddick, Rochlen, Grasso, Reilly, & Spikes, 2012). The inter-correlations between measures also showed that level of family involvement was positively correlated with family-work facilitation. Therefore, although having children on one hand is associated with greater family-work conflict; on the other hand, spending time with and caring for children may actually help academics to recover from work and mentally prepare for work the next day.

7.3.4 Occupational Level
As noted in the rationale chapter, an objective of this study was to examine all study variables for differences when occupational level was taken into consideration. The results revealed that professors enjoyed significantly higher levels of job satisfaction, work enjoyment and job involvement than academics at lower grades in the university setting. This effect of occupational level on job satisfaction is in line with previous findings (Leung et al., 2000; Thorsen, 1996). Similarly, but not directly comparable, Winefield et al., (2008) reported that Deans and Heads of Departments reported higher job satisfaction than other categories of academics. Leung et al., (2000) suggested that factors such as higher salary and greater levels of autonomy may explain the higher levels of job satisfaction of academics in higher occupational positions. The finding within the current study that professors reported greater job control than more junior academics, lends some support for Leung’s argument that academics at higher levels have greater job autonomy. Professors and senior lecturers reported higher levels of family involvement than junior lecturers, which may possibly be due to junior lecturers not yet having started families or alternatively, it may be that the job autonomy that academics at higher levels have affords them greater flexibility to partake in family activities and caring responsibilities.

7.3.5 Structural Model
The current study used multi-group structural equation modeling to examine the influence of individual and organisational factors and life circumstances on work hours, work-life conflict, and psychological strain in female and male academics. A
comparison of a fully mediated model and partially mediated model revealed that the partially mediated model was found to provide a better fit to the data, with a number of exogenous variables found to have a significant direct effect on work-life conflict and psychological strain. While two variables significantly predicted longer working hours for both men and women -- high levels of job involvement and lower work hours expectations -- longer work hours in men, but not women, was predicted by higher work effort and also by the presence of dependents in the home environment. As predicted in Hypotheses 2 and 3, and consistent with previous research (Frone, Russell, & Barnes, 1996), for both men and women, longer work hours predicted higher levels of work-life conflict, and higher work-life conflict in turn predicted higher levels of psychological strain. Higher work-life conflict in both men and women was also predicted by a perceived lack of organisational support, higher work intensity, and higher work drive. Work-life conflict in men, but not women, was also predicted by lower levels of work enjoyment and higher levels of job involvement. In addition to the influence of higher work-life conflict on higher levels of psychological strain, psychological strain was predicted by higher work drive and higher work intensity in both women and men. As such, work drive and work intensity had a variety of both direct and indirect effects on psychological strain in men and women. Finally, higher work enjoyment also predicted lower psychological strain in men, but not women.

A number of counterintuitive findings were observed in this study. For example, it was expected as per Hypothesis 4a that the presence of dependents would potentially have a more significant effect on working hours in women academics, but we observed no effect of dependents on working hours in women. However, it was found that men with children reported working longer hours than men without children. This finding was also contrary to the expected impact of having children on working hours, as it has been suggested that having children generally tends to reduce the time available to work (O'Driscoll et al., 2006). Gender role socialization theory may help to explain the findings observed in the current study. Specifically, the men in the current study reported working significantly longer hours than the women, as per traditional gendered roles, where men give more time to the work role and women give more time to the
family role. What is interesting in this context is that male academics with children showed an exaggeration of this pattern, working longer hours than did those men without children. What is unclear from the current study is whether or not the men with children differed in any other respect from the men without children, for example, whether or not their partners also worked. Follow-up analyses did reveal that men in the more senior academic positions were more likely to have children than were men in more junior positions. Longer work hours may be necessary as one moves up the academic hierarchy, and thus the effects of dependents on men in this study may be in part explained by their more senior positions being associated with more demands and thus longer working hours. Recent qualitative research has noted that fatherhood was associated with increased productivity in academics (Reddick et al., 2012) which they noted was in line with general research which has shown that fatherhood can increase both job commitment and financially providing for one’s family (Knoester, Petts, & Eggebeen, 2007; Snarey, 1993). Interestingly, the presence of dependents in the home did not significantly influence levels of reported work-life conflict in the current study. This finding is contrary to Hypothesis 4b and to previous research which suggests that having children may increase work-life conflict (Behson, 2002; Carlson, 1999; Grzywacz & Marks, 2000). Having said that, the impact of dependents on male academics’ work-life conflict may have been indirect, as male academics with children reported working longer hours and longer work hours in turn predicted higher levels of work-life conflict.

Another unexpected finding from the current study was that lower organisational expectations predicted longer reported work hours. This finding is contrary to the hypothesis (H5a) and also the opposite of findings reported by Major et al., (2002). The academics in this study appear to be largely self motivated to work long hours as opposed to being significantly influenced by pressure from external sources, specifically, with longer work hours being a function of higher job involvement, but not higher organisational expectations. From one perspective, this appears to reflect a positive pattern, with intrinsic motivation appearing to dominate extrinsic motivation as a driving force in the long working hours culture of academics. However, this positive
view does not extend any further in the model, because long work hours predicts higher
work-life conflict, which in turn predicts higher levels of psychological strain.
Furthermore, this pattern of intrinsically-driven longer working hours, a function of
higher job involvement, may change as university management systems become
increasingly performance-focused and thus seek to alter the incentive structures and the
power of the organisational expectations that shape work behavior and attitudes of Irish
academics.

Although organisational and supervisor support had no influence on working hours, as
hypothesised (H6b) low levels of perceived organisational support predicted high levels
of work-life conflict in both men and women. One indicator of organisational support is
the availability of work-life integration policies, and although Irish public sector
institutions, such as universities, are generally regarded as having better work-life
integration policies than the private sector, it is unclear whether or not the availability of
these policies is having the desired effect on academics. Specifically, although
reasonable work-life integration policies are in place, some academics are reporting low
levels of organisational support in this context and, consequently, high levels of work-
life conflict and psychological strain. Policies alone are insufficient to support the
practice of true work-life integration as elements of organisational culture usually need
to be addressed to allow policies to be adopted (Thompson et al., 1999). On the other
hand, the perception of poor organisational support in the current sample may reflect a
generalized negative attitude to the organisation amongst those who are struggling with
high levels of work-life conflict for a variety of different reasons (e.g., due to high work
drive and high work intensity).

Drago et al., (2006) have noted that supervisors play a crucial role in allowing
employees to manage the work home interface. However, contrary to expectation
(Hypotheses 6a and 6b), supervisor support was not related either directly or indirectly
to work hours, work-life conflict or psychological strain in this study. One possible
explanation for this lack of relationship may be made by reference to work by Menzies
and Newson (2008) which stated that academics now work in greater isolation from their
co-workers than previously due to current working practices in academia (such as not taking coffee breaks and a greater reliance on email for communication with colleagues as opposed to face-to-face interactions). These work practices are associated with a growing sense of isolation and disconnection from colleagues. The fast-paced and intense nature of academic work coupled with a sense of disconnection from colleagues may prevent opportunities for seeking and/or offering support for work-home integration. Furthermore, the heightened use of email and the Internet as information sources may cause academics to be directed to formal organisational support policies as opposed to informal personal forms of support.

Consistent with previous research in industry (Major et al., 2002) and in academia (Mantler & Murphy, 2005), highly job involved individuals worked longer hours in the current study. This was expected, and it is consistent with the predictions of role salience theory (Frone & Rice, 1987). However, Hypothesis 7a was only partially supported by the model results, as the relationship was not found to be stronger for males. Hypothesis 7b was also only partially supported, a relationship between higher job involvement and higher work-life conflict was found in men, but not women. High levels of job involvement (in men) combined with long working hours may manifest in mental preoccupation with work, or difficulty switching off from work, even when in the home setting, which can also translate into higher perceived (strain-based) work-life conflict.

It was hypothesised (H8a, H8b) that higher work intensity would be associated with longer work hours, higher levels of work-life conflict, and higher psychological strain. Although work intensity was found to be predictive of long work hours for men, but not women, it was found that high work intensity predicted higher work-life conflict and higher levels of psychological strain for both men and women. Therefore, hypothesis 8b was fully supported, while hypothesis 8a was partially supported. The finding that high work intensity predicted longer working hours for men may be related to a greater desire in men for progression to more senior positions (Burke & Fiskenberg, 2007). It may also be possible that men and women approach their work demands differently. Men with heavy work loads work longer hours and therefore experience (time-related) work-
life conflict. Women with heavy workloads may have greater time limitations due to non-work commitments and therefore experience work-life conflict due to cognitive preoccupation with unfinished work or work backlogs. The finding that higher work intensity predicts higher work-life conflict in Irish academics is consistent with similar findings from industry (Major et al., 2002; Skinner & Popcock, 2008) and academia (Winefield et al., 2008).

Increasing work effort and high work intensity are significant stressors for many European workers today. Furthermore, it has been suggested that the speed of academic work has dramatically increased within the last decade (Ylijoki, 2013). It appears that high speed working in combination with additional responsibilities, such as greater levels of administration, external demands, new management practices are contributing to stress levels within academia. The finding in this study that work intensity directly affected psychological strain is consistent with findings from Winefield et al., (2008). The combination of both direct and indirect effects of work intensity on psychological strain in the current study also suggests that work intensity is a critical factor that needs to be addressed in any workplace intervention focused on reducing psychological strain in academics.

The current study also predicted (Hypotheses 9a and 9b) that both work drive and work enjoyment (two components of workaholism) would predict longer working hours and higher work-life conflict in male and female academics. No relationship was observed between either work drive or work enjoyment and working hours, therefore, Hypothesis 9a was not supported by the results. Hypothesis 9b was partially supported as it was found that low work enjoyment and high work drive predicted high levels of work-life conflict in men, whereas only high work drive predicted high levels of work-life conflict in women. Previous studies have found that workaholics report higher levels of work-life conflict than non-workaholics, in particular workaholics who are low on work enjoyment (Bonebright, et al., 2000; Russo & Waters, 2006). Spence and Robbins (1992) classify those low on work enjoyment and high on work drive as ‘workaholics’. Thus, findings from the current study suggest that male workaholics have more work-
life conflict than non-workaholics. However, for the women in the current study, the case is different: work drive appears to be the more important of the two workaholism factors as a predictor of work-life conflict and strain. To progress in academia it may be necessary to put in very long hours, however, for women, particularly, highly driven women who have limited hours of work time available to them, high levels of work-life conflict may be experienced as a consequence.

At the same time it should be noted that higher work drive also had a direct effect on higher levels of psychological strain in both men and women. This finding is consistent with findings in the extant literature, where it has been reported that health complaints are predicted by high drive (McMillan & O'Driscoll, 2004). Interestingly, the current study also revealed that higher work enjoyment predicted lower psychological strain in men, but not women. High work enjoyment has been shown to enhance satisfaction and well-being (Burke, 1999c). For academic men, high work enjoyment may help to offset any negative effects of long work hours on psychological strain however, a sense of pressure due to work backlog or increasingly high work demands may in the long run be damaging to well-being and ultimately long term health. Notably, women in the current study reported shorter working hours than men, perhaps due to more home-related demands. The high work demands of academic work coupled with less time available for work may explain why women experienced less work enjoyment than men. This interpretation is consistent with the fact that the women academics in the current study reported significantly lower work enjoyment than men.

It has been argued that “the perfect academic is someone who gives total priority to work and has no outside interests and responsibilities” (Bailyn, 2003, p.139); however, this may not be possible for all workers, such as female workers and dual-earner couples whose time for work may be constrained by caring and household duties. In this study, it was observed female academics worked fewer hours than males, however, the reasons associated with these lower hours were not elucidated. Given the challenge of devoting long hours to work in order to progress within the academic hierarchy, it is possible that academia may encourage a unique pattern of workaholism, work-life conflict and
psychological strain in women academics. Conversely, men in this study appear to be fulfilling the ideal academic worker role by working significantly longer hours than women, driven by their own high work involvement and heavy work demands. They also reported higher work enjoyment. However, this pattern of work in men academics is not without its potential negative consequences, as long hours in part predict higher work-life conflict and higher psychological strain.

These findings are important given the current situation in the Irish higher education sector, and internationally, with reducing staff salaries, recruitment and promotion freezes, reduction in staff numbers, increasing student numbers, and a greater emphasis on research outputs, combining to further increase the pressures on academics. The need to work even longer hours in the face of increasing work demands, may not be sustainable in the long term, particularly given the potential negative long term consequences of chronic stress on health and productivity outcomes. Addressing the long work hours culture, and work-life conflict and stress within academia requires a combined effort by both the management and academic staff of universities. From an organisational perspective, there is a significant design challenge in relation to how best to cultivate a work environment that results in both high work enjoyment, reasonable work demands and working hours, and low levels of work-life conflict. The challenge for universities moving forward is to design work systems and processes that maintain the agility and resilience of both individual workers and the university as a whole in the face of both internal and external pressures.

7.3.6 Study Strengths and Limitations

Notwithstanding the interesting and suggestive pattern of results found in this study, it is important to acknowledge the limitations of the current study design. This study consisted of a cross-sectional survey; therefore, no causal inferences can be made in relation to the observed pattern of structural relationships.

The potential for bias in the data must also be acknowledged, as with any self-report data there is potential for recall bias, and given the low response rate to the questionnaire
self-selection must also be addressed as a potential problem. It may be the case that responses were received from academics who were relatively more stressed or relatively less stressed due to working hours and work-life conflict. At the same time, the sample profile is one that inspires some confidence, as the data on self-reported working hours are consistent with other studies on academic working hours. Also, the response rate, although low, was comparable to other surveys of academic stress, for example, Catano et al., (2010), 27%; Kinman & Jones (2008), 22%; but lower than 38% (Tytherleigh et al., 2005) and 33% (Anderson et al., 2002). The low response rate (23%) to the survey may reflect a number of factors, such as lack of time to complete the survey or survey fatigue. Such non-response bias is purported to weaken findings, however, at least one researcher has stated that “there is little empirical support for the notion that low response rate surveys de facto produce estimates with high non-response bias” (Groves, 2006, p. 670).

This study is significant as it suggests that the relationship between organisational and individual factors and work hours, work-life conflict and psychological strain is potentially different for male and female academics. While previous studies have reported that, in comparison with male academics, higher levels of work-life conflict in female academics are associated with higher stress levels (Cantano & Francis, 2010), consistent with Byron (2005), the results of the current study suggests that the contextual influences and variable interactions that characterize levels of work-life conflict in men and women may be more complex.

In addition, Eby et al. (2005) noted a gap in the work-family literature, in that; there was little predictive research which examined individual differences such as personality features. This study took into consideration the role of workaholism in predicting levels of work-life conflict experienced by academics thereby adding to the relatively sparse literature available on workaholism (Burke & McAteer, 2007; McMillan et al., 2001).
7.3.7 Summary and Conclusion

The findings from this study indicate that Irish academics face a number of occupational stressors which are similar to those encountered by their international peers. Long working hours caused higher levels of work-life conflict and in turn psychological strain for Irish academics. However, other individual, organisational and personal factors also combined to contribute to long working hours and in turn negative consequences. Gender differences also added to the complexity in the causes of working hours, work-life conflict and psychological strain in academia. Academics in this study were intrinsically motivated to work long hours however they also reported that they were unrewarded for their efforts. This lack of reciprocity between effort and rewards has negative implications for employee stress and well-being. Additional exogenous variables (i.e. work drive and work intensity) were found to be noteworthy in this study due to their direct negative effects on both work-life conflict and psychological strain experienced by academics. Furthermore, the academics in this study indicated that they desired a greater level of segmentation between their work and home lives, which indicates that academics may not be satisfied with the degree to which their work spills over into their family lives. Overall, the pattern of findings is concerning, especially in light of efforts to increase the competitiveness and productivity of the Irish university sector. In the context of reducing budgets and increasing student numbers, academic demands may increase the length of the working week beyond acceptable norms and thus continue what has been identified by many researchers as an unhealthy increase in academic stress levels.
Chapter 8 – Study 2 Methodology

8.1 Introduction
This section describes the methodology employed for the diary study. The study consisted of a seven day diary completed by a sample of Irish academics in two third level institutions. A detailed account of the diary instrument design, participant recruitment strategy, and procedure is provided.

8.1.1 Sample Selection and Recruitment
In advance of conducting the study, permission to contact academic staff and conduct the study was sought from the three universities that had participated in Study 1. An email was sent to the Registrar of each university in February 2011. The email (see Appendix 5) requested permission to send an email request to all of the university’s academic staff to participate in the diary study. Two universities granted permission and one did not reply to the request.

While it is acknowledged that random sampling is the best approach in order to achieve a sample that is generalisable to the total population, a decision was made based on the response rate to the questionnaire survey in Study 1, to conduct a full population request to source participants for the diary study. The staff listings used in study one were used to identify academic staff for this study. The total population size across the two universities was 999 academics. A number of individuals were removed from the list of 999 academics due to a number of issues, for example, email problems, persons had retired or no longer were working at the university, and persons on leave (maternity, sick leave, sabbatical) for the duration of the data collection period. Therefore, the final population size was 916.

An email request for study participants was sent to the academic staff in the two Irish universities (See Appendix 6). The emails were sent on the 16/02/11 (University 1) and 21/02/2011 (University 2). Reminder emails were sent on the 03/03/11 (University 1) and the 09/02/2011 (University 2). In order to maximise participation in the study,
inclusion in a prize draw (€200 Amazon voucher) was offered for all diary participants who returned fully completed diaries.

All persons interested in participating in the diary study responded to the researcher via email. In total 70 academics agreed to participate in the study. This gave a response rate of 7.6%. Such a low response rate will draw concern of a non-response bias in terms of how the participants differ from all the non-responders. It is acknowledged in diary research that the task of keeping a diary is time consuming and possibly disruptive (Alasweski, 2006) and therefore, those who agreed to be involved in the study may differ from the general population either in terms of personal motivation and/or in their personal time available to allow participation. It may also be a case that those persons with a special interest in the areas of work hours, work intensity and work-life conflict may also have agreed to participate. Therefore, for the purpose of this study, the sample can be considered a ‘convenience sample’ and the potential for differences between the total population and sample is acknowledged as a design limitation, but one that was unavoidable.

8.1.2 Participant Profile
A total of 17 male academics (40%) and 27 female academics (60%) returned completed diaries for the seven day period. Over half of the sample (55%, N=24) were aged between 36-45 years of age, 21% (N=9) were aged between 26-35 years, 18% (N=8) were aged between 46-55 years, 4% (N=2) were aged between 56-65 years, and one person (2%) was aged >65 years of age. The majority of the sample were married (N=34), six were single, two were divorced/separated, and two reported the category of ‘other’. Just over half (52%, N=23) of the sample had children, and the median number of children reported was two. The maximum number of children reported was four (one person), and the minimum number was one. The majority of parents in the sample had young children, with 15 reporting that they had at least one child under the age of five. Seven reported having at least one child between the ages of 6-10 years, four reported having at least one child between the ages of 11-15 years, and two reported having at least one child between the ages of 16-18 years.
The majority of respondents (N=43) reported that they worked full time, with only one respondent working part time. Within the sample, the following occupational grades were present: one professor (2%), three senior lecturers (7%), 23 college lecturers (52%), 11 junior lecturers (25%) and six other contract types (14%). In the ‘other’ category, the reported occupational groups were as follows: three university teachers, two practice educators and one university fellow.

8.1.3 Diary Instrument Design

Premdairy screening questionnaire

A six page pre-screening questionnaire was designed to elicit information from the diarists relevant to the study objectives. The purpose of the pre-screening questionnaire was to gather demographic information and the self-rated propensity of the diarists towards workaholism and work rumination. Positive and negative affect measures were also included in the pre-screening questionnaire. The pre-screening questionnaire contained four sections; demographic and work information, work rumination, workaholism and positive/negative affect. See Appendix 8 for the complete pre-screening questionnaire.

Demographics

The demographics section of the questionnaire consisted of eight questions, and a five item measure concerning work practices. The eight questions elicited information on gender, age, marital status, family status, job category, work contract (full time versus part time) and normal working hours. All response scales were categorical.

The five item work practices scale was an amended version of a scale employed in a British police officer study (McDowall & MacKinnon, 2004) designed to measure the frequencies with which individuals engage in positive (i.e. taking lunch breaks, taking rest days, using holiday entitlements) and negative work practices (i.e. bringing work home, working outside of normal hours). The responses to the items were on a five
point Likert scale ranging from “never” to “always”. For example, respondents were asked to indicate how often they take work home. Scores range from five to 25. Low mean scores indicated more negative work practices while high scores on the scale indicated more positive work practices. Internal consistency for the scale was .746

**Work Rumination**

Section 2 of the questionnaire consisted of the Work-Related Rumination Scale (WRRS) (Cropley & Millward Purvis, 2003). This measure contained 26 items designed to determine the ease with which individuals switched-off from work. The responses to the items were on a five point Likert scale ranging from “very seldom or never” to “very often or always”. An example of a question from this measure is “Do you find yourself thinking about work-related issues when you are not at work?” Construct validation studies point to three sub-scales that can be measured using this scale (Cropley, Michalianou, Pravettoni, & Millward, 2011), specifically: Affective Rumination (five items), Problem Focused Rumination (five items) and Detachment (five items). Internal consistency for the scales in the current study was $\alpha = .926$ (Affective Rumination), .735 (Problem Focused Rumination) and .872 (Detachment). High mean scores on each of the sub-scales indicates greater difficulty detaching from and ruminating about work. Scores ranged on each subscale from five to 25.

**Workaholism**

The WorkBat-R scale (McMillan et al., 2002) employed in Study 1 was also used in the pre-screening questionnaire. Seven items were used to measure each factor, that is, work enjoyment and work drive. For example, “My job is more like fun than work” is an example of a work enjoyment item, while “I often feel there is something inside me that drives me to work hard” is an example of a work drive item. A five point Likert scale ranging from “strongly disagree” to “strongly agree” was used. Scores ranged on each sub-scale from seven to 35. Higher scores on the two subscales indicate higher work enjoyment and higher work drive. Internal consistency for the two subscales was $\alpha = .718$ and .784, for enjoyment and work drive, respectively.
Positive and Negative Affect

The PANAS measure of positive and negative affect (Watson, Clark, & Tellegen, 1988) was also employed in the pre-screening questionnaire. This measure includes a total of 20 items, ten items that measure positive affect and ten items that measure negative affect. A list of ten positive affect words (e.g. enthusiastic, inspired) and a list of ten negative affect words (e.g. distressed, hostile) were presented to the respondents, and they were asked to indicate the extent to which they had felt the emotions listed over the past few weeks. For each of the items, the respondents used a five point Likert scale ranging from “very slightly or not at all” to “extremely”. Scores range from ten to 50 on each subscale. Higher scores indicate higher levels of positive and negative affect. Composite scores for the measure were generated. Internal consistency for the Positive Affect scale was $\alpha = .851$ and for the Negative Affect scale $\alpha = .918$

Daily diary

The daily diary consisted of nine printed pages, containing a combination of quantitative and qualitative measures. The daily diary was divided into five sections. Section one allowed the diarist to indicate the date, time and day of the week on which the daily diary was complete. Section two was designed to elicit information on work patterns that day. Section three investigated work recovery and detachment. Section four investigated work-life conflict and section five allowed respondents to indicate their level of fatigue and emotional exhaustion. See Appendix 9 for the complete daily diary.

Work Patterns

Six questions were used in Section 2 to measure the work patterns of the respondents on the day the diary was completed. The first question asked the diarist “how many hours did you work today?” Responses were given prescribed categories which ranged from zero hours to greater than 10 hours.

Three questions amended from the Effort-Reward Imbalance Questionnaire (Siegrist, 1996) were employed to determine the level of work intensity the diarist experienced that day. The wording of the items was slightly altered to allow the respondent to reflect
on the current day. An example item is “I had constant time pressure due to a heavy workload”. All responses were scored on a five point Likert scale ranging from “strongly agree” to “strongly disagree”. Internal consistencies ranged over the data collection period from .398 to .816.

Two questions were employed to investigate the breaks taken by the diarist during the working day. Diarists were asked to indicate the amount of time they had taken for their coffee and lunch breaks. Responses to each question were categorical and ranged from “less than 20 minutes” to “greater than 60 minutes” for the lunch break question, and from “less than 15 minutes” to “greater than 45 minutes” for the coffee break question.

Work Recovery and Detachment
Section 3 of the daily diary contained seven measures; time spent in activities after work (5 items), ability to switch off during activities (4 items), recovery (2 items), detachment (3 items), cognitive intrusion (4 items), leisure (3 items) and mastery (4 items). Three open-ended questions were also posed to gain more detail in relation to post-work recovery and detachment.

Participants were asked to indicate “...(in minutes) how much time you spent after work on the following categories of activities”. Five categories of activities were available; work-related, household/childcare, low effort activities (e.g. watching TV), physical activity (e.g. walking), social (e.g. meeting friends). The wording of this question and the categories of activities were based on a previous quantitative diary study (Sonnentag, 2001).

Respondents were next asked to rate the level to which they managed to ‘switch-off’ from work during their household/childcare, low effort, physical and social activities. Statements were presented, for example, “While performing physical activities I could switch off completely”, and respondents used the four item Likert scale ranging from “not true at all” to “very true” to indicate their response. These items were designed to measure the level of detachment achieved by the diarists during their various post work
activities (Sonnentag & Bayer, 2005). Internal consistency on this measure ranged over the data collection period from .734 to .898.

Respondents were asked two questions designed to investigate post-work recovery, amended from an existing measure (Sonnentag & Fritz, 2007). A five point Likert scale ranging from “strongly agree” to “strongly disagree” allowed the respondents to indicate their level of agreement with the following two statements; “Today, I would have preferred more time for relaxing and recovering from work” and “I feel like I have recovered from work today”.

Three items were employed to measure psychological detachment from work, amended from a four item scale (Sonnentag & Fritz, 2007). For example, diarists were given the statement ‘I didn’t think about work at all’, and had to indicate their level of agreement on a five point Likert scale ranging from “strongly agree” to “strongly disagree”. Internal consistency on this measure ranged over the data collection period from .821 to .925.

A four item Cognitive Intrusion at Work Scale was employed (Swiercz & Ezzedeen, 2007). An example from this subscale is the statement “I was routinely distracted by work related thoughts”. Diarists indicated their level of agreement with each of the statements on a five point Likert scale ranging from “strongly agree” to “strongly disagree”. Internal consistency on this measure ranged over the data collection period from .869 to .948.

A three item relaxation measure and a four item mastery measure (Sonnentag & Fritz, 2007) were also employed. For example, “I did relaxing things” was an item from the relaxation measure and “I learned new things” was an item from the mastery measure. Agreement with the seven items was indicated using a five point Likert scale ranging from “strongly agree” to “strongly disagree”. Internal consistency for the relaxation scale ranged over the data collection period from .816 to .948. Internal consistency on the mastery scale ranged from .843 to .938.
Three open-ended questions were employed to obtain more detailed comments, opinions and reflections from the diarists. The question “Please describe your overall level of recovery after work today (max 100 words)” was used to allow diarists add any additional details in relation to their post work recovery that was not captured in any of the preceding sections. The second open-ended question asked “If you were thinking about work this evening, please describe the type of work related thoughts you were having (max 100 words)” to gain additional information about work rumination and cognitive intrusion. The third open-ended question asked the diarist to “Please indicate any additional points you would like to make with regard to switching off from work today. (max 100 words)”.

Work-life Conflict
A three item measure of time-based work interference with family (Carlson et al., 2000) was employed in this section. Respondents used a five-point Likert scale to indicate their level of agreement with the three statements, for example, “My work kept me from my family/personal activities more than I would have liked”. Internal consistency for this measure over the data collection period ranged from .869 to .991.

An additional three items were used to measure strain-based work interference with family (Carlson et al., 2000). The response scale for these items was identical to the three time-based interference items. An example from this measure is “When I got home from work I was too frazzled to participate in family/personal activities.” Internal consistency on this measure over the data collection period ranged from .843 to .940.

Six items were then employed to measure the impact of family/home life on work (Carlson et al., 2000). Three items were used to measure time-based family interference with work and three items were used to measure strain-based family interference with work. For example, “I had to miss work activities due to the amount of time I had to spend on family activities” was used as an item to measure time-based family interference with work. Internal consistency on the time-based family interference with work measure over the data collection period ranged from .732 to .922. “Tension and anxiety from my family weakened my ability to do my job” was used as an item to
measure strain-based family interference with work. Internal consistency on this measure over the data collection period ranged from .850 to .962

**Fatigue**

Section 5 contained a single item measure of fatigue (van Hooff et al., 2007). Respondents were asked to rate ‘How fatigued do you currently feel?’ on a five point Likert scale ranging from “not at all” to “extremely fatigued”. The Likert scale employed in this study was an amended version of the scale developed and employed by van Hooff et al. which contained a 10 item response scale. The Likert scale was shortened in this study to ensure that the scales used across the sections were equivalent in terms of design and layout.

**Emotional Exhaustion**

Two items from the Maslach Burnout Inventory (MBI) (Maslach & Jackson, 1981) were employed in this study to measure emotional exhaustion related to one’s work. Respondents were presented with two statements from the MBI; “I feel emotionally drained from my work today” and “I feel frustrated by my job today”. Responses were scored on a five point Likert scale which ranged from “strongly agree” to “strongly disagree”.

**Weekend diary**

The weekend diary consisted of eight printed pages which contained four sections. The majority of the measures employed in the weekend diary were identical to the measures in the week day diary; however, a small number of measures were reduced in size and modified in content, to make them more applicable to the weekend. Section one was identical to the weekday diary, where the diarist could record the date, time and day of week. See Appendix 10 for the complete weekend diary.

Section 2 contained three questions designed to explore work patterns that day. The diarists were asked to indicate how many hours they had worked during the day, as per the week day diary. One item “I had constant time pressure due to a heavy workload”
was used to measure work intensity at the weekend. This item was scored using a Likert scale ranging from “strongly agree” to “strongly disagree”. The third item was an open ended question which enquired as to why the respondent needed to work on the weekend day in question.

Section 3 of the weekend diary contained the same seven measures employed in the daily diary; time spent in activities after work (5 items), ability to switch off during activities (4 items), recovery (2 items), detachment (3 items), cognitive intrusion (4 items), leisure (3 items) and mastery (4 items). The three open-ended questions were also posed to gain more information in relation to post-work recovery and detachment at the weekend.

Section 4 of the weekend diary contained the three item measure of time-based work interference with family used in the daily diary. One item was used to measure time-based family interference with work, “the time I spent with my family caused me not to spend time in work activities that could be helpful to my career”. The measures of strain-based work-life conflict and strain based family interfering with work were omitted from the weekend diary.

Section 5 contained the single item measure of fatigue (van Hooff et al., 2007) and the two questions from the MBI (Maslach & Jackson, 1981) as already described for the weekday diary.

8.1.4 Diary Pilot

A pilot diary study was conducted in February 2011. Convenience sampling was employed for the pilot. A total of six academics known to the researcher agreed to participate in the pilot study. The pilot was conducted using an electronic diary format or paper copy format (depending on the preferences of the participants). Five of the six participants completed the electronic diary questionnaires. Each of the six participants in the pilot was interviewed subsequent to completing a week of daily diaries. A number of significant changes to the diary study design were made on foot of the feedback from
participants. In particular, it was decided to use a paper based diary format instead of an electronic format, as this avoided the requirement to have an internet connection at home and participants having to log into their work email accounts late at night. Changes were also made to differentiate the week day diaries and the weekend diaries, as some of the measures included were deemed to be irrelevant for weekend days.

8.1.5 Diary procedure
Diary packs were sent to all 70 participants in March 2011. (The diary pack consisted of an instruction page, a pre-screening questionnaire, five weekday diaries and two weekend day diaries). See Appendix 7 for diary instructions. The participants were instructed via email to complete their daily diaries between weeks nine and 12 of semester two (i.e. teaching term). Data was collected between March and April 2011. A total of 45 completed diaries were returned, which reflects a completion rate of 64%. One diary was deemed unusable as it did not contain the pre-screening questionnaire; therefore, there were 44 usable diary returns.

8.1.6 Data Analysis

8.1.6.1 Quantitative Analysis
The quantitative data from the diaries was entered into SPSS. Descriptive and inferential statistics were conducted using SPSS, Version 20. Figure 8.1 outlines the measurement structure employed in this study. As can be seen in Figure 8.1, time-based work-life conflict was measure across the five week days and the two weekend days therefore a seven day repeated measures ANOVA was conducted when analyzing work-life conflict. However, strain-based work-life conflict and both time-based and strain-based life work-conflict were measured only during the five working days, therefore, for analysis of these variables a five day repeated measures ANOVA was employed.

The diarists were categorized into groups based on their scores on the workaholism scales and inferential statistics i.e. repeated measures mixed design ANOVAs were employed to analyse the data. Due to the sample size it was not possible to analyse the
diary data using a Gender x Workaholism ANOVA structure. Therefore, the analysis of
the diary data involved examining the effects of gender and the effects of workaholism
type separately.

Figure 8.1: Overview of Measurement Structure

<table>
<thead>
<tr>
<th>Work Days (Monday – Friday)</th>
<th>After Work (Monday – Friday)</th>
<th>Weekend (Saturday – Sunday)</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Hours worked</td>
<td>• Time worked</td>
<td>• Time worked</td>
</tr>
<tr>
<td>• Work intensity</td>
<td>• Time household</td>
<td>• Time household</td>
</tr>
<tr>
<td></td>
<td>• Time low effort</td>
<td>• Time low effort</td>
</tr>
<tr>
<td></td>
<td>• Time high effort</td>
<td>• Time high effort</td>
</tr>
<tr>
<td></td>
<td>• Time social</td>
<td>• Time social</td>
</tr>
<tr>
<td></td>
<td>• Work intensity</td>
<td>• Work intensity</td>
</tr>
<tr>
<td></td>
<td>• Recovery experience rating</td>
<td>• Recovery experience rating</td>
</tr>
<tr>
<td></td>
<td>• Recovery level</td>
<td>• Recovery level</td>
</tr>
<tr>
<td></td>
<td>• Detachment level</td>
<td>• Detachment level</td>
</tr>
<tr>
<td></td>
<td>• Cognitive Intrusion level</td>
<td>• Cognitive Intrusion level</td>
</tr>
<tr>
<td></td>
<td>• Relaxation</td>
<td>• Relaxation</td>
</tr>
<tr>
<td></td>
<td>• Mastery</td>
<td>• Mastery</td>
</tr>
<tr>
<td></td>
<td>• Time – WLC</td>
<td>• Time WLC</td>
</tr>
<tr>
<td></td>
<td>• Strain – WLC</td>
<td>• Fatigue – end of day</td>
</tr>
<tr>
<td></td>
<td>• Strain – LWC</td>
<td>• Emotional exhaustion</td>
</tr>
</tbody>
</table>

8.1.6.2 Qualitative Analysis
The qualitative data from the open-ended questions was transcribed into MSWord. For
the purpose of analysing the open-ended question responses from the diaries descriptive
coding (Miles & Huberman, 1994) was employed as the data varied in depth from single
word responses in some instances to significantly detailed and reflective responses. The
open-ended diary data was first checked for data quality and then analysed initially on a
case by case basis. Subsequent to the initial analysis, further analyses were conducted
taking into consideration gender and then workaholism type (separately). Tables were
constructed in MSWord to present each participant’s responses to the four questions
over the course of the seven day data collection period. Five tables were constructed: a
table collated all male responses, a table collated all female responses, a table collated
all workaholic responses, a table collated all enthusiastic workaholic responses and a
table collated all low drive worker responses.
Approach to Analysis

The initial analysis involved the reading and re-reading of each of the seven daily diaries for each of the participants (N=44). Initially the level of recovery over the course of the five day week and the weekend was assessed for each diarist and then each person was classified as having had consistently adequate recovery, variable recovery or poor recovery at the working week and weekend levels. Good recovery was defined as the respondent reporting predominantly good post work recovery and/or switch off at least four out of five days during the week and both days on the weekend. Poor recovery was defined as the respondent reporting predominantly poor post-work recovery and/or switch off at least four out of five days during the week and both days on the weekend. Mixed recovery was defined as recovery which changed from day to day, with recovery levels almost equally distributed between good and poor recovery during the week and one day of poor recovery and one day of good recovery at the weekend. This analysis was conducted in order to investigate patterns of recovery within and between the participants over the course of the week.

The second step in the analysis was to categorise all the diary responses by the gender of the diarist. The diary entries were then analysed for the two groups; male and female academics. The level of recovery achieved was noted for each of the groups in total and assessed for patterns. The data was then analysed to identify barriers to recovery identified by male and female academics and aids to recovery (promotion). The coding of the barriers to recovery were not pre-defined but allowed to emerge progressively during the reading and analysis phase. The activity categories used in the quantitative diary measures i.e. work activities, passive activities, active activities, household/caring activities, mastery activities were used as the start list (Miles & Huberman, 1994) for coding the promoters of recovery. The data was coded descriptively using labels e.g. physical activity, passive activity and the data was tabulated in order to illustrate the patterns within and across the two groups. During the analysis additional trends were observed in the data relevant to the study and these trends are noted in the results section.
The third step in the analysis was categorising all the diary responses by the workaholism type of the diarist. The entries were then analysed for the groups; workaholics, enthusiastic workaholics and low drive workers. The level of recovery achieved was noted for each of the groups in total and assessed for patterns. The data was then analysed to identify barriers to recovery identified by the three workaholism types and aids to recovery (promotion). The data was coded descriptively and the data was tabulated in order to illustrate the patterns within and across the three groups.

8.1.7 Ethical Considerations

Ethical approval was received from the NUI Galway Ethics Committee (29/02/2008) prior to data collection. An email was sent to all potential participants outlining the study aims and methods. On foot of this email, a number of email and telephone call queries were received in relation to the study and the methodology. The researcher endeavored to answer all queries and address any concerns. In most cases, after the queries were addressed, the person consented to participate. All study participants were required to provide informed consent on the initial page of the pre-screening questionnaire.

In this study, the participants were required to provide their name and addresses in order for the diary pack to be sent to them and in order for them to participate in the prize draw. To protect the confidentiality of the participants, only the researcher had access to the participant list. The two participating universities are not named in this document. The write-up of the diary study is anonymous and individuals or their institutes are not named.
Chapter 8 - Study 2 Results

8.2 Introduction
The results from the diary study are presented in three parts. Descriptive statistics, sample characteristics and contextual sample data from the pre-screening questionnaire are first presented. Next, the results of the quantitative analyses are reported. And finally the results of the qualitative analysis of the open-ended questions within the diaries are presented.

8.2.1 Descriptive Statistics

Pre-screening questionnaire results

Hours worked
Average weekly working hours were noted during the completion of the pre-screening questionnaire: 5% (N=2) worked between 21-30 hours a week, 16% (N=7) worked between 31-40 hours a week, 49% (N=21) reported that they usually worked between 41-50 hours per week, 16% (N=7) reported that they worked between 51-60 hours, with 14% (N=6) reporting that they worked in excess of 60 hours per week. There was a statistically significant difference (Mann-Whitney U test, $p = .017$) between males and females in their reported work hours at the pre-screening stage. Females were more likely to work < 50 hours per week (N=21) and men were more likely to work between 40 - > 60 hours per week (N= 16).

Composite scores for all subscales employed in the pre-screening questionnaire are presented in Table 8.1. A series of t-tests were conducted to determine gender differences on all pre-screening questionnaire measures. As shown in Table 8.1 only one significant gender difference was observed. It was found that female academics ($M = 14.66$) reported more positive work practices than male academics ($M= 12.12$), $t (41) = 2.303, p = .026$. 

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Table 8.1: Descriptive statistics for all pre-screening measures

<table>
<thead>
<tr>
<th>Subscale</th>
<th>Total Sample (N= 44)</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Work practices</td>
<td>13.68</td>
<td>3.63</td>
<td>6</td>
<td>23</td>
</tr>
<tr>
<td>Affective Rumination</td>
<td>12.91</td>
<td>4.45</td>
<td>5.20</td>
<td>21.00</td>
</tr>
<tr>
<td>Problem Focused Rumination</td>
<td>13.99</td>
<td>3.17</td>
<td>6.20</td>
<td>20.80</td>
</tr>
<tr>
<td>Detachment</td>
<td>11.22</td>
<td>3.71</td>
<td>4.60</td>
<td>18.80</td>
</tr>
<tr>
<td>Work Drive</td>
<td>25.25</td>
<td>4.85</td>
<td>8</td>
<td>34</td>
</tr>
<tr>
<td>Work Enjoyment</td>
<td>19.59</td>
<td>3.96</td>
<td>12</td>
<td>30</td>
</tr>
<tr>
<td>PANAS Positive Affect</td>
<td>32.52</td>
<td>5.99</td>
<td>22</td>
<td>42</td>
</tr>
<tr>
<td>PANAS Negative Affect</td>
<td>19.68</td>
<td>8.74</td>
<td>10</td>
<td>41</td>
</tr>
</tbody>
</table>

Note: Higher scores on the PANAS Positive Affect measure and Work Practices measure indicate better functioning. Higher scores on all other measures indicate poorer functioning.
Table 8.2: Gender differences on all subscale measures

<table>
<thead>
<tr>
<th></th>
<th>Males (N= 17)</th>
<th>Females (N= 27)</th>
<th>t-value</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>Work practices</td>
<td>12.12</td>
<td>2.55</td>
<td>14.66</td>
<td>3.89</td>
</tr>
<tr>
<td>Affective Rumination</td>
<td>13.79</td>
<td>3.99</td>
<td>12.39</td>
<td>4.69</td>
</tr>
<tr>
<td>Problem Focused Rumination</td>
<td>14.33</td>
<td>2.56</td>
<td>13.76</td>
<td>3.54</td>
</tr>
<tr>
<td>Detachment</td>
<td>10.60</td>
<td>3.34</td>
<td>11.58</td>
<td>3.93</td>
</tr>
<tr>
<td>Work Drive</td>
<td>24.58</td>
<td>4.36</td>
<td>25.67</td>
<td>5.17</td>
</tr>
<tr>
<td>Work Enjoyment</td>
<td>20.69</td>
<td>3.19</td>
<td>18.92</td>
<td>4.28</td>
</tr>
<tr>
<td>PANAS Positive Affect</td>
<td>33.06</td>
<td>6.71</td>
<td>32.18</td>
<td>5.60</td>
</tr>
<tr>
<td>PANAS Negative Affect</td>
<td>19.58</td>
<td>9.57</td>
<td>19.74</td>
<td>8.35</td>
</tr>
</tbody>
</table>

Work Practices

Table 8.3 presents the reported frequencies of positive and negative work practices engaged in by the academics.
Table 8.3: Frequencies of work practices

<table>
<thead>
<tr>
<th></th>
<th>Never</th>
<th>Rarely</th>
<th>Sometimes</th>
<th>Often</th>
<th>Always</th>
</tr>
</thead>
<tbody>
<tr>
<td>Take work home</td>
<td>2%</td>
<td>5%</td>
<td>18%</td>
<td>43%</td>
<td>32%</td>
</tr>
<tr>
<td>(N=1)</td>
<td>(N=2)</td>
<td>(N=8)</td>
<td>(N=19)</td>
<td>(N=14)</td>
<td></td>
</tr>
<tr>
<td>Work outside of office hrs</td>
<td>0%</td>
<td>5%</td>
<td>11%</td>
<td>43%</td>
<td>41%</td>
</tr>
<tr>
<td>(N=2)</td>
<td>(N=5)</td>
<td>(N=19)</td>
<td>(N=18)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Take all rest days</td>
<td>5%</td>
<td>25%</td>
<td>32%</td>
<td>36%</td>
<td>5%</td>
</tr>
<tr>
<td>(N=2)</td>
<td>(N=11)</td>
<td>(N=14)</td>
<td>(N=16)</td>
<td>(N=2)</td>
<td></td>
</tr>
<tr>
<td>Take at least the minimum amount of annual leave</td>
<td>9%</td>
<td>14%</td>
<td>21%</td>
<td>16%</td>
<td>41%</td>
</tr>
<tr>
<td>(N=4)</td>
<td>(N=6)</td>
<td>(N=9)</td>
<td>(N=7)</td>
<td>(N=18)</td>
<td></td>
</tr>
<tr>
<td>Take a lunch break</td>
<td>2%</td>
<td>30%</td>
<td>36%</td>
<td>25%</td>
<td>7%</td>
</tr>
<tr>
<td>(N=1)</td>
<td>(N=13)</td>
<td>(N=16)</td>
<td>(N=11)</td>
<td>(N=3)</td>
<td></td>
</tr>
</tbody>
</table>

**Workaholism**

In order to classify the diarists by workaholism type (McMillan et al., 2001), the scores for the two Workaholism scales (Work Drive and Work Enjoyment) were transformed into z-scores. Scores above the mean on both scales (positive z scores) were labelled ‘high’ and scores below the mean (negative z scores) were labelled ‘low’. The diarists were then categorised using the dyad as per Table 8.4. Table 8.5 provides a gender x workaholism categorisation of the diarists.

Table 8.4: Workaholism Type Dyad

<table>
<thead>
<tr>
<th></th>
<th>Drive</th>
<th>Enjoyment</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Workaholic</td>
<td>High</td>
<td>Low</td>
<td>15</td>
<td>34.1</td>
</tr>
<tr>
<td>Enthusiastic workaholic</td>
<td>High</td>
<td>High</td>
<td>13</td>
<td>29.5</td>
</tr>
<tr>
<td>Relaxed worker</td>
<td>Low</td>
<td>High</td>
<td>9</td>
<td>20.5</td>
</tr>
<tr>
<td>Uninvolved worker</td>
<td>Low</td>
<td>Low</td>
<td>7</td>
<td>15.9</td>
</tr>
</tbody>
</table>
Table 8.5: Gender x Workaholism Type

<table>
<thead>
<tr>
<th></th>
<th>Workaholic</th>
<th>Enthusiastic</th>
<th>Relaxed worker</th>
<th>Uninvolved worker</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>4</td>
<td>6</td>
<td>4</td>
<td>3</td>
<td>17</td>
</tr>
<tr>
<td>Female</td>
<td>11</td>
<td>7</td>
<td>5</td>
<td>4</td>
<td>27</td>
</tr>
<tr>
<td>Total</td>
<td>15</td>
<td>13</td>
<td>9</td>
<td>7</td>
<td>44</td>
</tr>
</tbody>
</table>

For the purpose of conducting inferential statistics on the diary data using the workaholism types as independent variables, the categories ‘Relaxed Worker’ and ‘Uninvolved Worker’ were grouped into a category labelled ‘Low Drive Workers’ (N=16).

Correlations
Inter-correlations between the pre-screening questionnaire measures are presented in Table 8.6. As shown in the Table, there was a significant positive correlation between work enjoyment and positive affect ($r = .428$, $p <.01$, two-tailed). Negative affect positively correlated with problem focused rumination, work drive and emotion focused rumination and was negatively correlated with detachment. There was a positive correlation between work practices and detachment ($r = .609$, $N= 41$, $p <.01$, two-tailed), and there was a negative correlation between work practices and problem focused rumination, affective rumination and work drive. Work drive was negatively correlated with detachment ($r = -.525$, $N = 41$, $p <.01$, two tailed) and positively correlated with affective and problem focused rumination.
Table 8.6: Inter-correlations of pre-screening questionnaire measures (N = 44)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive affect</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Negative affect</td>
<td>-.270</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Detachment</td>
<td>.119</td>
<td>-.384*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Affective Rumination</td>
<td>-.295</td>
<td>.590**</td>
<td>-.783**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Problem Rumination</td>
<td>-.130</td>
<td>.506**</td>
<td>-.771**</td>
<td>.865**</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Work Drive</td>
<td>-.072</td>
<td>.367*</td>
<td>-.525**</td>
<td>.541**</td>
<td>.587**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Work Enjoyment</td>
<td>.428**</td>
<td>-.320*</td>
<td>.073</td>
<td>-.201</td>
<td>-.048</td>
<td>.105</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Work Practices</td>
<td>-.006</td>
<td>-.129</td>
<td>.609**</td>
<td>-.477**</td>
<td>-.487**</td>
<td>-.463**</td>
<td>-.133</td>
<td></td>
</tr>
</tbody>
</table>

8.2.2 Quantitative Analysis

Gender Differences in post work activities

Two of the research questions in this study were to determine what strategies are used by academics to recover and detach from work and if gender differences existed in these strategies. Graph 8.1 shows the post-work activities engaged in by all the academics, while Graph 8.2 shows the post-work activities engaged in by male academics only and Graph 8.3 shows the post-work activities of female academics only.
The results of a 5 (Activity) x 7 (Day) x 2 (Gender) repeated measures ANOVA revealed a main effect of Day, $F(6,240)=66.365$, $p<.0001$, partial $\eta^2 = .624$. Post-hoc pair-wise comparisons revealed significantly higher levels of activity on Saturday and Sunday compared to Monday to Friday ($F_{\text{range}} = 59.23 – 131.87; p < .0001$ for all 10 comparisons), with no differences observed across Monday to Friday, and no differences between Saturday and Sunday. There was a main effect of Activity, $F(4,160)=11.780$, $p<.0001$, partial $\eta^2 = .228$, with participants reporting more household activity relative to work, physical activity, and social activity ($F_{\text{range}} = 7.11 – 33.76; p < .01$ for all three comparisons). There was no main effect for Gender. The Day x Activity interaction was
also significant, \( F(24, 960) = 3.183, p < .001 \), partial \( \eta^2 = .073 \). Post-hoc pairwise comparisons revealed while participants engaged in higher levels of activity on the weekend days (Saturday and Sunday) relative to weekday evenings, these differences were larger for household, social, and passive activities, in comparison with physical and work-related activities (\( F_{range} = 6.10 - 22.46; p_{range} < .01 - .00005 \)). Excluding Friday evening, there were no differences in work hours Monday to Thursday evening in comparison with Saturday, and no significant differences between Monday, Wednesday and Thursday in comparison with Sunday evening.

There was a Gender x Activity interaction effect \( F(4, 156), = 4.73, p < .005 \), partial \( \eta^2 = .105 \). While men showed no difference in levels of work, household and passive activity, they devoted more time to passive activities relative to physical activities \( F(1, 39) = 16.45, p < .0005 \), significantly more work activity relative to physical activity \( F(1, 39) = 8.07, p < .005 \), and significantly more passive activity relative to social activity \( F(1, 39) = 8.09, p < .01 \). No other pairwise differences were observed within the male group. Women did significantly more housework relative to all other activity types, \( F_{range} = 6.68 - 41.91; p < .01 \) for all four comparisons. Women also did more housework relative to men \( F(1, 39) = 4.74, p < .05 \). Conversely, men engaged in more work-related activity in the evening relative to women \( F(1, 39) = 10.33, p < .005 \). Men and women did not differ significantly across passive, physical and social activities.
Graph 8.2: Male post-work and weekend activity patterns

Graph 8.3: Female post-work and weekend activity patterns
Gender differences in the effectiveness of post-work recovery activities

Another research question sought to determine which post-work activities were perceived as most beneficial in aiding recovery. A 4 (Activity) x 7 (Day) x 2 (Gender) repeated measures ANOVA was conducted to analyse the ratings given by the diarists to each of the categories of post work activity (i.e. as to how well they recovered from work during four post work activities) and to also determine if gender differences existed.

Graph 8.4: Effectiveness of post-work activities in aiding recovery from work
Results revealed that there was no main effect associated with the Day of the week. The main effect of Activity on Recovery Experience Rating ability was significant, $F(3,60)=3.241, p<.05$ partial $\eta^2=.139$. Post hoc pairwise comparisons revealed that participants recovered more when engaging in physical and social activities relative to household activities ($p<.01$ for both comparisons), with no difference in recovery associated with household and passive activities. No other main or interaction effects were observed. Graph 8.4 shows the patterns in the data over the seven day reporting period.

**Gender differences on all other measures**

A series of repeated measures ANOVAs were conducted on all other diary measures; recovery, detachment, cognitive intrusion, leisure/relaxation, mastery, strain-based work-life conflict, time-based work-life conflict, strain-based life-work conflict, time-based life-work conflict, emotional exhaustion and fatigue. Only one main effect for Gender was observed on the mastery measure: $F(1,38) = 4.487, p < .05$, partial $\eta^2 = .106$. Graph 8.5 shows that male academics engaged more in mastery activities after work and at the weekend than female academics. Main effects for Day were observed on a number of the diary measures, which are detailed below in the section on Workaholism Type. Appendix 14 contains graphs for all gender analyses conducted, for which there were no significant effects.
Graph 8.5: Gender differences in reported engagement in mastery activities

Workaholism differences in post-work activities

One of the aims of this study was to determine if there were differences across workaholism types either in terms of post-work activity patterns or post-work recovery patterns. The results of a 5 (Activity) x 7 (Day) x 3 (Workaholism Type) repeated measures ANOVA revealed a main effect of Day, F(6,228)=64.522, p<.001, partial $\eta^2 = .629$. There was a main effect of Activity, F(4,152)=11.252, p<.001, partial $\eta^2 = .228$. There was no main effect for Workaholism Type. No interaction effects were observed.
Workaholism differences in recovery experience ratings

A 4 (Activity) x 7 (Day) X 3 (Workaholism Type) repeated measures ANOVA was conducted on recovery experience ratings given by the diarists to each of the categories of post work activity. No significant main or interaction effects were observed.

Workaholism differences in post-work recovery

Results of a 7 (Day) x 3 (Workaholism type) two-way repeated measures ANOVA, revealed a main effect for Day $F(6,198) = 5.348, p < .0001$, partial $\eta^2 = .139$. Participants reported a higher ability to recover on Saturday and Sunday in comparison with Monday-Thursday $F_{\text{range}} = 6.96 – 21.71$, $p < .01$ for all eight comparisons. Excluding Wednesday participants reported greater ability to recover on Friday relative to earlier in the week, (i.e. Mon, Tues and Thursday; $p < .05$ for all 3 comparisons). No other differences were observed. A main effect for Workaholism type was also observed, $F(2,33) = 6.414, p < .005$, partial $\eta^2 = .280$. Post hoc analysis revealed that the low drive workers reported significantly greater ability to recover in comparison with the enthusiastic workaholics $F(1,35) = 7.63, p < .01$ and the workaholics $F(1, 35) = 12.02, p < .005$. There was no difference between the enthusiastic workaholics and workaholics on ability to recover $F(1,35) = 0.20, p > .05$. 

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Workaholism differences in detachment

A 7 (Day) x 3 (Workaholism type) ANOVA revealed a main effect for Day, $F(6,198) = 2.792$, $p < .05$, partial $\eta^2 = .078$. Academics reported greater levels of detachment on Saturday and Sunday in comparison with Monday to Wednesday, $F_{\text{range}} = 7.49 – 13.12$, $p < .01$. Participants also reported more detachment on Sunday in comparison with Thursday, $F(1,35) = 6.53$, $p < .05$. There was a main effect for Workaholism type, $F(2,33) = 9.989$, $p < .0001$, partial $\eta^2 = .963$. Post hoc analysis revealed that the low drive workers reported a significantly greater ability to psychologically detach from work over the course of the week than the workaholics, $F(1,35) = 2.34$, $p < .0001$ and the enthusiastic workaholics, $F(1,35) = 6.59$, $p < .05$. The Day x Workaholism type interaction effect was not significant.
Graph 8.7: Ability to psychologically detach from work by workaholism type

Workaholism differences in cognitive intrusion

A 7 (Day) x 3 (Workaholism type) ANOVA revealed a main effect for Day on cognitive intrusion, $F(6, 246) = 2.736, \ p < .05$, partial $\eta^2 = .063$. Post hoc comparisons revealed significantly lower levels of cognitive intrusion on Saturday relative to Monday - Wednesday and lower levels on Sunday relative to Tuesday, $F_{\text{range}} = 4.24 – 6.21, \ p < .05$. A main effect for Workaholism type was also observed $F(1, 41) = 9.465, \ p < .0001$, partial $\eta^2 = .316$. Post hoc analysis revealed that the low drive workers reported significantly less cognitive intrusion from work thoughts than the workaholics ($p < .005$) and the enthusiastic workaholics ($p < .01$). The Day x Workaholism type interaction was not significant.
Workaholism differences in leisure/relaxation

A 7 (Day) x 3 (Workaholism type) ANOVA revealed a main effect for Day, F(6,228) =8.359, p<.0001. Post hoc comparisons revealed significantly higher levels of leisure on Saturday and Sunday relative to Monday – Friday. F_{range} = 7.50 – 32.43, p<.01. There was also significantly higher levels of leisure reported on Friday relative to Monday F(1,38) = 4.45, p<.05.
A 7 (Day) x 3 (Workaholism Type) ANOVA revealed no main or interaction effects on the Mastery measure.

**Workaholism differences in fatigue**
A 7 (Day) x 3 (Workaholism type) ANOVA revealed a main effect for Day, $F(6,210) = 10.872$, $p < .0001$, partial $\eta^2 = .237$, with lower levels of fatigue reported on Saturday and Sunday relative to Monday-Friday, $F_{range} = 20.43 - 24.38, p < .001$ across 10 comparisons. A borderline main effect for Workaholism type was also observed, $F(1,35) = 3.182, p = .049$, partial $\eta^2 = .154$, with the workaholics reporting significantly higher fatigue than the low drive workers throughout the week. ($p = .049$).
Workaholism differences in emotional exhaustion

A 7 (Day) x 3 (Workaholism type) two-way repeated measures ANOVA revealed a main effect for Day on emotional exhaustion, $F(6,204) = 11.225$, $p < .0005$, partial $\eta^2 = .248$, with lower levels of emotional exhaustion on Saturday and Sunday relative to Monday to Friday, $F_{\text{range}} = 4.96 – 48.55$, $p < .05$ for all ten comparisons. A main effect for workaholism type was observed, $F(1,34) = 3.436$, $p < .05$, partial $\eta^2 = .168$. Post hoc pairwise analysis revealed that the workaholics reported higher levels of emotional exhaustion than the low drive workers, $F(1,34) = 6.20$, $p < .05$. 

Graph 8.10: Post-work fatigue levels by workaholism type
Graph 8.11: Emotional exhaustion by workaholism type

**Workaholism differences in time-related work-life conflict**

A 7 (Day) x 3 (Workaholism type) two-way repeated measures ANOVA revealed a main effect for Day on time related work-life conflict, $F(6,204) = 9.422, p < .0001$, partial $\eta^2 = .217$. Post hoc pairwise analysis revealed that participants reported higher levels of time-related work-life conflict Monday-Thursday in comparison with Friday to Sunday, $F_{\text{range}} = 19.77-37.12, p < .01$ (for all 12 comparisons) A main effect for Workaholism type was also observed: $F(1,34) = 6.266, p < .0001$, partial $\eta^2 = .268$. Post hoc analysis revealed that enthusiastic workaholics reported consistently higher levels of time-related work-life conflict than the low drive workers, $F(1,32) = 10.60, p < .01$ (See Figure 8.12)
Graph 8.12: Time-related work-life conflict by workaholism type

Workaholism differences in strain-related work-life conflict

A 5 (Day) x 3 (Workaholism type) two-way repeated measures ANOVA revealed a main effect for Workaholism type on strain-related work-life conflict, $F(1,31) = 5.047$, $p<.05$, partial $\eta^2 = .246$, with workaholics reporting higher strain-related work-life conflict than the low drive workers $F(1,30) = 9.63$, $p<.005$ and with enthusiastic workaholics reported higher strain-related work-life conflict than the low drive workers $F(1,30) = 4.89$, $p<.05$. No other main or interaction effects were observed.
Graph 8.13: Strain-related work-life conflict by workaholism type

**Workaholism differences in life-work conflict (strain and time-based)**

Two 5 (Day) x 3 (Workaholism type) two-way repeated measures ANOVAs revealed no main or interaction effects on the strain-related life-work conflict measure and time-related life work-conflict measure.


8.2.3 Qualitative Analysis

Qualitative data analysis was employed to address the fourth research question on the barriers to successful recovery and detachment for academics. In addition to identifying barriers, academics were also asked to describe their recovery after work and to describe their thoughts in relation to work, that is, if they were thinking about work in the evenings.

Open Ended Questions - Data Quality

All 17 of the male academics responded to the open ended questions in the daily diaries. However, two males provided minimal information (i.e. lecturer 6 only commented on one week day and minimal commentary at the weekend and lecturer 40 only responded in single word answers across all of the seven days). The other 15 participants provided more significant levels of data across the week of data collection.

All 27 female academics responded to the open ended questions. Two participants provided minimal information (i.e. Lecturer 15 did not provide information on three week days and did not answer all questions on the other four days. Lecturer 27 only provided responses on two days).

Weekday recovery

There was a large degree of variability across the participants in the levels of reported recovery during the working week (i.e. Monday-Friday). 13 academics were categorised as having consistently good levels of recovery throughout the week. Another seven academics reported largely poor recovery during the week. Approximately half of the participants reported variable levels of recovery throughout the week (i.e. fluctuating from day to day). Three academics were omitted from this analysis, due to ambiguity in responses (N=1) and lack of detail (N=2). Therefore, almost half of the academics reported fluctuating levels of recovery during the week, with a smaller number reporting consistently good or poor recovery.
Table 8.7: Categorisation of post-work recovery over during working week

<table>
<thead>
<tr>
<th>Recovery Level</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adequate recovery</td>
<td>5</td>
<td>8</td>
<td>13</td>
</tr>
<tr>
<td>Variable recovery</td>
<td>8</td>
<td>13</td>
<td>21</td>
</tr>
<tr>
<td>Poor recovery</td>
<td>2</td>
<td>5</td>
<td>7</td>
</tr>
<tr>
<td>Missing</td>
<td>2</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>17</td>
<td>27</td>
<td>44</td>
</tr>
</tbody>
</table>

A number of the academics achieved a good level of recovery, for example, Female Lecturer (36) reported mainly good recovery throughout the week and weekend. She noted

“I felt I recovered well today. There was nothing major on my mind to stress me out – a typical day” (Tuesday)

“Friday night – have family saying – no time to think about work!” (Friday)

“100% recovery – forgot about it all (!)” (Saturday)

“Chilled out day” (Sunday)

However, for others achieving recovery required the use of particular strategies, for example, Female Lecturer 39 consistently referred to her workdays as “intense” although she was able to switch off from work and achieve recovery. She reflected on her attitude towards work and recovery on Saturday noting that

“I was thinking about why I am ok now when before I was not. I found last year very, very difficult almost collapsed with stress + realised I had to do something about it. I put strategies in place to allow me not take as much responsibility over things I can’t control. I put timing management strategies in place to avoid things spilling over, this helps me stay in control + as a result I am not thinking about all I have to do while at home.”

On the other hand, consistent poor recovery was also evident for a number of the academics, for example, Male Lecturer 22 and Female Lecturer 5 both reported poor
recovery throughout the week and weekend. For example Lecturer 22 (male) reported that his recovery was

“About 90%, but rarely feel fully recovered” (Thursday)
“Too tired to recover” and “Come to a halt rather than switched off” (Saturday)

For lecturer 5, her diary entries reflected a sense of pressure and guilt around work in the language employed. When describing her level of recovery on Saturday, she notes that she had

“None really – this is a challenging insight for me.” “I realise that this week so far which included St. Patrick’s day & a Saturday thus far – I have had no “down time” – not good!”

Almost half of the sample was categorized as having variable levels of recovery, however it must be noted that some academics categorised as having variable levels of recovery reported a combination of very poor recovery on some days with adequate recovery on others. For example, Female Lecturer 44 worked very long hours during the first half of the week and as a result had poor recovery on those days e.g. she described her recovery on Tuesday as “I have not yet recovered from work as I was at work solidly from early in the morning to about 5 minutes ago (11.55pm).” She reduced her work hours from Thursday onward and reported adequate levels of recovery; however, she also reported feelings of unease around reducing her work hours, for example, on Saturday she reported “I took it rather easy today and avoided working as much as possible. Despite the pressing deadline and the likely difficulty of meeting it, I just stayed in denial and pretended to myself that I’d be able to meet my deadline next week.”

Irrespective of having reported adequate, mixed or poor recovery, a number of the participants reflected on how switching off from academic work was an impossibility. Some of the academics attributed their inability to recover and switch off from work to general workload and intensity of work, upcoming deadlines, while others mentioned the
preoccupying nature of academic work or needing a block of time for recovery as opposed to achieving recovery on a daily basis. For example:

“It’s impossible! For me to switch off truly I need to be gone for a block of time i.e. 2 weeks minimum” (Female Lecturer, 9)

**Weekend recovery**

Over half of the academics (10 males and 15 females) were categorized as having reported a good level of recovery over the weekend. Only four academics (all females) reported poor recovery over the weekend, while 12 (five males and seven females) academics were categorised as having had mixed recovery over the weekend i.e. they reported good recovery on one day of the weekend and poor recovery on the other. The importance of the weekend as a time for recovery was identified as a theme during the analyses. A number of academics noted how they felt more relaxed on Fridays because they knew the weekend lay ahead and they could switch off more easily from work.

“Friday is generally the day of the week I feel most relaxed after work, due to the fact that the weekend is ahead. Hence on Fridays I generally achieve to distance myself almost completely from work related thoughts and stress.” (Female Lecturer 1)

“After a stressful week, and leaving the university at 9pm, I finally got the chance to chill out and let the stress go. Not all weeks are like this one, thankfully.” (Male Lecturer 16)

For both academics who conducted some work over the weekend and academics who did not, the tone of the language describing recovery over the weekend was largely positive. The weekends were kept mainly free by most participants for family activities, social activities and general relaxation, and in general the weekend allowed persons to go at a slower pace than during the working week. For example, one academic who conducted work on Saturday, reflected that his recovery was
“Very good. A nice balance today as I had spent 2 hours on a chapter that I wanted to finish as it’s close to completion. Happy with that I relaxed and enjoyed the day with family and friends.” (Male Lecturer 7)

On the other hand, a subsection of the academics expressed a number of negative emotions during the weekend, for example, a sense of pressure, anxiety about the impending week ahead and guilt about not working over the weekend.

“Sunday – always make me anxious & stressed as the week approaches. Sometimes I feel that the guilt of not doing some weekend work also contributes to stress & anxiety.” (Female Lecturer 31)

“….but concerns for the week ahead are starting to build” (Sunday, Male Lecturer 41)

“Feel I start to think again about work on Sundays and I have to work hard to put work-related thoughts aside. I find myself getting increasingly panicky as the afternoon goes on and I have to work hard to distract myself” (Female Lecturer 4)

“Actively decided not to work today (Sunday) but by not doing it increased worry re how to make deadlines & do all I have to do so reduced recovery” (Female Lecturer 20)

**Recovery and Workaholism**

Analysis was conducted to determine whether there were differing trends in the recovery data, when the participants were grouped into their workaholism type. It was found that the majority (N=11) of workaholics reported variable recovery/detachment during the week. Two reported consistently poor recovery over the course of the working week and another two reported consistently good recovery during the week. At the weekend six of the 15 workaholics reported achieving good recovery on both days. Three reported poor recovery, while an additional five reported mixed recovery. One workaholic did not provide any data relating to weekend recovery and therefore could not be classified. Only one workaholic reported consistently good recovery over the seven day diary period.
Over half of enthusiastic workaholics reported mixed levels of recovery during the week. Four reported poor recovery and two reported good recovery. At the weekend seven enthusiastic workaholics reported good recovery over the two days. Four reported mixed levels of recovery and one reported a poor level of recovery and one provided no data. Over the course of the seven days, two enthusiastic workaholics reported consistently good recovery, while one reported consistently poor recovery.

Most of the low drive workers (N=9) reported achieving adequate recovery during the week. One low drive worker reported poor recovery during the week and three low drive workers reported mixed levels of recovery. Two low drive workers did not provide enough data with regard to recovery during the week to categorise them. At the weekend nine low drive workers reported good recovery and one reported moderate levels of recovery. Three reported mixed levels of recovery, but no low drive worker reported poor recovery at the weekend. Two low drive workers did not provide enough data with regard to recovery during the week to categorise them. Five low drive workers reported consistently good recovery throughout the seven day diary period. For example Female Lecturer (32) reported her recovery was:

“…100%” and that “I didn’t have a problem switching off after work. Cycling home along the seafront was therapeutic & helped to forget about work” (Monday)

Her recovery remained high throughout the week and on Saturday she reported that her recovery was

“100% because I didn’t think about work at all” and that “I did things I enjoy and can’t do during the week because of work and because my friends are working too”.
Recovery and Anxiety

Upon analysis it was found that the workaholics were more concerned and anxious in relation to their work and recovery than the other two groups. The majority of workaholics (12 out of 15) had at least one negative diary entry during the week. There were a number of expressions of generalized anxiety in relation to work and also specific concerns in relation to research outputs and ability to meet upcoming deadlines. For example:

“Concerned I ought to be writing more, still need papers & this years review will be coming around soon enough” (Saturday, Female Lecturer 10)

“Actively decided not to work today but by not doing it increased worry re how to make deadlines & do all I have to do so reduced recovery.” (Female Lecturer 20, Sunday)

For a number of workaholics Sunday afternoon and evening were a time of worry and anxiety in relation to the upcoming week. For example:

“Monday tomorrow & the weekend isn’t long enough. Feeling of the week looming ahead.” (Female Lecturer 10, Sunday)

In addition, a number of the workaholics were very negative with regard to when describing academic work and their ability to switch off and recover. For example, male Lecturer 22 described academic work as “relentless”, while Lecturer 38 stated that recovery “does not exist?”. Lecturer 16 described email as “the greatest curse bestowed on man in recent years”.

Lecturer 14 noted that “After work doesn’t apply as I don’t work office hours” and stated on Saturday “Struggled to organise myself so that I could take a full day off – found it very beneficial. Wish I could do it every week”, while also noting on Sunday that she “Couldn’t get through my workload without marking on Sunday.”

The same level of anxiety and negativity was not observed in the other two groups. Within the enthusiastic workaholic group the tone of language was more variable,
ranging from very positive to very concerned and anxious. For example Female Lecturer 1 (enthusiastic workaholic) was quite successful in recovering and switching off from work during the week and even though she worked on Saturday she stated:

“Good level of recovery. Worked for a few hours in the morning, but was able to enjoy the rest of the day.”

However, there were also a number of enthusiastic workaholics who had frequent negative diary entries across the week, for example, Lecturer 44, Lecturer 24 and Lecturer 5. For example Lecturer 24 described his recovery on Wednesday as “Nil. Mad Day”

“Worrying about getting all the jobs I need to get done! This is a constant worry.” (Female Lecturer 5)

It’s difficult to “switch off” since I constantly have several pressing research tasks to complete and at least one overdue deadline at any given point. Most of the tasks are demanding and require considerable thought so I doubt that being switched off is realistic. (Female Lecturer 44)

Nevertheless, in the enthusiastic workaholic group and the low drive workers, there wasn’t the same degree of anxiety evident on Sundays with regard to the coming week. For example:

“Feel much more relaxed today than yesterday. Would love another day off!” (Female Lecturer 9)

“Good. I did things that had to be done at home and that made me feel happy (spring cleaning)” (Female Lecturer 1)

Although lecturer 44 noted on Sunday that “It’s really impossible to “switch off” properly due to the highly preoccupying nature of the work and constant impossible deadlines.”
Engaging in work on the weekend

An additional question was posed in the two weekend diaries to investigate why participants engaged in work during their free time at the weekend. Most of the participants did not work on Saturday (N=28) or Sunday (N=27). However, 13 academics (seven females and nine males) worked on Saturday, while 17 academics (eight females and nine males) worked on Sunday. A total of 12 academics (four females and eight males) engaged in work on both weekend days. Therefore, just over half of the male academics worked on both weekend days. Of the 12 academics who worked on both weekend days six were enthusiastic workaholics, four were low drive workers and two were workaholics.

The main reasons identified for working on the weekend included doing research, preparing for the following week (teaching, meetings, administration), communications (e.g. emails, and general workload). Other reasons also noted were engagement in a distance education course that required Saturday teaching, college open day and using the weekend time to catch up (for example on reading). See Table 8.8. The enthusiastic workaholics mainly cited time pressures (i.e. deadlines) as the reason that they had worked the weekend, whereas more variable reasons were put forth in the other two groups. The majority of females who engaged in work on both weekend days were engaged in research activities, while male academics tended to engage in a variety of activities, such as research, emails, teaching preparation and reading.

Table 8.8: Categorisation of reasons for working on Saturday

<table>
<thead>
<tr>
<th>Response Category</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research</td>
<td>Writing book chapters, finishing papers, data entry;</td>
</tr>
<tr>
<td>Teaching</td>
<td>Lecture preparation, distance education classes</td>
</tr>
<tr>
<td>Communication</td>
<td>Email</td>
</tr>
<tr>
<td>Other</td>
<td>Reading, college open day, planning and preparing for the following week</td>
</tr>
</tbody>
</table>
Table 8.9: Categorisation of reasons for working on Sunday

<table>
<thead>
<tr>
<th>Response Category</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research</td>
<td>Research deadlines, finishing papers, data entry</td>
</tr>
<tr>
<td>Preparation</td>
<td>Preparing for meetings, teaching, administrative work</td>
</tr>
<tr>
<td>Workload</td>
<td>Work overload, time pressure during week</td>
</tr>
<tr>
<td>Other</td>
<td>Catching up on reading</td>
</tr>
</tbody>
</table>

The responses to the question as to why academics worked on Saturday and Sunday indicated that for some respondents there was a generalised sense of time pressure and lack of time to do all that was required during ‘office hours’.

“No time for reading during week” (Male Lecturer 21)

“Struggled to organise myself so that I could take a full day off – found it very beneficial. Wish I could do it every week.” (Female lecturer 14)

Another reason for working at the weekend which was evident in a number of cases was due to impeding deadlines which the academics were trying to meet.

“I have an urgent deadline for the end of next week to finish a new piece of writing (a textbook chapter) only having finished the last piece of work, which was overdue yesterday, this has shortened the time available.” (Female Lecturer 44)

“Grant proposal deadline for Tuesday – wanted to try to clear the desk for Monday, so worked today” (Male Lecturer 2)

Cognitive intrusion

Only two academics (one male, one female) reported consistently throughout their diaries that they did not have any work related thoughts in the evenings. The remaining 42 academics all reported having work related thoughts during their free time to varying
degrees throughout the week. The majority of academics (N=31) reported having strategic thoughts about work in the evenings. For most, planning for the following day or week ahead occupied their thoughts, which included creating and reviewing to-do lists, prioritising activities, thinking about deadlines, preparing for lectures, meetings, up-coming events and problem solving. Some academics referred to these strategic thoughts as “the usual type of stuff” or “routine stuff”, which happened on a regular basis.

Another trend (N=11) in work related thoughts was reviewing what had happened during the day or earlier in the week, that is, previous conversations, meetings and interactions with people. Additionally, some academics reported research related thoughts either related to specific projects they were engaged in or writing that they were completing. Upcoming research deadlines also featured in the research related thoughts.

Difficulties with regard to switching off from thinking about work and work-related cognitive intrusion were also identified for a number of the academics (N=11). Some academics referred to their inability to detach mentally from work, while others referred to intruding work thoughts.

“Impossible to switch off – totally unsustainable in the long term” (Male Lecturer 24)

“It’s really impossible to “switch off” properly due to the highly preoccupying nature of the work and constant impossible deadlines. It’s crazy, when I think about it and the worst thing is that I don’t see things improving, only getting more pressured.” (Female Lecturer 44)

“Went to yoga but kept thinking of work through relaxation session at end” (Female Lecturer 20)
“Really the thoughts were intruding ones like things I need to do next week etc” (Female Lecturer 9).

Over half of the sample reported negative work-related thoughts during their free time. Worry was the predominant emotion expressed, followed by frustration/annoyance, guilt and stress. Females had more reported instances of worry during the week than the male academics, while expressions of annoyance and frustration were equal between the males and the females. Worrisome thoughts included concerns about meeting workload demands and deadlines, concerns about relationships with students, concerns about relationships with colleagues, heads of department, tensions within departments, concerns in relation to competence, concerns relating to research output. For example,

“Worrying about my relationship with the students – I can never remember any of their names and other staff are very good at that. Also very worried about the reliability of my marking – really hate having to mark & give feedback.” (Female lecturer 4)

“Worrying about getting all the jobs I need to do done! This is a constant worry.” (Female lecturer 5)

“Concerned I ought to be writing more, still need papers & this years review will be coming around soon enough.” (Female lecturer 10)

Frustration and annoyance predominantly related to personal interactions within the workplace, but other factors which caused frustration included a lack of time to do work to a satisfactory level, frequent interruptions at work, working with outside agencies and emails.

“Anger about a staff member who treated PhD students disrespectfully.” (Male Lecturer, 38)
“Frustration at having to fix problems caused by others and having to chase students for their work” (Male Lecturer 22)

“Annoyance. An issue which arose today which shouldn’t have happened. I didn’t want confrontation so I ‘backed down’. I’m annoyed I did and know I will need to follow up with this in the coming days.” (Female lecturer 9)

On the other hand, very few academics reported positive work-related thoughts; there were only three instances of positive thoughts reported throughout the week. For example, Male Lecturer 23 stated on Tuesday in relation to his work thoughts

“Talked briefly about my meeting with a possible future collaborator and students, generally positive feelings about my day at work”

**Fatigue**

Self reported fatigue was a predominant trend across the diary entries for both the male and female academics, when describing their recovery. Half of the sample participants referred at least once during the week to being tired as the result of work. Descriptions of fatigue ranged from mild tiredness to extreme exhaustion and for some although they were tired, they also reported being relaxed, whereas in other instances tiredness was also associated with high stress levels. For example, Male Lecturer 22 reported on Saturday that he was “too tired to recover”, while Female Lecturer 39 reported on Monday that “I was very tired as a result of work today, it was very intense.” Lecturer 35 (female) reported that on Wednesday that she was “Absolutely exhausted – I spent part of the day in tears I was so tired”. While on Friday, Female Lecturer (6) noted that “I feel so tired this evening that doing anything more challenging than sitting down would have been impossible!”

Reports of tiredness were intermingled across the week and not concentrated towards the end of the week. It was noted by some academics that it was coming towards the end of Semester 2 and that this accounted for their tiredness in general.
“I am generally feeling tired as it is coming towards the end of the academic year and this is a busy period.” (Male Lecturer 32)

“I feel exhausted (it might be because it is week 8 at the university so things are busy).” (Female Lecturer 34)

The work home-interface

Some of the academics made reference to caring and household duties in relation to their recovery. In total, 15 academics (10 females and five males) made reference to the family/caring and household roles with regard to recovery. Three trends were observed; one trend was the use of caring and family activities as a means to recovery, for example “Today I was able to switch off from work though exercise and childcare activities” (Monday, Female Lecturer 26)

“…………Again, recovery in the form of family activities is essential for me” (Wednesday, Male Lecturer 7)

Another trend was that household work and caring requirements reduced recovery time for female academics. For example, Female Lecturer (9) on Friday stated that she was “Wrecked. It is a constant battle. Either I am wreaked from doing long days at work or long days catching up with child/household related tasks.”

While Female Lecturer 19 noted on Saturday that “I did switch off from work, though I was following so far behind in domestic chores that I was completely focused on catching up. Is that recovery??” An additional trend was the encroachment of work time into family life for two male academics. For example, Male Lecturer 41 stated on Friday evening

“Not much time (finished at 9pm) and no time to spend with kids (they’re in bed)”
**Barriers to recovery**

A number of barriers to recovery and detachment from work were reported and grouped into categories (See Table 8.10). Having to work in the evenings and at weekends was noted most frequently by the respondents as a barrier to recovery.

“I’m not sure I could be counted as “having recovered” as I am still working. I am thinking about work and intend to do roughly another 30-45 minutes. (11.10pm)” (Female Lecturer 44)

“V. little chance to switch off.” With work dinner I had 2 hours at home between work + dinner to put in an appearance. All the time I was distracted by later work”. (Male Lecturer 41)

Preoccupation with work was the second most frequently reported barrier. For example, Male Lecturer 22 who was preoccupied all week with work reported on Friday that his recovery was “Not great, thinking about tomorrow”, he added that he was thinking about “What is going to go wrong” and then also noted that he “Didn’t switch off really. Thinking about tomorrow and the inevitable problem that will occur.” Female lecturer 10 also on Friday evening noted that she had “Low level of recovery” as she was “Preoccupied with incomplete tasks”.

The third most common category of responses was general workload. For example Female Lecturer 10 noted on Wednesday that she “Worked until going to bed at 11.30pm” and that she “was engaged in work all evening”, and that it was “Not possible to switch off when things need to be done”. Male Lecturer 24 wrote on Tuesday “I was so mad busy today, I am still up at 1am – I started at 6am this morning. Hardly ideal!” and went on to also state “Impossible to switch off – totally unsustainable in the long term”.

Work related travel was noted particularly by female academics as a barrier, for example Female Lecturer 34 stated that she was “Exhausted from travel and busy week. Trying to
“unwind” by watching TV”. She further qualified this diary entry by adding that “I have a business trip – so today I went to work 8-12; drove to xxxxx airport (waited for flight – delayed 4 hours) flew to UK, took train to destination, prepared for meeting the next day. How do you evaluate this? Is driving work? Airport time?”

For two male academics emails were considered a barrier, e.g. Male Lecturer 7 noted on Monday that he was “haunted by emails – inescapable” and again on Tuesday “I gotta switch off those emails!” and again on Sunday “Again the email issue, I really should learn to practice to ignore them outside of work hours – whenever that is!” Male Lecturer 16 noted on Tuesday that it was “Difficult to switch off due to email traffic and lots of things to prepare, people to contact”, while on Thursday he stated that “Email must be the greatest curse bestowed on man in recent years”

Miscellaneous barriers to recovery included problems with colleagues and not sleeping well.

Table 8.10: Barriers to Recovery and Detachment from Work

<table>
<thead>
<tr>
<th>Response Category</th>
<th>Males</th>
<th>Females</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time pressure/deadlines</td>
<td>2</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>Emails</td>
<td>2</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Working evenings/weekends</td>
<td>3</td>
<td>10</td>
<td>13</td>
</tr>
<tr>
<td>Work related travel</td>
<td>1</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>General workload/work hours</td>
<td>4</td>
<td>5</td>
<td>9</td>
</tr>
<tr>
<td>Preoccupation</td>
<td>4</td>
<td>7</td>
<td>11</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>2</td>
<td>1</td>
<td>3</td>
</tr>
</tbody>
</table>

Upon analysis it was found that the workaholic and enthusiastic workaholics identified more barriers to recovery than the low drive workers. The workaholics and enthusiastic workaholics both identified 21 barriers to recovery, while the low drive workers identified ten barriers. Table 8.11 shows the categorisation of barriers identified by the
three workaholism types. Having to do work in the evenings was particular to the enthusiastic workaholics, while long working days were a barrier to both the workaholics and enthusiastic workaholics.

Table 8.11: Barriers to Recovery by Workaholism Type

<table>
<thead>
<tr>
<th></th>
<th>Workaholics</th>
<th>Enthusiastic Workaholics</th>
<th>Low Drive Workers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Long work days</td>
<td>5</td>
<td>7</td>
<td>1</td>
</tr>
<tr>
<td>Workload / incomplete work</td>
<td>6</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Work related travel</td>
<td>2</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Working weekends</td>
<td>2</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Colleagues</td>
<td>2</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Working in evening</td>
<td>0</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Deadlines</td>
<td>1</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Other</td>
<td>3</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>21</strong></td>
<td><strong>21</strong></td>
<td><strong>10</strong></td>
</tr>
</tbody>
</table>

**Promotion of recovery**

Table 8.12 shows activities which were identified by the academics over the course of the week as aiding recovery after work. Engaging in passive activities was noted most frequently in the comments from the diarists. Passive activities reported included listening to the radio, watching TV, reading, personal care (e.g. visit to hairdresser/beautician). Watching television was noted by more female than male academics as a way of recovering.
A number of physical activities were identified as promoting recovery. For example, some of the physical activities mentioned by males included: cycling, running, walking, swimming, gardening, tai chi, exercise and fresh air, DIY. Physical activities noted by the females included: yoga, Pilates, cycling, walking, running, gardening, spring cleaning and dancing.

“As the weather was good, I went out cycling all day. After a week of mental work, I find fresh air and exercise very refreshing.” (Male Lecturer 23)

An equal number of male and female academics referred to how engaging in family activities promoted their recovery from work. Examples of family activities reported to aid recovery included, for example, going to visit family at weekends, family dinners, playtime with children, homework with children, baths, playtime, etc. Conversely, social activities were noted largely by females as aiding recovery, this included meeting with family and friends, visiting and talking on the phone.

“Met with friends for dinner out & didn’t think about or talk about work. They are from completely different work environment.” (Female Lecturer 20)

A number of work management activities were also mentioned as promoting recovery, for example, working from home, staying on top of one’s workload, leaving work on
time and sorting out the office. Engaging in mastery activities, such as hobbies or new activities was not frequently mentioned as a means of recovery. Only three females reported that mastery activities promoted their recovery. The activities they mentioned included doing a craft night class, spending time doing creative activities, engaging in intellectually stimulating activities.

“Doing something with my hands (a craft) helps me stay out of my head, away from work thoughts because I have to concentrate in a different way.” (Female Lecturer 31)

Activities which were categorised as other included: community activities and thought blocking techniques to keep work thoughts away.

Analysis of recovery promoting activities revealed that low drive workers reported slightly more recovery promoting activities overall when compared to the workaholic and enthusiastic workaholic groups (See Table 8.13). Equal numbers across the three groups reported using family time as a way to recover after work, while slightly more low drive workers made reference to passive activities as a method of recovery. Two workaholics reported using mastery activities as a recovery method, one referring generally to doing ‘creative things’ while the other was engaged in a crafts night-class.

Table 8.13: Promotion of recovery across workaholic types

<table>
<thead>
<tr>
<th></th>
<th>Workaholics</th>
<th>Enthusiastic Workaholics</th>
<th>Low Drive Workers</th>
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</thead>
<tbody>
<tr>
<td>Physical activities</td>
<td>6</td>
<td>3</td>
<td>7</td>
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<tr>
<td>Socialising</td>
<td>4</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Work Management Strategies</td>
<td>3</td>
<td>2</td>
<td>2</td>
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<tr>
<td>Family Time</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Passive Activities</td>
<td>2</td>
<td>6</td>
<td>9</td>
</tr>
<tr>
<td>Mastery Activities</td>
<td>2</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Other</td>
<td>2</td>
<td>4</td>
<td>4</td>
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<td>Total</td>
<td>22</td>
<td>21</td>
<td>27</td>
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Chapter 8 - Study 2 Discussion

8.3 Introduction

The aim of Study 2 was to advance Study 1 by exploring the post-work activities of Irish academics and to determine the extent to which they achieved recovery and detachment from work. Barriers to recovery and detachment from work were also identified. Following on from the analysis of gender differences in the antecedents and consequences of long working hours in Study 1, this study also examined gender differences in patterns of post-work activities and levels of recovery and detachment from work. Furthermore, given the findings from Study 1, whereby work drive and work enjoyment (the two key elements of workaholism) were observed to directly affect work-life conflict and psychological strain, in this study the impact of workaholism on patterns of post-work activities and levels of recovery and detachment from work was also examined.

In this study sample there were more female than male academics, but the distribution of workaholism types was relatively even (15 workaholics, 13 enthusiastic workaholics and 16 low drive workers). The majority of participants were married and approximately half had children. Work rumination and detachment results for the participants at the pre-screening stage revealed that the detachment scores were towards the lower end of the scale, indicating that on average the participants could seldom detach from work, while emotional rumination and problem focused rumination scores were towards the mid point of the scales. From the pre-screening questionnaire it was found that the participants were quite similar to normative results for positive and negative affect (Watson & Clark, 1994). The results of the inter-correlations on the pre-screening questionnaire measures revealed that positive affect correlated with work enjoyment, while negative affect correlated with problem focused rumination, emotion focused rumination, work drive and inability to detach from work. Pravettoni et al. (2007) have previously linked affective rumination with negative affect; however, the pattern of findings indicates that for the academics in this study both types of work rumination --
both emotional and problem focused rumination -- were associated with higher reported negative affect.

8.3.1 Work hours

Similar to the findings from study one, many of the academics in this study worked long hours, with 30% working in excess of 50 hours per week. The work practices engaged in by the academics are also indicative of long hours culture, for instance 84% of the academics reported that they regularly worked outside office hours and 75% reported regularly bringing work home. In addition, 30% reported that they rarely took their rest days and a quarter of the academics rarely took annual leave. Only 32% of academics regularly took lunch breaks away from the office, which Bunting (2005) states is reflective of the negative impact of high work intensity on work behaviours. It was found that male academics were more likely than female academics to work over 60 hours per week which also supports the findings from Study 1, where male academics reported working longer hours than females. Also in this study, the male academics reported more negative work practices than females (e.g. taking work home).

The qualitative analysis of the diary data revealed that a subgroup of the academics worked on the weekends, with just over a quarter of the total group working on both weekend days. More male academics worked over the weekend (both days) than female academics. Furthermore, the qualitative data revealed the generalised sense of time pressure expressed by many academics associated with trying to fulfill the multiple requirements of academic work. For a subsection of academics, work in the evenings and at weekends was the norm as they could not complete all their requirements in normal ‘office hours’. When the reasons put forth for engaging in work on the weekends were analysed, a gender difference was observed, in that female academics who worked both days, conducted research work, whereas male academics engaged in a variety of activities, including research, teaching and what could be considered preparatory work for the week ahead. More enthusiastic workaholics and low drive workers engaged in work on both days of the weekend than workaholics, with time pressure being the main reason cited by the enthusiastic workaholics.
8.3.2 Post work activities

The first research question in the current study was to identify the strategies that academics used after work to recover and detach psychologically from work. This was done via measuring both the time spent after work in various activities and by obtaining recovery experience ratings associated with different categories of activities. The quantitative results revealed that household/caring activities were the most frequently engaged in after work activities and received most time relative to the other activity categories. A gender difference was noted, whereby women engaged in more housework/caring activities after work than men throughout the week. In addition, women conducted more housework/caring activities relative to all other activities. This finding is consistent with previous research on gender differences in post work time usage (Darcy & McCarthy, 2007; Lee, et al., 2007) generally and within the academia (Misra, et al., 2012). It was also found in this study that men engaged in work in the evenings more than women throughout the week. Furthermore, more male academics engaged in work on the weekends than female academics. This finding again is consistent with general trends in the literature which show that men tend to work longer hours than women.

Lee et al., (2007) have stated that working women face time constraints on their availability to do work due to bearing greater responsibility for housework and caring activities. The differences in post-work time usage evidenced in this study are important in the academic setting because academic women may be at a competitive disadvantage for promotions and progression, if academic men spend more of their discretionary time conducting work. Previous research has shown male academics tend to do more research work than female academics (Misra et al., 2012) and it is commonly acknowledged that research work requires long work hours in order to produce results. From the pattern of work hours and behaviours of male academics observed in this study, it suggests that male academics attempt to keep their research output high by using more of their free time to conduct work.
Interestingly, despite the differences in time usage by male and female academics after work, gender differences were not observed in levels of time or strain-based work-life conflict or life-work conflict experienced during the week. Therefore, the findings from this study are in line with a number of studies of work-life conflict that have not observed gender differences (Byron, 2005; Geurts & Demerouti, 2003; Korabik et al., 2008) in work-life conflict. However, this finding differs from previous studies of academics where gender differences have been observed. For example, it has been reported both that female academics experience greater work-life conflict than males (Cantano et al., 2010; O’ Laughlin & Bischoff, 2005) and that male academics experience greater work-life conflict than females (Winefield et al., 2008).

8.3.3 Post-work recovery

The second research question aimed to determine the perceived effectiveness of the different types of post-work activities in facilitating recovery and detachment from work. The quantitative analysis revealed that physical and social activities were rated as more effective than passive activities in aiding recovery. There is strong support in the extant literature for physical exercise facilitating recovery (Demerouti et al., 2009), although the findings on social activities are less consistent. However Sonnentag (2001) did find that engaging in social activities promoted well-being in teachers, who may face similar daily work stresses and strains as academics.

Conversely, in the qualitative analysis, engaging in passive activities was mentioned most frequently by the academics as facilitating recovery from work. This is in line with Sonnentag’s (2001) findings that engaging in passive activities was associated with well-being at bedtime in teachers. However, engaging passive activities as a recovery method may not be optimum in the long run for academics as it has been suggested that passive activities are beneficial for recovery from physical as opposed to psychological fatigue (Zijlstra & Rook, 2009).

In the quantitative analysis there were no gender differences in recovery experience ratings during different activities, however, in the qualitative analysis engaging in social
activities was mentioned more frequently by female than male academics as facilitating their recovery. Although most social support research (related to occupational stress) to date has tended to focus on organisational forms of support, research suggests that social support given by family and friends is strongly associated with general health and well-being (Ayman & Antani, 2008). Given the inconsistent findings to date on the impact of social activities on recovery, this issue deserves further research attention. It may be that more comprehensive and sensitive quantitative measures of recovery experienced in response to social activities are needed to ascertain effects in this regard.

Overall the post-work activity results show that female academics spent greater time in household/caring activities after work, while the male academics spent greater time in either work or passive activities relative to social and physical activities. However, the academics rated social and physical activities as most conducive to recovery. Therefore, although the academics may have been aware that certain activities were more beneficial in aiding recovery, finding the time and/or energy after a long working day combined with home demands, may have been too difficult for many of the participants. Perhaps in the face of long working hours, engaging in non-demanding activities such as watching the television may be considered preferable to more demanding activities (i.e. physical and social). The promotion of physical exercise as an after work activity could form the basis of an organisational intervention to increase employee recovery and well-being. This is supported by previous research which indicates that even engaging in a low amount of activity is beneficial to recovery (Sonnentag & Natter, 2004), and that physical activity is especially important for employees engaged in mentally demanding occupations (Zijlstra & Rook, 2009).

The study participants were asked both quantitatively and qualitatively to rate their recovery each evening during the data collection period. Reported recovery levels fluctuated during the week, and overall there was variability within the group as a whole with regards to their ability to recover after work. Almost half of the group was classified as having variable levels of recovery during the week (ranging from very poor recovery on some evenings to very good on others) based on their qualitative
descriptions of recovery, while smaller subgroups achieved consistently good or poor recovery during the week. For the majority of academics in this study, consistently achieving recovery after work was regarded as difficult and some felt recovery was almost an impossibility given the nature of academic work.

Both the qualitative and quantitative results show that the majority of academics in this study struggled to recover from work consistently throughout the week. When reflecting on their recovery at the end of the day, the participants identified a number of barriers to recovery from academic work. Upon analysis, the barrier to recovery most frequently cited was long working hours, followed by preoccupation with work, workload, work-related travel and work emails. These qualitative findings are consistent with previous study findings which have shown that working overtime and heavy work demands negatively affect post-work recovery (Rau, 2006; Rau & Triemer, 2004; Sonnentag & Bayer, 2005). Email traffic and pre-occupation with work both may impede psychological detachment from work, which in turn impedes the recovery process. Work-related travel was identified only by female academics as a barrier to recovery as travel was perceived as fatiguing as it lengthened the working day and was also associated with hassles such as having to arrange childcare whilst away from home.

The qualitative results revealed that the weekend was an important time for recovery for the study participants, as they reported greater recovery on the weekend than during the week. The qualitative responses indicated that over half of the participants achieved good recovery at the weekend and that most aimed to keep the weekend free or at least one day of the weekend free for leisure and recovery. Only a small number academics reported poor recovery over the weekend, while another subset reported mixed recovery. Many academics reflected positively on their weekend time and used it for family, leisure and general relaxation activities. This corresponds with the finding that most of the academics (~60%) did not engage in academic work over the weekend during the study. The weekend has been previously identified as an important for recovery (Zijlstra & Rook, 2009); however, achieving recovery on a daily basis is also required in order to enhance vigour (Sonnentag & Niessen, 2008).
Although the men and women engaged in different post-work activities throughout the week, no gender differences were observed in quantitative analysis of reported levels of post-work recovery. In the qualitative analysis both men and women referred to recovering via spending time engaged in childcare activities, yet only female academics referred to the combination of full time academic work with household and childcare duties as an impediment to recovery. This is in line with previous research which has shown that household activities have an obligatory nature and participation in household activities has been shown to detract from recovery (Saxbe, et al., 2011). One notable finding with regard to gender differences was that in the qualitative analysis only female academics reported achieving poor recovery at the weekends. Overall, further investigation is required into gender differences in post-work recovery. Studies employing qualitative methods such as focus groups and/or interviews may yield important information on how male and females perceive recovery and detachment from work.

Flaxman et al., (2012) have stated that little attention has been paid to personality variables in recovery/respite research. This study therefore is timely in its examination of the impact of workaholism on post-work recovery and detachment. Specifically, in this study no differences in time spent in the five post-work activities were found between low drive workers, enthusiastic workaholics and workaholics. In addition there were no differences in recovery experience ratings given to different activities by workaholism type. The extant literature on workaholism and recovery is quite limited; however, at least two studies investigated this relationship (Bakker, et al., 2013; van Wijhe, et al., 2012). The findings of this study differ from both. Bakker et al. (2013) reported that workaholics engaged in more work activity in the evenings in comparison with non-workaholics, whereas no differences in post work activities were observed across the three groups in this study. van Wijhe et al. (2012) also reported that workaholics who were in a negative emotional state engaged in more work related activities in the evenings in comparison to non-workaholics. However, the results of this study are not directly comparable to those of van Wijhe et al. (2012) as the emotional state of the academics was not incorporated in the study design. Therefore the results are not fully comparable.
Despite this lack of difference in post-work activities across the three workaholism types, the quantitative analysis revealed that both workaholics and enthusiastic workaholics reported significantly lower ability to recover from work over the course of the week when compared with the low drive workers. The qualitative diary entries support the quantitative findings, in that, the majority of low drive workers reported a good level of recovery throughout the working week and weekend whereas most of the workaholics and enthusiastic workaholics reported variable levels of recovery during the week. At the weekend almost equal numbers of workaholics reported good and variable recovery, while in the enthusiastic workaholics group, slightly more academics reported good recovery as opposed to variable recovery. It has previously been noted that excessive effort and an inability to disconnect from work reduces the opportunities of workaholics to recover from work (Shimazu & Schaufeli, 2009).

In addition, the workaholics and enthusiastic workaholics referred to more barriers to recovery in their diary entries than the low drive workers. Both the workaholics and enthusiastic workaholics referred to long working hours as a barrier. However, workaholics cited workload as a barrier more frequently than the other two groups, while the enthusiastic workaholics cited working at night/evenings as a barrier more frequently.

8.3.4 Detachment from Work
In this study, we measured three psychological experiences suggested by Sonnentag and Fritz (2007) to be associated with recovery: psychological detachment, relaxation experience and mastery experience. In addition, work-related cognitive intrusion (suggestive of poor detachment) was also measured. Results from the pre-screening questionnaire showed that difficulty in detaching from work correlated positively with both affective and problem focused work rumination. Levels of detachment reported throughout the week varied, with the diarists achieving greater detachment from work during the weekend relative to early in the working week (Monday-Wednesday) and with greater detachment also being achieved on Sunday relative to Thursday. It was also found that there were lower levels of work-related cognitive intrusion on Saturday.
relative to early in the working week (Monday -Wednesday) and lower cognitive intrusion on Sunday relative to Tuesday.

In this study, one of the most frequently cited barriers to recovery from work was preoccupation with work and irrespective of hours worked, for many of the academics psychologically detaching from academic work was viewed as very difficult, if not near impossible in some cases. A number of known barriers to psychological detachment from work were also identified in this study. Many academics in this study worked long hours and reported being under time pressure, both of which have been previously reported to negatively affect ability to psychologically detach from work (Sonnentag & Bayer, 2005). Sonnentag & Bayer have suggested that under conditions of chronic time pressure detachment is not achieved due to the anticipation of time pressure in the future. This was evidenced in the qualitative findings in this study, where academics reported thinking after work about future work that needed to be completed and strategised as to how best to handle upcoming work. Sonnentag et al., (2010) have stated that stressful jobs are reflected in low detachment from work. The study participants also identified workload and striving to meet deadlines as barriers to recovery in the qualitative analysis. Workload has previously been linked to poor detachment from work (Sonnentag & Bayer, 2005; Sonnentag & Kruel, 2006; Sonnentag, Kuttler, et al., 2010).

In the qualitative analysis it was found that the vast majority of the academics repeatedly thought about work issues during their after work time (i.e. only two academics reported that they did not think about work during their free time consistently over the week). In a number of instances these work related thoughts were referred to as intrusive. The academics mainly reported problem-focused or strategic thoughts whereby their thoughts centred on preparatory work they needed to complete, upcoming tasks, to-do lists, deadlines, and so on. Rumination over events that had occurred during the day or earlier in the week also featured. A negative trend was observed in the analysis of the post-work thoughts of the academics, with most thoughts reflecting anxiety, concern or frustration and annoyance. These thoughts can be classed as ‘affective rumination’ defined as intrusive, pervasive and recurrent thoughts about work, which are negative in
affect (Pravettoni, et al., 2007). Worrisome thoughts predominated followed by frustration and annoyance. Conversely, very few positive work-related thoughts were reported over the course of the week. This is in line with previous research which has reported that negative words tend to be used when describing work life (Montgomery, Panagopoulou, Peeters, & Schaufeli, 2005).

When the quantitative analysis was conducted, no gender differences were observed in the cognitive intrusion and detachment measures during the week. However, the qualitative analysis revealed that female academics reported more instances of worrisome work thoughts than men. Worry is considered to be a manifestation of perseverative cognition (Flaxman, et al., 2012) which may interfere with recovery. Cropley and Millward (2009) have noted that there is a lack of information on gender differences in rumination and ability to detach from work.

When workaholism was considered in relation to detachment from work, it was found that the workaholics and enthusiastic workaholics reported poorer detachment from work and greater levels of work-related cognitive intrusion over the course of the week than the low drive workers. The qualitative data revealed that the workaholic academics reflected more negatively on work than the other two groups, with worry, anxiety and guilt prominent, indicating an inability to emotionally detach from work. Research suggests that being able to detach from work is associated with improved well-being (Fritz, Yankelevich, et al., 2010) and it has been reported that detaching from work is very important for the well-being of highly engaged workers (Sonnentag, Mojza, et al., 2008). Highly engaged workers are not the same as workaholics, but they share some similarities in that both groups are very invested in work and have a tendency to become absorbed in their work. The findings from this study indicate that both enthusiastic workaholic and workaholic academics are consistently less well able to detach from work than low drive academics, which may ultimately have negative health impacts.

8.3.5 Relaxation and mastery
Relaxation activities are characterized by low activation and positive affect (Stone, Kennedy-Moore, & Neale, 1995). Engagement in relaxation/leisure activities varied
over the course of the week, however, there were no gender or workaholism differences observed in ability to relax after work. In the qualitative data, female academics made more references to relaxation activities (e.g. getting massages, meditation); however, overall references to relaxing experiences outside of passive activities were very few.

Mastery activities unlike relaxation activities require effort (physical or mental) (Binnewies & Sonnentag, 2008). However, the effort involved may involve the use of other resources not called upon in the course of one’s work. In this study, the quantitative findings revealed that men and women differed significantly in the extent to which they engaged in mastery activities, with males reporting greater engagement in mastery activities than females after work. This is interesting given the pattern of time usage reported after work during the study, as males spent more time doing work or engaged in more passive activities relative to other activities. This finding may be a result of the measure employed as the questions posed asked if the person did things that were challenging, did something to broaden their horizon, and did intellectually challenging things, which all could conceivably be done when engaged in academic work. In the qualitative findings very few participants referred to mastery activity methods of promoting recovery, in comparison with the other categories of activity.

8.3.6 Work-life conflict
Montgomery et al., (2009) have previously reported that levels of work-life conflict and life-work conflict vary over the course of a two week period, and that work-life conflict levels spiked at the weekends. In this study, the opposite was observed. Time-related work-life conflict was higher earlier in the week (Mon-Thurs) and decreased towards the weekend. This finding is consistent with the long working hours reported both quantitatively and qualitatively during the working week and the finding that most academics kept the weekends largely free from work. On the other hand, no variation was observed in strain-based work-life conflict or in the two measures of life-work conflict during the data collection period. O’Laughlin & Bischoff (2005) have identified strain-based work-life conflict as particularly relevant to academics due to the multiple demands placed upon them. It may be that in the face of long work hours, heavy
workloads and also juggling the different elements of academic work on a day to day basis that time-based conflict may fluctuate, however strain related conflict remains relatively consistent. The finding that the two life-work conflict measures did not vary over the course of the week may indicate that home demands and the stress associated with them remain relatively constant, as opposed to work demands which may vary.

Although gender differences were not observed in work-life conflict or life-work conflict, a number of differences were found when workaholism was taken into consideration. This finding is in line with those of Aziz & Cunningham (2008), who stated that work-life imbalance and workaholism are not gender dependent. In this study, enthusiastic workaholics reported significantly higher levels of time-related work-life conflict than the low drive workers over the course of the week. Both workaholics and enthusiastic workaholics reported significantly more strain-related work-life conflict than the low drive workers. These findings partially replicate previous findings that workaholics and enthusiastic workaholics experience more work-life conflict than non-workaholics (Bonebright, et al., 2000; Russo & Waters, 2006). However, by differentiating between strain-based work-life conflict and time-based work-life conflict in this study, a slightly different pattern was observed, in that only the enthusiastic workaholics reported more time-based work-life conflict consistently over the week than the non-workaholics. Furthermore, the finding that enthusiastic workaholics experience more time-based work-life conflict is opposite to a previous finding where workaholics experienced more work-life conflict due to the impact of work drive (Brady, et al., 2008). Comparing the findings of the current study with previous workaholism and work-life conflict studies is hindered due to the fact that previous studies investigated global work-life conflict, whereas in this study a dichotomous measure of work-life conflict was employed.

The finding that enthusiastic workaholics experienced significantly more time-based work-life conflict than non-workaholics is noteworthy as it was previously reported that enthusiastic workaholics with schedule flexibility (which academics have) had decreased levels of work-life conflict (Russo & Waters, 2006). Also, it must be noted that the
enthusiastic workaholics in this study experienced significantly more of both forms of work-life conflict than the low drive workers. Perhaps for some academics high work enjoyment leads to greater time spent at work and more time thinking about work, both in the work and home domains, therefore, leading to time and strain-related work-life conflict. Indeed, it has been proposed that thinking about work and being preoccupied by work constitutes a form of cognitive work-life conflict (Swiercz & Ezzedeen, 2007).

Direct references to work-life conflict within the responses to the open-ended questions were relatively few. However, some indirect comments were indicative of work-life conflict during the data collection week, for example, in one case work activities in the evenings caused an academic to miss out on spending time with his children and in another case how trying to combine the demands of academic work with household work and caring for young children could be exhausting. Experiencing work-life conflict is said to be negative in that it reduces opportunities to recover (Taris, et al., 2006). Somewhat related to recovery and work-life conflict in this study was that many of the academics with children reported that spending time in caring activities with their children after work promoted recovery. This finding is in line with a previous study which indicated that greatest post-work recovery was achieved by employees living with family including children (Steptoe, Lundwall, & Cropley, 2000). On the other hand, it was observed that engaging in household tasks negatively impacted reported recovery over the course of the week. This finding is in line with Saxbe et al. (2011) but not with other recovery studies which have not found a negative relationship between housework and recovery.

8.3.7 Fatigue and Emotional Exhaustion

In this study emotional exhaustion and fatigue were measured as they are considered to be theoretical indicators of impaired functioning (Flaxman et al., 2012). Fatigue and recovery are related, in that, fatigue is the outcome due to the demands of the day and recovery is the process which restores resources such as energy. Fatigue levels in this study were higher during the week than at the weekend consistent with the findings of Zilstra & Rook (2003). Presumably the participants had the ability to sleep in at the
weekends and generally do less demanding activities, which resulted in lower fatigue. The higher levels of fatigue reported during the week correspond with the variable levels of recovery reported by most of the academics during the week.

The impact of fatigue on ability to recover from work was evidenced in the qualitative findings. Post-work fatigue was a prominent theme and this may have influenced the preference for passive post-work activities as opposed to more active activities. Sonnentag & Bayer (2005) have suggested that for detachment to occur self-regulation is required, that is, the person needs to make a conscious effort to stop thinking about work. However, they noted that research has shown that self-regulation is impeded due to fatigue.

The analysis revealed that workaholics reported higher levels of fatigue than the low drive workers over the course of the week. Experiencing high levels of fatigue may have work and productivity implications for workaholics, as being fatigued has been linked to a lack of concentration (Demerouti et al., 2007) and poor cognitive functioning (Meijman & Mulder, 1998). Indeed, although workaholics work harder they may not be more productive than other workers, as they create work problems and complicate simple tasks (Tabassum & Rachman, 2013).

Work-related emotional exhaustion is one of the most frequently investigated outcomes in recovery research (de Bloom, 2009) as emotional exhaustion reflects extremely impaired psychological well-being (Sonnentag, Kuttler, et al., 2010). Being unable to detach and recover from work drains energy, which over time may result in increases in emotional exhaustion (Sonnentag, Binnewies, et al., 2010). The workaholic academics reported significantly higher levels of emotional exhaustion over the course of the seven days than low drive workers. This finding is noteworthy given that both the enthusiastic workaholics and workaholics reported greater difficulty in recovering and detaching from work than the low drive workers during the same time period. The finding may be explained by the fact that enthusiastic workaholics unlike workaholics have high work enjoyment and this may provide a buffer against the drive factor. The finding is consistent with a previous study of workaholism in academics which found that
academics high on work enjoyment reported better emotional health (Burke et al., 2008). The finding is also consistent with the extant literature on the consequences of workaholism which has shown that workaholism is positively associated with burnout and poorer psychological health (Tabassum & Rachman, 2013). The emotional exhaustion findings also have work performance implications for the workaholics as stressed individuals do not perform as well as non-stressed individuals (Kavanagh, 2005). Furthermore, it has been stated that stressed individuals engage in more task irrelevant cognitive activities (Van der Linden, Keijsers, Eling, & Van Schaijk, 2005).

8.3.8 Study Strengths and Limitations
With respect to the present study a number of limitations must be addressed. First, this study relied on self-reported data and although memory effects are lessened in diary designs (Reis & Gable, 2000), there may be concerns in relation to social desirability bias and common method variance. All participants were assured of confidentiality and that the reporting of results would be anonymous, therefore, encouraging the reporting of true diary responses as opposed to desired. The qualitative diary entries are supportive of this, as it was noted that many of the participants provided detailed responses, some of which were counter to the study hypotheses. With regard to common method variance, the use of self-report designs is common place in recovery and respite research and alternative methodologies may also have problems of error variance (Semmer, Grebner, & Elfering, 2004). In this study, not all expected relationships were observed, for example, gender differences in recovery and detachment, therefore, as noted by van Hooff et al., (2007) “using self-reports does not guarantee finding significant results” (van Hooff et al., 2007, p.611). Also, it has been noted that “the popular position suggesting common method variance automatically affects variables measured with the same method is a distortion and over simplification of the true state of affairs” (Spector, 2006, p.221).

Participating in a diary study is demanding and requires more effort than participating in a traditional survey (Hektner, Schmidt, & Csikszentmihalyi, 2007). Therefore, it is possible that the diarists are in some way different from the total population, in that, they may have had an interest in the area or perhaps had previous difficulties with work-life
conflict or stress. A selection bias is inherent in diary designs (Alaszewski, 2006) and therefore, must be regarded as a limitation.

In addition, the number of participants in the diary study was lower than desired, despite contacting all academic staff across two universities and employing an incentive for participating in the study. Although there are no mandatory requirements for the number of diary study participants, it has been noted that 100 participants over the course of a five day period is the standard across many high ranking journals (Ohly et al., 2010). However, this study had 44 participants, which is in excess of the level (30 participants or less) at which biased results are said to occur (Scherbaum & Ferreter, 2009). It must also be taken into consideration, that this diary contained both quantitative and qualitative measures and its sample size is comparable to that of another qualitative diary study (N=38) (Poppleton et al., 2008). A final note with regard to the sample is with regard to the generalizability of results. The sample in the current study largely consisted of lecturing staff at or below college lecturer level; therefore, the findings may not be totally representative of more senior academics and can not be applied to other university personnel.

Despite the study limitations referred to, there are also a number of strengths to this study. Most work-non-work studies employ cross-sectional studies (Poppleton et al., 2008). However, this study has responded to calls for work-family researchers to use more innovative design methods (Greenhaus, 2008). By designing a mixed method diary, the data elicited provided rich details on post-work recovery and detachment issues in academia. In addition, the diary method allowed the dynamic nature of post-work recovery, detachment and related variables to be explored both within and between subjects. This study adds to the small number of diary studies which have explored work-life issues for academics, such as Flaxman et al., (2012) and van Hooff et al., (2007).

A second strength of this study is the focus on the non-work domain, as this domain in work-life research has been under-researched in comparison with the work domain (Eby et al., 2005). Zijlstra & Sonnentag (2006) have stated that researchers interested in
people’s well-being need to investigate ‘after-work time’. By focusing on the non-work time of academics, greater insight was gained into the encroachment of work into private/leisure time and the impacts this has on recovery and detachment from work.

In addition, another strength of this study was the focus on workaholism. It has been noted that the effects of personality variables are under-researched in the respite/recovery literature (Flaxman et al., 2012). Furthermore, researchers have stated that the extant literature available on workaholism is inconsistent and relatively sparse (Burke & McAteer, 2007; McMillan et al., 2001). This study has shown that workaholism is important in relation to recovery and detachment from work in academia and also has significant implications for work-life conflict.

Finally, this study is significant in that qualitative information on work thoughts and cognitive intrusion was obtained. Flaxman et al.,(2012) have noted that it is important to differentiate between positively thinking about work and worrying/ruminating about work. This study clearly illustrates that the academics were prone to perseverative thinking as opposed to positively reflecting on work, which is suggested to be beneficial for well-being (Binnewies et al., 2009).

8.3.9 Summary and Conclusion
This study complimented the findings of Study 1 by further examining the work-home interface of Irish academics and examining the impact of engaging in academic work on the home domain. Again, in this study, many academics were engaged in long work hours, with male academics consistently devoting longer hours to work than female academics. Despite gender differences in post-work activities, gender differences were not observed in relation to post-work recovery and detachment levels achieved. Within this study, the construct of workaholism was shown to be a significant factor in relation to both recovering and psychologically detaching from work. Both workaholics and enthusiastic workaholics had greater difficulty in recovering and detaching from work than low drive workers. Yet, only the workaholics reported poorer functioning on two measures of well-being. The findings suggest that high work enjoyment experienced by enthusiastic workaholics may provide a buffer against the more negative impact of high
work drive, even in the face of low recovery and detachment. However, the enthusiastic workaholics reported poorer functioning at the work-home interface in that they experienced significantly higher levels of both time-related and strain related work-life conflict than low drive workers in this study. The pattern of results suggest that certain groups of workers may have greater difficulties detaching and recovering from work, which in the long term may lead to psychological and health problems. These findings are important for the design of interventions to promote recovery from work.
Chapter 9 – Study 3 Methodology

9.1 Introduction
In Study 3 recovery processes, psychological detachment and work/home boundaries were explored qualitatively during interviews with Irish academics. This section describes the methodology employed for the semi-structured interviews and their analysis.

9.1.1 Sample Selection and Recruitment
Of the 44 participants in the diary study, 31 indicated in the diary study that they would participate in a follow-up interview. 14 academics were chosen for inclusion in this study based on their availability for interview during the data collection period. In total 14 semi-structured interviews were held. Eight female academics and six male academics from a single university were interviewed. It was intended to have an equal number of male and female academics; however, it was not possible to interview an additional male academic during the data collection period. The number of interviews is considered sufficient to allow exploration of the concepts of interest, taking into consideration that it has been reported that eight one-to-one interviews is regarded as sufficient to obtain rich and meaningful data (Cropley & Millward, 2009; Smith, 1996).

9.1.2 Interview Schedule Design
A schedule of open-ended questions was designed for the semi-structured interviews. This method was chosen as it allowed the interviewees to provide their opinions, feelings, knowledge and experiences with regard to the topics of interest. A total of 14 questions were devised for the interview schedule. Six areas were explored in the interview schedule; demographics, the work setting, home life, leisure time and unwinding from work, psychological detachment from work and work-home boundaries. See Appendix 11 for the full interview schedule.
9.1.3 Interview Pilot
Pilot interviews were conducted with two academics prior to scheduling of interviews and data collection. The pilot aimed to ensure clarity of the questions in the interview schedule and to ensure the set up and operation of recording equipment was correct. The two pilot interviews were fully transcribed. No changes were made to the interview schedule based on the pilot, however, it was noted that additional prompts during the interview were necessary. The pilot interviews ranged in length from 17 minutes 21 seconds to 50 minutes and 56 seconds.

9.1.4 Procedure
All interviews were scheduled for over the summer months (June/July 2011) and the locations of the interviews varied. Most interviews were conducted in the participant’s office but two interviews were conducted in meeting rooms. The interviews also varied in terms of their length; the shortest interview was concluded in 14 minutes and 41 seconds, while the longest interview concluded after one hour and twenty three minutes.

Information Leaflet
Before the interview took place each interviewee was given an information leaflet (see Appendix 12). This leaflet was designed to provide relevant information, such as the study aim and objectives, and what the person’s involvement in the study and interview process would entail. Additional information on the larger study was provided. The information leaflet also stated that each participant was free to withdraw from participating in the study at any stage.

Consent Form
Before the interview began each interviewee was given a consent form to read and sign, which was then taken as an indication of their agreement to participate in the study. The form was signed by both the interviewer and interviewee. Only after the information

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3 All interviews conducted for this study were completed by a research assistant. All data analysis of interview materials was conducted by Victoria Hogan.
leaflet had been read and the consent form read and signed, did the interview proper begin. (See Appendix 13)

*Equipment*

The interviews were recorded using an Olympus digital voice recorder. The recording equipment was placed to try to ensure optimal sound quality and recording. The recordings were transferred to a PC and then saved as VLC Media Files. The VLC Media Files were then used to during the interview transcription. In addition to the interview recordings, some field notes were taken on the day.

**9.1.5 Data Analysis**

The 14 interviews were transcribed verbatim into MSWord documents. Once in MSWord, the interviews were then formatted to allow for importation into the QSR NVIVO 10 package. NVIVO 10 was used for the coding of the interview transcripts.

A review of qualitative methods suitable for analyzing interview data was conducted and thematic analysis was chosen as the most suitable method for this study. The process of thematic analysis is recommended as a starting point for the novice qualitative researcher (Braun & Clarke, 2006). Thematic analysis is not theory bound and is very flexible. It is defined as “a method for identifying, analyzing and reporting patterns (themes) within data” (Braun & Clark, 2006, p. 6). Braun & Clark’s step by step guide to thematic analysis was used for guidance throughout the analysis. (See Table 9.1).

Initially, the data analysis was focused on the semantic level, that is, describing patterns within the data, summarizing these patterns, interpreting the patterns and determining their significance. Each interview transcript was analysed in detail, with each case being read and re-read a number of times in order to become familiar with their content. Notes were made during this stage in relation to points of interest and potential themes.

This second stage in the analysis was the cross-case comparison in order to identify common themes across the interviews, underlying similarities, any inconsistencies and
extreme cases. Trends were also analyzed from a gender perspective, in order to provide in depth reflections of males and females in relation to the constructs of interest. In order to ensure the validity of the findings from the thematic analysis, the interview transcripts were also read by the researcher’s PhD supervisor who then advised on the generation of themes and provided feedback throughout the thematic analysis process.

Table 9.1: Phases in doing thematic analysis (Braun & Clarke, 2006)

<table>
<thead>
<tr>
<th>Phase</th>
<th>Description of Process</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Familiarise yourself with your data</td>
<td>Transcribe data (if necessary), read and re-read the data, noting down initial ideas</td>
</tr>
<tr>
<td>2. Generate initial codes</td>
<td>Code interesting features of the data in a systematic fashion across the entire dataset, collating data relevant to each code</td>
</tr>
<tr>
<td>3. Search for themes</td>
<td>Collating codes into potential themes, gathering all data relevant to each potential theme</td>
</tr>
<tr>
<td>4. Review themes</td>
<td>Check the themes work in relation to the coded extracts (Level 1) and the entire data set (Level 2), generating a thematic map of analysis</td>
</tr>
<tr>
<td>5. Define and name themes</td>
<td>Ongoing analysis to refine the specifics of each theme, and the overall story the analysis tells; generating clear definitions and names for each theme.</td>
</tr>
<tr>
<td>6. Produce the report</td>
<td>Selection of vivid, compelling extract samples, final analysis of selected extracts, relating back to the analysis of the research question and literature, producing a scholarly report of the analysis.</td>
</tr>
</tbody>
</table>
9.1.6 Ethical Considerations

Ethical approval was received from the NUI Galway Ethics Committee (29/02/2008) prior to data collection. Participants for the interview study were sourced during the diary study. All persons who were sent diary packs were asked to indicate whether they would participate in a follow up interview. If the person indicated positively to this request, they were asked to provide their email address. In total, 31 out of the 44 diary participants provided this information. The diary packs were kept in a locked office and/or the researcher’s home office for the duration of this project. Only the principal researcher had access to the full list of potential interviewees, while the research assistant had access only to the data of the 14 interviewees from the single institution. The interview recordings were held on a password secured PC in the researcher’s office and the interview transcriptions were anonymous. The write-up of the diary study is anonymous and individuals are not named. The institute where the interviews occurred is also not named.

Prior to the interview being conducted, all study participants were provided with a study information sheet and an informed consent form to sign. The interviewees were free to stop the interview at any stage and withdraw from the study.
Chapter 9 – Study 3 Results

9.2 Introduction
The aim of Study 3 was to further examine post-work recovery and psychological detachment from work using a qualitative method. The boundaries between the work and home domain were also examined in relation to post-work recovery and work-life conflict.

9.2.1 Participant Profile
There were eight female interviewees and 6 male interviewees. Tables 9.2 and 9.3 present the interview participant profiles. The majority of participants were married; eleven in total. Two participants were single and one was in a long term relationship. Eight of the participants had children; the majority (N=7) had two children, with one female academic having three children.

Table 9.2: Male Participants

<table>
<thead>
<tr>
<th>Gender</th>
<th>Position in University</th>
<th>Workaholism Type</th>
<th>Marital status</th>
<th>Children</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>University teacher</td>
<td>Low drive</td>
<td>Married</td>
<td>2</td>
</tr>
<tr>
<td>Male</td>
<td>Lecturer below bar</td>
<td>Low drive</td>
<td>Married</td>
<td>0</td>
</tr>
<tr>
<td>Male</td>
<td>Lecturer below bar</td>
<td>Workaholic</td>
<td>Long-term relationship</td>
<td>0</td>
</tr>
<tr>
<td>Male</td>
<td>Head of School</td>
<td>Low drive</td>
<td>Married</td>
<td>2</td>
</tr>
<tr>
<td>Male</td>
<td>Professor</td>
<td>Low drive</td>
<td>Single</td>
<td>0</td>
</tr>
<tr>
<td>Male</td>
<td>College lecturer</td>
<td>Low drive</td>
<td>Married</td>
<td>2</td>
</tr>
</tbody>
</table>
Table 9.3: Female Participants

<table>
<thead>
<tr>
<th>Gender</th>
<th>Position in University</th>
<th>Workaholism Type</th>
<th>Marital status</th>
<th>Children</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>College lecturer</td>
<td>Enthusiastic workaholic</td>
<td>Married</td>
<td>2</td>
</tr>
<tr>
<td>Female</td>
<td>College Lecturer</td>
<td>Low drive</td>
<td>Married</td>
<td>2</td>
</tr>
<tr>
<td>Female</td>
<td>Lecturer (unspecified)</td>
<td>Enthusiastic workaholic</td>
<td>Single</td>
<td>0</td>
</tr>
<tr>
<td>Female</td>
<td>College lecturer</td>
<td>Low drive</td>
<td>Married</td>
<td>3</td>
</tr>
<tr>
<td>Female</td>
<td>Lecturer below bar</td>
<td>Workaholic</td>
<td>Married</td>
<td>0</td>
</tr>
<tr>
<td>Female</td>
<td>Lecturer below bar</td>
<td>Workaholic</td>
<td>Married</td>
<td>0</td>
</tr>
<tr>
<td>Female</td>
<td>Lecturer above bar</td>
<td>Low drive</td>
<td>Married</td>
<td>2</td>
</tr>
<tr>
<td>Female</td>
<td>Lecturer below bar</td>
<td>Workaholic</td>
<td>Married</td>
<td>2</td>
</tr>
</tbody>
</table>

Within the group of interviewees, the predominant workaholism type was low drive worker, with a total of eight low drive workers. There were two enthusiastic workaholics and four workaholics. All of the male participants bar one were low drive workers; therefore there were more workaholics in the female group.

9.2.2 Occupational Profile

All of the participants worked full time, except one female academic who was availing of parental leave and therefore was temporarily working part-time hours. Six of the interviewees were senior academics, seven were junior academics and one female academic did not specify which level of lecturer she was.
Table 9.4: Occupational level and gender

<table>
<thead>
<tr>
<th>Position in University</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Senior level</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Junior level</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Lecturer (unspecified)</td>
<td>-</td>
<td>1</td>
</tr>
</tbody>
</table>

The length of employment of the interviewees at the university also varied from three years to 21 years. (See Table 9.5). Two of the participants (one male and one female) both referred to the fact that they were pre-retirement. Two of the participants in the early stages of their academic careers mentioned that they had worked outside the third level education sector before moving to academia.

Table 9.5: Length of employment and gender.

<table>
<thead>
<tr>
<th>Length of Employment</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-5 years</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>6-10 years</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>11-15 years</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>16-20 years</td>
<td>2</td>
<td>-</td>
</tr>
<tr>
<td>≥21 years</td>
<td>1</td>
<td>-</td>
</tr>
</tbody>
</table>

9.2.3 Results of Thematic Analysis

Four master themes were identified during the thematic analysis: (1) Pleasure and pain of academic work (2) the struggle to recover (3) boundary management (4) health and stress.

9.2.3.1 Pleasure and pain of academic work

The first major theme from the qualitative analysis is what Gornall & Sailisbury (2012) previously referred to as the pleasures and pains of scholarship. Many participants described academic work with reference to three main elements: teaching, research and

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4 Senior level consists of persons at college lecturer level or above. Junior level consists of persons below college lecturer level.
administration. These three elements differ slightly from the broad categories of academic work defined by Soliman & Soliman (1997): teaching, research and service. This may reflect a change in terminology and/or the increasing levels of administrative work inherent in academia (Tight, 2010).

There was a mix of postgraduate and undergraduate teaching conducted by the interviewees. It has been noted that junior level academics tend to do more teaching than more senior academics (Soliman & Soliman, 1997), which is reflected here in the range of teaching hours reported. The lowest reported hours were two to three hours per week (Male, Senior Level) and the highest reported hours to 25 hours per week (Female, Junior Level). In the main, typical teaching hours for the female academics were between four to ten hours per week. While for the males, the typical teaching hours reported were between 2-10 hours. Six minor themes were identified with regard to academic work: (1) unseen work (2) the variability of academic work (3) inability to do research (4) pleasures of academic work (5) norms and expectations (6) endless work.

Unseen Work
Many of the academics reported that much of their work was ‘unseen’ in particular much of the administrative work and also lecture preparation. The level of administrative work involved in academia was regarded as a negative issue for a number of the academics and a trend of gaining more administrative work over time was noted. These additional administrative demands were regarded as taking up limited time resources of academics and in some cases preventing the participants from conducting what they considered to be ‘true’ academic work, for example two female lecturers noted how administrative work featured in their overall work load:

“I mean there has been a lot of administrative duties related to directing the Masters that I didn’t have previously so I would spend at least a day a week doing that now.”
(Female, Senior Lecturer 11)
“Yeah, whereas you would be expecting well I have nailed this now, so you know I don’t have to spend five hours prepping a lecture because I have done it already. But that’s filled up with other activities.” (Female, Junior Lecturer 12)

A number of participants noted that actual contact teaching hours were a poor reflection of the level of work involved in teaching, as the preparation time involved is not evidenced. Some academics noted that their lectures needed to be updated on an annual basis and that this was time consuming. Revising lectures was considered necessary in order to provide a good standard of teaching to students. For example, Male 2, Senior Lecturer stated:

“So for each hours teaching, there might be three, four, five hours associated with that hour that you’re working as well. So contact hours isn’t really a good measure of actual work that’s required to put into teaching.” (Male 2, Senior Lecturer)

Variability of academic work

The variability of tasks and responsibilities in academic work was also identified as a theme during the analysis. This is consistent with the viewpoint of Soliman & Soliman (1997, p. 136) who stated that “academic work is complex and diverse.” For example, Male 13, Junior Lecturer stated “I don’t think there is a typical week really.”

The majority of the participants made reference to this variability inherent in academic work. It was noted that the requirements and responsibilities of academic work are linked to the time of the year (e.g. during teaching semester or outside of semester), with the focus during the summer being largely concerned with research and research students, while during semester it was largely focused on teaching. For example:

“Well I mean that depends really I guess in semester and out of semester is quite different.” (Female 11, Senior Lecturer)
The ability to govern your own work also feeds into the variability and was regarded as a positive aspect of the job by one academic, in that, academics can change the focus of their work throughout the week, and this can enhance productivity.

“The beauty of my job is that it is so varied, that if I don’t feel productive in one thing I can go into another and another and another, so that is how I maximize my productivity in a way.” (Female 1, Senior Lecturer)

However, on the other hand another junior female lecturer regarded the summer months as more difficult than during the teaching terms as the summer lacked structure and although she worked consistently and diligently throughout, she felt her efforts did not amount to any tangible results.

Inability to conduct research
A third minor theme identified by a subset of academics was an inability to conduct research work. Some academics stated that they largely did not or could not engage in research work, although they acknowledged that it was an expected work activity. Reasons for this lack of research included high levels of administrative and teaching work, lack of motivation, and lack of encouragement. For example, two male academics described the reasons for their lack of research activity.

“I would more describe myself as an administrator, certainly over the last year, as an administrator who does some teaching and has tried to do some research.” (Male 7, Junior Lecturer).

“And you know despite valid efforts at the beginning, I just think I lost interest really, but then again my teaching load is ah probably double what some academics have.” (Male 4, Senior Lecturer)

Pleasures of academic work
When describing their work, a number of academics spoke very positively about their work, for example using the terms ‘love’ and ‘like’ and ‘enjoy’ to describe how they felt
about their work. Others described deriving satisfaction from their work and doing their jobs well. The vocational nature of academic work was also reflected in the descriptions of the level of interest some academics had in their subject areas and the degree to which academics could become absorbed in their work. For example:

“Ok if you put it a different way, if I go into a book shop in Dublin. I go in to buy a novel. I always gravitate towards the areas I am interested in before I buy the novel. And even though if I buy a new novel in xxxxx, which I’m teaching, it will always be, if I like this I put it on a course.” (Male 3, Senior Lecturer)

“Am… the thing is, I am able to create like sort of a bubble and if I am doing something, I might not even be able to hear. Like if somebody is talking to me and I am so engrossed, or it will upset me if somebody is talking to me, or I will just plainly cannot hear.” (Female 1, Senior lecturer)

“I mean I love my job so why shouldn’t I think about it at other times. I love what I do. I wouldn’t do it otherwise. If you considered it just a job well you have got a problem. You cannot be an academic if you don’t like it.”(Female 6, lecturer)

One of the main features identified as being positive about academic work was the ability to control how and when you work.

“Whereas the summer is lovely in that you can do more organising your own time as you like it, which is a real benefit to our jobs and its something that I really appreciate that you can to a large degree organise your time how you want it.” (Female 11, Senior Lecturer).

**Endless Work**

A number of the academics (N=4) noted that they felt that academic work was never-ending and that it could consume all your time and be done to the exclusion of all else. For example,

“Always yeah, I mean every week, it literally, over the years I have kind of developed my own way of kind of doing my to-do list for the week. And like it never gets done. Bits of it
gets done but there is never a week where I say, oh that’s great now, everything I set out to do is done. It never happens like that.” (Male 14, Junior Lecturer)

“And I don’t like when I am in my kitchen and I look and I see piles of work related documents and I am like, oh god, you know, now it has kind of morphed into this thing that’s following me around. There is never an end to it. There is no definite end. It is constantly there.” (Female 9, Junior Lecturer)

Related to this theme of endless work was the data provided by the interviewees in relation to their work hours. All the interviewees worked at least 40 hours per week, except for the female academic availing of parental leave who worked 20 hours a week. A number of the female participants reported peaks and troughs in their work hours linked to time of year, with semester time requiring more work hours. However, even in summer time the work hours reported were in most cases between 40-50 hours per week. Three females regularly engaged in excess of 50 hours per week. On the other hand, a number of females noted that their work time availability was constrained due to childcare demands. For example,

“I kind of would come in and I would leave but I suppose I’m more acutely aware of it because of the children. I probably work between forty and fifty hours a week. At this point in time, no I wouldn’t do much more.” (Female 5, Senior Lecturer)

For the male academics the lowest reported hours were between 40-45 hours per week, whereas the highest number of work hours was between 60-70 hours per week. A similar trend of increased work hours during semester was observed for the male academics for example, Male 7, Junior Lecturer worked approximately 45 hours per week outside of semester, but during semester worked 60-70 hours per week.

A minor theme related to work hours was the impact of work load. A number of academics (N=7) referred to their inability to get their work done during the ‘normal’ working week. Most of the junior academics referred to workload issues, so it appears that the issue of excess workload begins early in the academic career, and may continue indefinitely as one gains extra responsibilities over time.
“That’s eleven hours a day in semester one and easily the odd Saturday as well because you can never get everything done during the week with your teaching and you are exhausted and mentally drained as well.” (Female 9, Junior Lecturer)

“….. And all the people I work with here it’s the same way. You never get the amount of work done if you didn’t bring the stuff home. And I know, its crazy, nut job (laughs), but its one of those things, it’s the pile up problem. If you’re not on the top of your game all day every day it means that you are going to have a pile up and that has to be done somewhere so it has to be done, you know, and it is just what happens.” (Male 14, Junior Lecturer)

Another minor theme identified was that of work intensity. The interviewees were divided with regard to the constancy of the work intensity, just over half of the participants (N=8) remarked that there were periods of very high intensity (e.g. during semester) but then also periods of lower intensity.

“Am….. term time is probably more intense just because teaching is more of an in your face thing, where you know you have got a lecture to prepare for tomorrow, you just absolutely have to do that. Am, summer time maybe is a bit less intense but there is still always things happening.” (Male 2, Senior Lecturer)

On the other hand, a number of academics (N=5) regarded high work intensity as being constant throughout the year, with no real let up.

“Its complete high octave for me from the middle of August to June. Say this week is the first time an element of slack has been introduced to the system. Now when I say complete high octave I’m more talking about constantly going” (Female 5, Senior Lecturer)

Two of the academics were relatively new to academia and both remarked that the level of work intensity associated with academic work was unexpected. This view is consistent with that of the general public, whereby academic work tends to be regarded as low stress.
“So am, so it is when you are here it is very, very intense. And before I took this job I thought that it wouldn’t be (laughs) but it’s completely intense.” (Female 10, Junior Lecturer).

“Whereas this is a huge transition from spending all my time face to face with xxxxx to learning all new skills. So yeah it is fairly intense. And some of it I felt, it was a lot more than I expected.” (Male 13, Junior Lecturer)

A number of factors were identified by the interviewees as contributing to the intensity of their work, for example, studying in addition to working full time (one participant was completing her PhD, another female participant had mandatory continuous professional development courses), research deadlines, covering for colleagues who were out sick, slow systems for resolving problems within the university, increasingly demanding research funders, developing new courses or teaching multiple diverse subjects, and juggling competing demands (i.e. research, teaching and administrative demands).

For the majority of cases, high work demands and intensity meant that long working hours were almost compulsory in order to meet the various demands placed upon them. Only one female academic described compulsive working as the main factor driving her long working hours

“Well I suppose like, em…. I am to blame, I suppose. The schedule that I am following in a way is self imposed. Because I think that these things need to be done and they need to be done sooner rather than later. So it is me the one, it is not that I feel like somebody is putting pressure on me or anything like that but its that things will go better when this is done, you know, things will go better when something is done and if it is up to you to do it, I’ll do it.” (Female 1, Senior Lecturer)

A number of academics addressed the outcomes associated with high work intensity. It was noted that there was a high level of mental strain associated with high work intensity and that this strain negatively affected their mental capacity to do work. Similarly, high intensity also contributed to post-work fatigue levels.
“I like my job, but I always have this thing of when I’m driving into work, it is like here we go again, just another poxy day that is going to go on forever and you are just going to be wrecked, you know.” (Female 9, Junior Lecturer)

“The problem is that it is so constant and so overwhelming that you are constantly tired. Em, and you become emotionally and physically exhausted and mentally exhausted, so tasks that you would normally be able to cope with very easily become more and more difficult over time because you never feel rested.” (Male 2, Junior Lecturer)

For some of the academics the work hours and intensity that they currently had were regarded as not sustainable in the long term. A number of the interviewees noted that they would like to reduce their work hours, in order to avoid burning out and because it was not healthy in the long term.

**Norms and expectations**

Another theme related to academic work was work expectations and norms within the academic setting. Many of the interviewees referred to workplace norms around working hours that they and their colleagues adhered to and the prevalence of working at home in the evenings. Most referred to a long work hours culture within their institution, and some were frustrated with this norm. Social comparisons of one’s own working hours with others caused self doubt in relation to one’s own work behaviours and in some cases a sense of wrong-doing by not engaging in similar hours. This sense of unease applied be it in comparison with those who worked fewer or longer hours. In comparison to those who worked fewer hours, some reflected that it caused them to feel inefficient at their work. While on the other hand, choosing not to work long hours lead to unease, as it was noted by one female academic that long hours were more desirable from the university’s point of view and therefore could have promotional impacts for her.

“Yeah, because that is another thing that is frustrating because I know that the idea that people, and even ourselves have of academia is like saying your job is not a nine to five job. And there is people that they take that to the dot. And they are in the university for
maybe a few hours a week. And you are saying, ok, why that person can do this?” (Female 1, Senior Lecturer)

“There is some uneasiness there about it, but it’s what I am doing and I know it is good enough for my job. It just means I am not going to be promoted as quickly or whatever, you know.” (Female 10, Senior Lecturer)

The perception that long hours were expected of all academics at an institutional level was also voiced. This institutional expectation around long work hours had happened incrementally over time according to the male academic who was about to retire and was regarded as unfair by one male academic.

“But I do think there is something coming into society and I think its come into this institution, kind of a creeping paralysis, maybe not in a very fast creeping, where to survive, I see especially with some young staff who need to get their publications up there, coming in all day Saturday and all day Sunday I don’t think that’s right. You know, I’m at the other end of that” (Male 3, Senior Lecturer)

“And you have some people who are workaholics and they think that everybody else should work at the same thing they do. I mean I have seen people walk out of here at 19.00 at night, where I might be going into town or something. But if that is what they want to do that is fine, but don’t expect everyone else to do it. But the problem is they do expect everyone else to do it.” (Male 4, Senior Lecturer)

Another issue raised with regard to work expectations was that although the junior academics all reported long working hours and high work demands, there was an expectation that you would take on more roles and additional responsibilities over time, therefore, potentially increasing the level of work intensity.

However, it was noted that work expectations were not always clear, and some academics found this difficult, for example, the two female academics had moved to academia from industry/clinical practice. Both noted that it wasn’t always clear to them what they needed to be doing in work, other than a generalized sense of pressure around work and progression.
“I was working in industry before I was an academic. And I do work better when I know what I am doing. And if they are saying, ok, you work nine to five, and you have to be productive and you have to do this. Is it possible, is it not? You know, it’s not a black and white type of situation. This sort of wishey, washey I am not used to.” (Female 1, Senior Lecturer)

“There is a lot of pressure coming down from the top as well and em, yeah to do that, but you can’t define what it is, you can’t put your finger on what you need to do sometimes to be able to fill that need from above. There not some as clear guidelines, they are a bit woolly so you are kind of scratching your head going what am I going to do here that’s going to get what I need to get.” (Female 10, Junior Lecturer)

9.2.3.2 Struggle to recover
Another major theme identified was the struggle to recover from academic work reflecting the fact that recovery and detachment from work did not come easily to many of the participants. A number of minor themes were identified: (1) the home as an extension of the workplace (2) planned recovery times (3) recovery activities (4) being time poor (5) ability to detach.

The home as an extension of the work place
Working at home in the evenings was identified as a theme. All of the academics made reference to working at home in the evenings, although the frequency with which they engaged in work during the evenings varied within the group. For example, some academics worked every evening, while others occasionally worked at home if there was something urgent or important to be attended to. Half of the academics (five men and two women) reported that they worked at home every evening. Therefore, the majority of the academic men worked every evening. For example, Male 7, Junior Lecturer stated that:

“So what I found this year was for example, I was going home and doing the marking and things like that in the evenings at home rather then being able to get that done during work time.”
The female academics did not engage in work in the evenings as frequently as the male academics. Only two females reported that they worked every evening (both had no children). Three females rarely worked from home in the evenings, with the remaining three working intermittently. Most of the women had actively decided to try to not conduct work from home and tried to keep to this rule. For example, Female 11, Senior Lecturer stated:

“But in general I don’t like to do that. I would much rather just be here and not have lunch, not go out during the day and just try and finish it here, you know that would be my preference.”

One female academic reported that instead of working in the evenings, that she was far more likely to get up early and do work in the early morning in advance of going to work, therefore although she didn’t work in the evenings, she occasionally worked outside of normal office hours.

“But it would usually be, em, I would, em, when I was correcting I would get up at half six and correct for two hours. And then I would have my breakfast at half eight and I would get into work at half nine, so I would do that sort of stuff” (Female 10, Junior Lecturer).

The type of work conducted in the evenings also varied from what could be considered low intensity work (e.g. checking emails, planning for the next day) to high intensity work (e.g. developing lecture material, conducting research work). For example, Male 7, Junior Lecturer reported that he checked his emails every night, “In busy times or in quiet, pretty much without fail.” Whereas, Female 6, Lecturer conducted all of what she considered her academic work at home, “That is where I do my writing, and my research is all done at home.” One female academic noted that she would not have considered prior to participating in the study that she worked from home in the evenings, but on reflection realised that she regularly did low intensity work.
“I never thought I worked at home, if you were to ask me do you work at home, bar the odd time now where you can do a certain amount you know formally but yet I probably end up spending some time every evening just bouncing off e-mails over a cup of coffee or something like that. I suppose sometimes it’s to clear the inbox for the next day.” (Female 5, Senior Lecturer)

In a similar case a male academic who regularly worked from home noted that he did not consider what he did in the evenings to be ‘work’ as such.

“I think it depends what you class as work because in any medical fields these days we are expected to practice evidence based medicine that if it is not something that is part of a direct role in the job, you still have to keep up with that yourself. So you know, reading academic papers that are being published, and you know, it’s a never ending supply of them. Then, I suppose, I don’t consider that work really because it, but it is a form of work I suppose.” (Male 13, Junior Lecturer)

**Planned Recovery Times**

Another theme was the importance of the weekend for recovery and personal time. For most of the academics their weekend time was more important than their evening time in terms of recovery. Half of the interviewees (5 females, 2 males) reported that the weekends were largely reserved for family time and activities, be it trips to the supermarket, visiting relatives, bringing children to various hobbies and activities, but all focused around the family. For academics without small children the focus was oriented to activities with extended family and spouses. Many of the academics referred to setting a rule around their weekend time, in that, it was their personal time and therefore they did not engage in work at the weekend.

“Em, visiting, but there is no work whatsoever at the weekends. I don’t engage in anything got to do with work at the weekends so it’s just really my time.” (Female 10, Junior Lecturer)
“But I suppose over the last number of years its just making that decision of, it can wait.” (Male 14, Junior Lecturer)

However, the remaining academics (N=6) regularly engaged in work during the weekend. Two of the six noted that they tried to limit their time working to one day, so that they had at least one whole day of free time available. For example,

“I would work half a day maybe, three or four hours over a weekend. And I try to do that all on the one day so at least then I have one day completely free from work” (Male 2, Senior lecturer)

For others, holiday time was regarded as a main method to achieve recovery and take a mental break from work. In all cases where the upcoming holiday was mentioned in the context of recovery, the academics worked very extended hours and therefore were holding out for this holiday as means of coping with their workload and extended working hours.

“Oh I think I am….. what’s the word I am going to say now, I think I am less stressed but I am actually stressed in a different context. It’s still there or whatever. I just can’t wait for holidays. I just really, really need a break. Yeah.” (Female 9, junior lecturer)

Only one male academic referred to taking the summer time more or less to himself as a means of recovery. He did work on an as needed basis and was happy that as long as he was contactable via email and there to support his students, that the rest of the time he could use for his leisure. He saw this as a means of payback for periods during the teaching semesters when he sometimes worked weekends and evenings.

“I will go down the country, down to xxxx. I have a house down there, so. It is from now I try to get down, June and July as most I can. But some years it doesn’t work out that way. But even when I go down there I will be checking my email everyday and I will stay
in contact with students, especially Masters students because they have submission date at the middle of August." (Male 4, Senior Lecturer)

Recovery activities
The participants provided information on how they normally spent their free time after work. For the majority of participants a mix of activities were recalled. When describing a typical evening after work, the academics with young children referred mostly to child care and family activities. For example:

“So if I could arrive and he is cooking, then I could be checking the homework for the kids and just getting them nearly ready for bed, you know like, and having dinner altogether and after dinner they will watch a little bit of television while we are trying to organise the day after, you know, what are they going to have for lunch, get the uniforms ready, check and sign their homework and then decide what are we going to eat the day after.” (Female 1, Senior Lecturer)

“Am, and I am a very hands on parent so as soon as I come home, you know, if there is meals to cook, I’ll cook meals; if there is the four year old to bath, I’ll bath the four year old, if they’re playing out, I’ll go play out with them. So it’s not as if you can walk into the house, sit down and start chilling out. That doesn’t happen.” (Male 13, Junior Lecturer)

All of the academics with young children reported that spending time with their family in the evenings after work allowed them to relax and recover. For example,

“Yeah, well its really just being at home with my family is kinda the main thing” (Female 11, Senior Lecturer)
On the other hand, academics with older children or no children largely referred to routine household tasks and leisure activities. For example, male 7 junior lecturer described a typical evening during a quiet working week as follows:

“And if it is a quieter week, it is go home, make dinner, chill out for a little while, try to catch up on stuff that I have to get done at home, whether it is house work or whether it is just listening to some music or whatever and chilling out for a while and then go to bed and get up.”

It was found in the analysis that engaging in passive activities after work was the category of activity which was most frequently referred to. Passive activities mentioned by the participants included: watching TV, reading, playing video games, doing craft work (e.g. sewing). For example, Male 2, senior lecturer reported “Am so what would I do to relax after I work in the evening? Probably veg out in front of the telly for an hour.”

A number of the interviewees also participated in physical activities after work which ranged from low intensity exercise (e.g. walking) to high intensity exercise (e.g. mountain climbing). The frequency of engaging in physical activities varied depending on the time of year (summer conditions were noted as more favourable for golf and walking) and the level of energy that individuals felt they had during the week. Walking was the most common physical activity engaged in by females, while the male academics listed a greater variety of physical activities including; golf, fishing, swimming, mountaineering and cycling.

The main focus of the information provided by the participants on recovery activities related to the evenings after work, however, a number of academics also mentioned how they recovered at the weekends. Some used weekend time to engage in hobbies, whereas for others, weekends were a chance to engage in minimal activity or just to spend time with family and friends.
The most effective ways of relaxing after work as reported by the participants included doing physical activities and exercise, spending time with the family, engaging in passive activities and engaging in mastery activities. Over half of the participants mention engaging in exercise as a very effective method for recovering from work; however two female academics did mention that having the energy and enthusiasm to engage in physical activities was sometimes difficult.

“Well actually I think exercise is really good and to do something different. But to get to the place where you have the energy and the enthusiasm to do that is the difficult bit.” (Female 12, Junior Lecturer)

Engaging in mastery activities (e.g. upholstery, making scale models) after work were regarded as very effective methods of recovery by three of the academics, because mastery activities required concentration and the use of different resources from those used during academic work. Mastery activities were regarded as an effective method of detaching mentally from academic work. For example,

“And that is kind of how I escape because you have to concentrate on what you are doing. Am, well, you have a scalpel so if you make a mistake you cut the finger off yourself. So you have to pay a lot of attention to what you are doing. And it is, it is like a form of meditation because you end up just sitting there doing it for two or three hours and everything else goes, you know what I mean, but that is what I do.” (Male 7, Junior Lecturer)

“And it really, it was amazing doing something with your hands because I am always so head orientated and next minute I was doing hand, I mean, crafty things and I switched off completely from work.” (Female 9, Junior Lecturer)

Other miscellaneous forms of recovery regarded as effective by some of the interviewees included socializing with people who were unrelated to college life and wine and cigarettes.

“One of the best ways I suppose is talking to friends who have no interest, no connection at all with the university.” (Male 3, Senior Lecturer)
“So am yeah unfortunately, yeah wine and fags, cigarettes and alcohol as they say, so that’s not good but I know that (laughs).”  (Female 9, Junior Lecturer)

**Being time poor**

Being time poor was a theme identified in the analysis in relation to post-work recovery. Interviewees were asked if there were activities that they would like to do in the evenings after work, but couldn’t as the result of their job. For the majority finding the time to participate in physical activities, mastery activities and socialising could be challenging. For some of the academics with young children, this lack of time for other activities was the result of combining a demanding work schedule with the demands of home life and caring responsibilities.

“It’s not the workload that stops me doing it. It’s the thought that I would have to take time away from the family to do it so its not the job that’s getting in the way really.”  (Male 13, Junior Lecturer)

Whereas for some of the other academics, the demands of the job alone, were the main factor in preventing individuals engaging in anything other than passive activities after work.

“……..I’m always conscious, my brothers have lots of small kids and I never get to see them apart from once in a blue moon at the weekends or whatever. And it’s a case that we don’t visit anybody, we don’t do any of that sort of stuff so definitely the family side of it is something that we can be doing more of. We are just pottering around doing our own thing at the minute at home, you know. That definitely is a challenge due to the nature of the work.”  (Male 14, Junior Lecturer)

**Ability to Detach from Work**

There was a large degree of variability in the views of the participants with regard to psychologically detaching from work during one’s free time. The transcripts were analysed with regard to references the individuals made about their general ability to psychologically detach after work. Half of the interviewees revealed that they generally had a difficulty detaching from work during their free time. For example, female 9, junior lecturer stated:
“I find it really hard to detach. I will frequently have dreams about work, frequently wake up and sometimes have sleepless nights and tension in the neck and am constantly thinking oh tomorrow I better do this, and I better do that and what,... and sort of ruminating over what would have gone on during the day in relation to people in conversations, meetings, students, peoples perceptions of you, what you said.”

On the other hand, five academics reported having a reasonably consistent ability to detach from work. For example, female 11 (senior lecturer) stated with regard to detaching from work:

“…. that’s generally something I haven’t really ever had any difficulty with because I do quite, I do quite segment the two things just being at work and then being out of work.”

The ability to detach from work appeared to be unrelated to the number of hours worked in some cases, for example, two academics who reported that they detached easily, worked very long hours during the week and also worked at the weekends. For example, female 6 (lecturer) who worked every evening and most weekends reported that she had a very good ability to detach.

“But I can actually switch off, I can leave here and walk out the door and switch off. I actually don’t need anything to make me switch off, I can very deliberately switch the switch off and that is just years of practice.”

Some of the participants (2 males and 2 females) regarded the ability to detach from work as a personality feature. One female academic felt her personality allowed her to easily detach from work:

“It could be yeah I suppose it’s the nature of the job really though isn’t it. I have to say as well too, psychologically I’ve never felt it being terribly discomforting, you know what I mean it’s just probably the way I am.” (Female 5, Senior Lecturer)
The other three academics felt their personalities caused an inability to detach from work. The second female academic did not regard this inability to detach from work as a negative issue, whereas both of the male academics regarded their inability to detach from work as a negative. For example, Male 7, junior lecturer stated

“It is the inability to disconnect, ah and I am aware that I am a kind of a person who has difficulty disconnecting.”

The interviewees were asked whether they regarded not switching off from work in the evenings as positive or negative. The majority of female academics (N=5) regarded not switching off from work in the evenings as negative. For example, Female 10, junior lecturer stated:

“Oh, completely a negative issue. 100% negative. I mean, I am, I don’t think anyone, I don’t think that’s good for anybody. I think that I’ll be a more ineffective worker if I do that. So it’s definitely a negative. I’ll end up hating my job.”

However, for the other three female academics, not switching off from work in the evenings was regarded as a positive issue, in fact all three regarded it as an opportunity to problem solve or engage in strategic planning, for example, Female 6, lecturer stated:

“I think it just goes around and you wake up next morning and you have a solution. It is just a way of problem solving and a lot of people do that. They appear not to be doing anything but in actual fact they have got it completely worked out and mapped out and planned and some people have got that ability”

The males were also divided in their views on detaching from work in the evenings. Two males regarded not detaching as a positive issue, and two males regarded it as negative, while another male academic had conflicting views on not detaching. Male 14, junior lecturer reported that he had significant difficulty in switching off from work, however, when reflecting on whether or not it was positive or negative, he revealed conflicting emotions
“If you were to look at it, if someone from the outside was to look at it and say ok it’s only a job at the end of the day and you have to work and all that, it’s crazy not to be switching off.”

“No, no, like I enjoy it. It’s not as if I ever say, oh Jesus I have that to do. I never, very rarely out of all the eight years that I have been here that I came in and said Jesus I have to go to work. It’s not like that. I enjoy coming to work. I love doing what I do. In that way it is kind of like a challenge to me to think about things and to try and do things so it’s not a chore. I kind of enjoy doing that sort of stuff.”

In all cases, the interviewees reported that their ability to detach from work could be compromised. For example at busy points during the year, such as exam time, the ability to detach from work could be compromised even for those who normally were quite successful at detaching from work. For one academic the summer months were regarded as a time when detaching from work was difficult as there is less structure to one’s time than during teaching semesters. A generalized sense that detaching from work was becoming more difficult over time was also voiced in part due to gaining new responsibilities over the course of the academic career. Particular factors were identified by the interviewees as barriers to psychologically detaching from work for example, technology (e.g. laptops, smart phones), challenging work situations (e.g. interpersonal conflicts at work, lingering work issues that were not resolved), work intensity and workload (e.g. trying to save time for the next day), external events (e.g. course accreditation), fixed term contracts and when feeling a lack of control over work. For example, male 13, junior lecturer noted how interpersonal issues at work lead to detachment problems

“You know, there are times when work challenges you, certainly interpersonal issues with other clinicians. I work in a profession where there are sometimes undefined areas where people treat patients differently. And if I don’t treat a patient in that particular way that somebody else does and we have a student that is stuck in the middle, sometimes there is that interpersonal conflict. But you have got to get on with it.”
Whereas for male 14, (junior lecturer) trying to stay on top of his workload lead to problems with detachment. He also noted that this was a progressive problem as the academic workload had increased for him over time.

“And I suppose the way I’m always thinking about it is if I get this five minutes done here, it means that I’m going to be ahead by that five minutes the next time I come to it. And being a little bit ahead of the game on Monday sometimes is good.”

“And I suppose with the experience, like the more experience you get, the more that’s expected of you, the more that you are given. So like the things I’m asked to do now, I wouldn’t have been asked to do when I was first, second or third year. So its definitely, you gain more as you go on but hopefully you get faster at doing it as well, you know, better at doing it as well.”

Female junior lecturer 12 noted the impact of increasing workload on being able to detach from work:

“No. it’s more difficult. It’s more difficult. I mean the work requirement has increased hugely (emphasised), I think since I came here. So whereas at the start its all very new and you are working very hard and maybe you are working long hours, for that reason after a while you get a bit better at the work part, but the work volume increases.”

Many of the participants (6 females and 3 males) referred to factors that aided their post-work detachment during their interviews. Factors which were identified included: physical exercise, being satisfied with your days work and mastery activities. Activities which required the use of different resources and/or required focused concentration were highlighted by the male academics. For example, male 2, senior lecturer stated:

“Something else I do is rock climbing, a little bit of it these days, where you are totally focused on what you are doing at the actual time, and that is probably the best way to get your mind off everything else.”
Some of the female academics also referred to physical exercise and mastery activities. In addition, talking about work and feeling satisfied with the work done during the day and getting all your work finished were important for females.

“Sometimes I talk about it and then I forget. So to me it is easier to vent things, to talk things. If I don’t talk about them then they will brew and they will get worse.” (Female 1, Senior Lecturer)

“But then because I felt I had done I really good days work, when I did go home I felt I could leave it behind me.” (Female 12, Junior Lecturer)

A number of academics reported that it was easier for them to detach at the weekends. For example, male 2, senior lecturer stated:

“It’s probably easier to switch off at weekends when, you know you’re not going in to face all these issues at eight o clock the following morning. Am, yeah so I would say maybe weekends are easier to switch off then mid week.”

Two academics (1 male, 1 female) found it easier to detach out of term time, whereas one female academic reported the reverse and found it easier to detach during term time as there was better structure to her time and she knew exactly what the work expectations were during that time of year. Another male academic reported that he could detach when he felt in control of his work, while another female academic reported that if her children were sick she was able to completely switch off from work.

“I mean, am… I can completely switch off from work if one of the kids is sick. That is like there is no work. I have like tunnel vision and I don’t care about the rest. And that will, I dunno, nothing around this exists”. (Female 1, Senior Lecturer)

9.2.3.3 Boundary Management

A third master theme identified in this study pertains to what Ylijoki (2013) refers to as ‘boundary work’, that is, the strategies that the academics put in place to manage the interface between the work and home environments. Within this master theme, a number
of minor themes were identified: (1) boundary work (2) ideal versus actual boundaries (3) compatibility with academia (4) the role of information technology in blurring the boundaries

**Boundary Work**
Analysis was conducted to determine the degree to which the academics segmented their work-home domains through the use of boundary management. The types of boundaries used are identified and the degree to which the boundaries were flexible and permeable is also described.

A number of the academics tried to have physical boundaries in place to separate their home and work lives; in particular many of the female academics tried to keep their work at their office and not bring work home. For other females who had physical offices at home, they tried to do all of their work in their office space only. One female academic begrudged having to set up an office in her home and having to bring work materials home, while another female academic had a strict rule of not bringing home work-related materials, books, etc. or doing work from home because it turned her kitchen into an office space and she did not want this invasion of her personal space.

“I don’t necessarily, I don’t have any books at home. I don’t have any journals at home. I don’t have any stuff from am from work at home. Sometimes I’d bring home a folder with a few articles, but it would sit in my bag and I’ve made a decision that I will never look at it anyway but it is almost like a person from work sitting in my lounge room again that I just said I am not going to do it because I know it is in there. So you know I have learned again from second year with that, don’t bring stuff home because it is there but its not there because I don’t engage in it then because I can’t because I’m too tired. So am physically there is no reminders of work in my home.” (Female 10, Junior Lecturer)

In the cases of those females who tried to conduct their work from their work office, all reported that on occasion they did work from home; therefore, these physical boundaries
were permeable. Only one male academic stated that he tried to conduct the bulk of his work in his office, however, he did also acknowledge that he regularly worked at home in the evenings.

The temporal boundaries between home and work could be classified as very flexible and permeable during the working week for most of the academics. Many of the participants worked long hours and these hours could vary depending on the changing nature of the work demands over the course of the academic year. Only one female academic had a strict time boundary in place where she generally worked 9-5 during the week. Others also reported certain types of temporal boundaries, for example, for two male academics who always engaged in work in the evening, nine o’clock at night was their end of work time. The predominant temporal boundary identified was around weekend time. The majority kept either the whole weekend free from work or at least one whole day free and this possibly helped them recover from long hours completed during the week.

The role of ‘gatekeepers’, that is, spouses and supervisors in preventing or facilitating employees in crossing boundaries was also demonstrated with regard to the temporal and psychological boundaries employed by academics. For instance Male 14, junior lecturer referred to both his wife and his Head of Department in relation to his post-work activities. He noted that both he and his wife both regularly worked at home in the evenings, therefore, because his wife was also working, this facilitated his ability to devote time to additional work in the evenings. Conversely, he noted the role of his supervisor in preventing him from detaching from work.

“My wife is a secondary teacher and between the two of us, we would come home and we would get the dinner or whatever else needs to be done and then usually, most evenings, both of us will have work to do. So we disappear. We have two offices at home, disappear, do our work and then we would meet up around nine, half nine or ten o’clock”
“Like my head of department, best man ever, but he could ring me, he has often rang me on a Saturday or emailed me on a Saturday or Sunday morning, you know looking for something or talking about something and that’s the way it is. And if you see that it’s kind of tempting to reply and you are kind of thinking about the stuff again and you are back into square one.”

Female 1, senior lecturer noted that because her husband worked from home, he took care of a number of household and childcare duties, for example, dropping off and collecting from school, cooking the evening meal. This allowed her to work longer hours and eased her transition from the work domain into the home domain, as not having to juggle these activities reduced her stress levels.

“Oh God, I am lucky that my husband works from home. So all the dropping kids, collecting kids, he does it.”

Some interesting psychological boundaries were identified during the analysis (i.e. relating to emotions, ways of thinking and behaviours). For example, two academics felt it was unfair on their families to work in the evenings and therefore decided in one case not to work at home, and in the other, only to do work when the children were asleep. One female academic had put in place a number of psychological strategies to segment her home and work lives, that is, she did not talk about work at home, she did not bring any work related materials home and she rarely checked emails from home in the evenings. For example, she stated in relation to having decided not to check emails at home:

“No because I know that it would stress me out if I checked it. So and I value my time too much, I value my relationship too much, I value myself too much to do that.” (Female 10, Junior Lecturer)

One male academic had decided that the boundaries between his work and home lives would be blurred for a temporary amount of time (i.e. for the duration that he was Head of School) as it was not feasible in his opinion to separate work and home when working 50-60 hours per week.
“I suppose one of the things is that I see myself doing this job for a four year term and then getting out of it and letting someone else do it.” (Male 2, Senior Lecturer)

On the other hand, a female academic recounted a psychological need that she had to be able connect to work at any time:

“Ah, but I need (and that is a psychological need) to have my computer with me. Just in case, even if I don’t use it. But if I don’t have it, I will feel like sort of, oh my God, a little bit naked” (Female 1, Senior Lecturer)

Although most academics did not refer directly to having psychological boundaries between work and home, as the theme on Ability to Detach from Work demonstrated for many of the academics detaching from work and not thinking about work during their free time was difficult, therefore indicating that for a subset of the academics their psychological boundaries between work and home were weak.

When the descriptions of boundaries were assessed and categorized in relation to their permeability and flexibility it was possible to assess the degree to which the boundaries between home and work were blended. The majority of female academics and all of the male academics were classified as having blended work-home interfaces. Only two female academics were classified as having a substantial amount of segmentation between their home and work lives.

Actual versus ideal boundaries
With regard to their work-home boundaries, an analysis was conducted to determine whether or not the academics perceived their boundaries to be working for them (i.e. adequate). Half of the females perceived their boundaries to be adequate, while one perceived her boundaries to be inadequate, the other three academics had boundaries that were somewhat effective, with two stating a desire for more separation. In the male academic group, two males were happy with their boundaries, with three desiring a greater level of separation between their work and home lives. While the remaining academic stated that he wouldn’t currently be happy having a greater degree of separation between his work and home life although he worked very long hours and had
difficulty detaching from work. See table 9.5 for the categorization of the interviewees with regard to the adequacy of their work-home boundaries.

Table 9.6 Type of work-home borders and degree to which they are suitable

<table>
<thead>
<tr>
<th>Type of Work-Home Interface</th>
<th>Are boundaries working?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female (I1)</td>
<td>Blended</td>
</tr>
<tr>
<td>Female (I5)</td>
<td>Blended</td>
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<tr>
<td>Female (I6)</td>
<td>Blended</td>
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<tr>
<td>Female (I8)</td>
<td>Slightly blended</td>
</tr>
<tr>
<td>Female (I9)</td>
<td>Blended</td>
</tr>
<tr>
<td>Female (I10)</td>
<td>Physically segmented</td>
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<tr>
<td>Female (I11)</td>
<td>Segmented</td>
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<tr>
<td>Female (I12)</td>
<td>Blended</td>
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<tr>
<td>Male (I2)</td>
<td>Blended</td>
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<tr>
<td>Male (I3)</td>
<td>Very blended</td>
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<tr>
<td>Male (I4)</td>
<td>Blended</td>
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<tr>
<td>Male (I7)</td>
<td>Blended</td>
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<tr>
<td>Male (I13)</td>
<td>Slightly blended</td>
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<tr>
<td>Male (I14)</td>
<td>Blended</td>
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</table>
The academics were asked whether they thought having boundaries was good. The majority of academics responded that having boundaries was positive. Terms like ‘essential’, ‘important’, ‘healthier’ ‘vital’ were used. For example, male 14 (senior lecturer) stated:

“Oh, I think long term, like I have said this at home as well and we have been talking about it. I think it is vital. There is no way, this intensity, you can’t keep this going. It’s the sort of thing that you could do for short period of time, but I think long term I can’t see myself doing it for another twenty or thirty years of this because you would just burnout.”

Two academics noted that their own work-related stress problems that they had had at certain points, highlighted for them the importance of having boundaries between work and home. For example,

“I think it is essential. Based on my own sort of going off the rails a couple of times.”
(Male 4, Senior Lecturer)

The two female academics with the strongest work-home boundaries both noted that having these boundaries were important for their sense of balance and well-being, however, both also noted the potential negative impact these strong boundaries could have on their academic careers.

“Am, culturally it is seen as a positive if you don’t have the boundaries. It means you are working harder, it means you are more committed to your job. But, am, I know for me, that could work for somebody else, but for me I would go back to my second year here if I do that. And I am not effective to anybody then.” (Female 10, Junior Lecturer)

“It’s not so good for your career. Do you know, because I think within the academic world now, you know, I think to be really super successful, you do need to do it practically to the exclusion of everything else. But I am just not willing to do that.” (Female 11, Senior Lecturer)
Compatibility with academia

The interviewees were asked whether or not they thought it was possible to have boundaries in academia. A gender difference was observed in that the majority of female academics all responded in the affirmative, except for one who thought that it wasn’t possible to have boundaries at all times. So although most of the females had blurred boundaries between work and home and what could be considered to be weak boundaries, they still felt it was possible to have boundaries in place.

For the male academics there was less certainty with regard to having boundaries between work and home. One male academic felt having boundaries was difficult given the nature of the job, and another felt it varied from person to person and that some people were better able to enforce boundaries. Another male academic thought that it was possible to have boundaries but that he wouldn’t be comfortable having them.

The role of information technology in blurring the boundaries

A theme identified was the role of technology in blurring the work-home boundaries. It was noted by the male academics that technology such as smart phones and home internet access allowed physical boundaries between work and home to become blurred. The majority of participants referred to having the ability to remotely connect to work from home. For some of the academics this was not regarded as a problematic issue, merely a tool that could be used to keep in contact with work if needed. Two of the female academics stated that they rarely checked emails from home, with the remainder of the females regularly engaging in work related emails. Four of the male academics also regularly checked their work emails while at home. For most of the academics that had access to the internet and emails, it blurred the boundaries between their work and home lives and this was regarded as detrimental to their ability to detach from work. One male academic stated that he would never contemplate buying a smart phone as a result of observing fellow academics continuously checking their work emails on them.

Some academics tried to enforce boundaries around their use of technology, for example, one female academic on the rare occasion when she checked emails from home would
only do it in the mornings as she found it too stressful to do it in the evenings after work. One male academic stated that he would never buy a smart phone as he wanted to have to make a conscious effort to check his email as opposed to having always-on access to it, while another female academic sold her I-phone as she found she was constantly checking her email. The ability to connect to work so easily allowed many of the academics to blur their home and work boundaries, and a number of the academics referred to their home and work domains as inter-connected with no strict boundaries.

“Time, time-wise am, yeah, I mean it does eat into home life and there is no two ways about it. I could be making dinner and next minute I will get out the lap top and I will be checking emails while I am stirring a pot and I am like oh yeah, and you know, there is no just leaving it there.” (Female 9, Junior Lecturer)

“Yes, yeah and worst, the phone, that’s an I-phone obviously and that level of technology is probably one of the worst things ever. When you said about switching off, when I am sitting at home it’s my private phone, the university don’t give us phones. I have my work email on it, I have my own email on it and particularly if a work email comes in, I’ll respond to it. Like an eejit, I’ll be there at nine o clock at night and I will respond to it” (Male 14, Junior Lecturer)

“I got an I-phone last year and I sold it because I found I was constantly checking emails, so I sold it.” (Female 9, Junior Lecturer)

“I mean, in some senses we think things like email and the web are great. But actually what that means is that you never kind of escape from work” (Male 2, Senior Lecturer)

9.2.3.4 Health and stress

The fourth master theme identified refers to stress and health problems discussed by the interviewees in relation to their work as academics. Three minor themes are contained within this section: (1) stressors (2) stress levels and stress related ill-health (3) coping strategies.
Stressors

A number of occupational stressors were identified during the analysis. The predominant types of stressors identified related to academic work and working within the university system. Stressors related to academic work included: work intensity, juggling teaching and research demands, having sustained mental capacity to work continuously, lack of structure to academic work, and too much administrative work. For example:

“Am you know, so this year I have to say it has, it’s actually quite intense, whereas in previous years I found that it was more manageable. I had more time in which I was just able to read and explore interests and I think that is really critical for an academic to have that time because otherwise it just turns into, you know, it feels like more of just an administrative post.” (Female 11, Senior Lecturer)

Stressors related to the university structure and management included: vague work expectations, organisational expectations around working time, interpersonal problems, being new to academia, poorly functioning university systems and non-replacement of staff (e.g. retiring staff, staff on sick leave, maternity leave, etc). For example:

“It is very rare that something is resolved quickly and straightforwardly. So the problem is that the issues remain and it is kind of like a hydraulic pressure. All of those issues are still there in the background and you have to remember to keep in contact with all of those issues. You cannot actually push it away easily to another area where it is their task to do it. You have to remember to get back onto them to make sure it was resolved” (Male 7, Junior Lecturer)

The final category of stressors refers to managing competing demands, for example, managing the work-home interface and working as a full time academic combined with studying (e.g. PhD, CPD). This category of stressors had considerably fewer entries than either of the other two categories. However, managing the simultaneous demands from multiple roles was stressful for some of the interviewees. For example, Female 1, senior lecturer stated:
“..and that probably would be my most distressful time, when I have to drop the kids in school in the morning and come over here and not finding a parking space and then starting to work at quarter to ten. Something like that, that really, really, really annoys me.”

Stress levels and stress related ill-health
A subset of the academics made reference to occupational stress issues and their stress levels in relation to recovery. In addition, others referred to the fact that they could not sustain their current work practices in the long term as they would burn out. Two of the junior female academics in particular had difficulties with work-related stress and both had experienced burnout early in their academic careers.

“…..I crashed and burned at end of my second year. I actually crashed and burned and from that I had to re-evaluate, I had to learn from that experience definitely.”(Female 10, Junior Lecturer)

Another female academic referred to her practice of going into inert mode when she felt she needed a mental break, when the intensity became too much. One male academic referred to using his year of sabbatical to recover from work-related stress and address health issues, while another male academic thought his current work hours would lead to burn out if he didn’t make any changes.

“But I mean, I was on sabbatical 2 years ago and when I came back I said ‘look, I can’t keep going’. I said I physically can’t keep going. I mean I was so stressed before I went on sabbatical. I mean I was nearly 20 stone. I put on a huge amount of weight.” (Male 4, Senior Lecturer)

In three of the cases, the stress related ill-health was significant and required a lengthy duration away from work to recover. For example, female 9, junior lecturer recounted:

“Yeah I was really sick. And em five months, I took four months and one months holidays and I felt so bad and so guilty, what would people think of me? They would think I am
“useless and I am not able to do this. And I learnt so much, I hit rock bottom, came right up and I totally see now that my mental health and my physical health is a lot more important than xxxxx.”

In the case of two academics the problems with work-related stress influenced their methods of recovery and detachment from work. In both cases the academics had put in place a series of rules around their time versus university time in order to ensure that their stress problems did not re-emerge. For example, female academic 10 (junior lecturer) put in place a series of activities (e.g. walking, running, yoga, meditation, and social activities) to promote her physical and mental wellness. However, in part these activities were also organised to prevent her from being able to work at home in the evenings. She also put in place very defined temporal and physical boundaries between work and home in particular for the evening time, in that she rarely worked at home in the evening, did not answer email, had no work-related material in her home, and would not talk about work in the evening. These strategies allowed her to cope with what she perceived as the constantly high level of intensity of academic work. However, she was aware that although these strategies were in the long term beneficial to her health and well-being, that having these strategies in place might mean that she wouldn’t be regarded as a committed academic.

In the case of male 4 (senior lecturer) his problems with work-related stress did not lead to a greater segmentation between home and work during term time, however, one of his main methods of recovering from academic work consisted of always taking a lengthy summer holiday (> 6 weeks). As a result of his work-related stress, he had lost his work motivation. He decided to reduce his workload significantly and mentally focus on his retirement even though this was ten years away. His coping methods focuses less on segmenting home and work, and more on reducing his overall workload by opting out of research (due his reported lack of motivation and lack of encouragement from his colleagues and superiors). Although he had engaged with support services provided by the university for employees with stress problems, he was largely negative in his evaluation of these services and highly cynical overall in relation to the university as a supportive working environment. He remained very favourably inclined towards teaching
and his students; however, he had little to no positive regard for university personnel in management positions.

Conversely, for female academic 9 (lecturer below bar) following her stress related illness she had not managed to achieve greater segmentation between work and home, mainly due her heavy teaching workload and due to the fact that she was trying to complete a PhD while working full time. However, following her illness she did report being more aware of herself and what she could manage and knew the warning signs of too much stress. In relation to recovering from work, while she was aware of the benefits of walking and cycling in helping her de-stress, she only engaged in these activities during the summer months. Her main method of recovering from work during academic term was “cigarettes and alcohol” which she acknowledged was a negative coping method. One of her main reported methods of detaching from work was taking a long holiday during the summer.

*Coping strategies*
A number of academics referred to coping strategies they used to help them deal with their demanding work lives. Some academics used what could be classed as positive coping methods whereas others used more negative coping methods. An example of a negative coping method identified was poor eating habits. The types of habits identified ranged from not eating at all during the working day to comfort eating and over-eating. These eating habits then lead to further problems ranging from weight loss and health problems to weight gain and a lack of desire to engage in physical activity. For example:

“…..Maybe get lunch. Lunch is a joke, eating is a joke in semester one. It’s just a disaster and I lose weight every year which is kind of a good thing but it is really unhealthy as well. So lunch, not really, not really bothered with food.”(Female 9, junior lecturer)

“…. I suppose there is a professional term for that but when I am stressed I pick and I eat more and that is, so it is like sort of a vicious circle. If I am like under stressful
situation I will eat more. But I won’t even enjoy what I am eating. Its like comfort eating, that is the word.” (Female 1, Senior Lecturer)

Some academics also engaged in what could be classed as negative work behaviours for example, not attempting to get promoted to more senior positions within the university. Avoidance behaviour at work was also another type of negative coping method for example, not responding to emails or requests for information and not engaging actively with colleagues and management.

“And then that’s it. I mean the height of my ambition is never to reach senior lecturer, no thanks. I don’t think senior lecturer is a kind of thing that I would be interested in. Above the bar I would be happy with.” (Female 9, Junior Lecturer)

“So stuff that I don’t really want to do anything about, I just send it over there and then maybe when the humour is on me, I might take a look at it. But I also subscribe to the idea that some people send me emails that they sent to other people, if I don’t answer it. So if I leave it long enough I discovered that maybe 2 or 3 weeks later if I go back and ask if it is still a problem they will say they got somebody else to fix it.” (Male 4, Senior Lecturer)

Another subset of academics adopted positive coping strategies both work-related and non-work related. Positive work-related strategies included re-negotiating workloads and availing of employee support structures such as the Employee Assistance Programme and the use of time management techniques and re-structuring work and use of to-do lists.

“Am… research supervision this year, I’m so surprised with how well that went. It wasn’t any way intense. Am it was probably the same workload as last year but I managed it better because I put in a plan during the summer. I came up with a plan to manage that.” (Female 10, Junior Lecturer)

Other positive coping strategies reported were classed as wellness/exercise oriented. A number of academics referred to the benefits of walking as a way of de-stressing during
the working day and recovering after work in the evenings. While one female academic did a variety of activities designed to protect her wellness, including running, cycling, meditation and yoga.

“And if I don’t walk, I am nuts. Absolutely wound up, I get really stressed.” (Female 9, Junior Lecturer)

Another strategy used to help cope with the demands of work was that of social support in particular, spousal support. A number of academics talked with their spouses as a way of coping with work.

“But yes, sometimes I find frustrating situations at work and I will have, you know my husband will have an ear full about it. Sometimes I talk about it and then I forget. So to me it is easier to vent things, to talk things. If I don’t talk about them then they will brew and they will get worse. So as far as I am able to talk about it I can cope with it I think.” (Female 1, Senior Lecturer)
Chapter 9 – Study 3 Discussion

9.3 Introduction

The present study was designed as a direct follow up to the diary study. The aim of this study was to gain more detailed information from academics regarding their recovery and detachment experiences. Furthermore, the relationship between boundary management and recovery was also examined as it has been suggested that boundaries have a psychological function which aids in detachment from work (Zijlstra & Sonnentag, 2006). Although in Study 2 workaholism type was found to be important with regard to recovery and detachment, workaholism could not be considered in this study, due to an uneven distribution of workaholism types in the interviewee sample group. In this study, gender was examined in relation to recovery in order to ascertain whether or not recovery and detachment are perceived differently by males and females and whether different strategies are employed to achieve detachment and recovery from work.

Therefore, the research questions were:

1. How is detachment from work achieved and how does this impact on recovery and the home domain?
2. Is there a gendered nature to interviewees’ accounts of recovery, detachment and boundary management?
3. How do academics manage boundaries between work and home and are their boundaries perceived as facilitating the desired level of integration/separation?

Four master themes were identified in this study: pleasure and pain of academic work, the struggle to recover, boundary management and health and stress. Each of these themes are discussed in turn and links with the findings from Study 1 and Study 2 and the extant literature are made.
9.3.1 Pleasure and pain of academic work

Consistent with the findings from Study 1 and Study 2, many of the academics in this study worked long hours. Some of the reported hours worked are worrying given the potential for negative health effects associated with working over 50 hours per week (Härmä, 2006). Working 60-70 hours per week during term time was regarded as normal for some of the academics, with quiet weeks involving between 40-45 hours of work. Cropley & Millward (2009) have defined work over-commitment as working outside one’s normal contractual hours. However, in the Irish third level sector it is difficult to apply this definition as academics do not have specified working hours, therefore, it may be difficult for academics to determine what a sufficient amount of work for a week actually is. In this type of situation, academics may use social comparison to determine their working hours and/or be reliant on informal working norms which may vary from one department to another. Halpern (2008) has noted it can be difficult for academics to determine when they have done enough work, as academic work is endless therefore, she recommends that new academics need to learn the implicit rules within their universities in order to determine when they have done enough work. A concern was voiced in this study that workaholics were setting the norms for long working hours and that the long hours standards were not achievable for many academics due to caring commitments, non-work commitments, personal preferences and health reasons. Using social comparison to determine working hours was problematic for a number of academics in this study, as it was associated with negative feelings such as worry, guilt, and perceptions of inadequacy and inefficiency.

The findings from this study with regard to work load and work intensity are also supportive of the findings from Study 1 and Study 2. Heavy workloads and constant work pressure were detrimental for recovery and associated with stress. The findings suggest that the pressures of high work demands make long working hours almost compulsory within the Irish academic setting. Only one academic described her own self-driven or compulsive working behaviour, whereby she felt that she was the main driver of her long working hours as opposed to external demands.
Contrary to the findings of Study 1, organisational expectations and norms around working time were significantly related to long working hours in this qualitative study. Many of the academics voiced the opinion that working long hours was viewed positively at an organisational level, while having a segmented work and home life was regarded as less favourable. Therefore, the results of Study 1 and Study 3 with regard to work expectations and norms around working hours are incongruous. This may be an anomaly owing to the small sample size employed in this study and owing to the fact that all participants in Study 3 were from a single institution.

Some of the academics struggled with role ambiguity, in that, although they felt a generalised sense of pressure to do more and be more productive, they did not understand exactly what these expectations entailed. Therefore, for some academics a constant sense of under-achievement prevailed even though they were working diligently. Role ambiguity in academic work was identified as an occupational stressor almost 20 years ago (Dua, 1994), however, it appears to still remain a stressor for some academics today. Addressing such stressors in the workplace is a management issue (Soliman & Soliman, 1997), which should be a priority given that increasing clarity around roles and work performance expectations should in the long term increase both quality and quantity of work (Dua, 1994).

Another subset of academics that did not adhere to the long hours culture and had greater segmentation between work and home, employed a ‘good enough’ attitude. Instead of trying to be the ideal academic this subset of academics were happy to take the middle road, whereby, they did their work to the best of their ability, but were happy to let it go at the end of their self-defined working hours. Many of these academics felt that academic work (and research work in particular) could be all consuming, so it was important to know when to draw the line.

A paradoxical situation was observed where many of the academics who were unhappy with the extent to which work monopolised their personal life, also described how much they enjoyed their work. A number of academics referred to their love of their work
which reflects the vocational nature of academic work and can be associated with long working hours also. For example, in one case, a female academic reflected that she could be so absorbed in her work (at home) she felt like she was in a bubble which separated her from her family and the outside world. One senior academic reported that whenever he entered a bookshop he was immediately drawn to the section which contained his subject matter and how very often his book purchases for his own reading would end up being taught on his courses. The ability to control one’s own work was regarded as a very positive feature of academic work. In addition, the pleasure inherent in teaching and interacting with students was another positive feature of academic life. One academic lamented the fact that increasing levels of administration and management activities prevented her from doing ‘true academic work’ which was the work she really enjoyed doing and also felt was vital for her role as an academic.

Within this study, many academics felt that a considerable proportion of academic work was unseen; in particular, the level of time that must be devoted to administrative work was a common complaint. Tight (2010) has previously noted that administrative work has increased over time for academics and is the least liked type of work. Ylijoki (2013) has noted that academics categorise work into what is referred to as ‘real’ or productive academic work and ‘wasted’ work (typically referring to administrative work such as form filling and managerial work). This sentiment was evidenced also in this study, where some academics recounted that their administrative duties had increased over time and that their available work time was being consumed by administrative work. This was a cause of frustration for a number of the academics, which is in line with a previous finding that spending time on ‘wasted work’ leads to a sense of lack of achievement for academics and is associated with frustration and disappointment (Ylijoki, 2013). Spending more and more time engaged in administrative and managerial work has implications for the time available for other types of academic work such as research. For example, within this study, one academic noted that she did all of her research work at home in the evenings, as it wasn’t possible to get it done during office hours.
The struggle to recover

Sonnentag (2001) reported that working at home in the evenings is not conducive to recovery. In this study, working from home in the evenings was commonplace, particularly amongst the male academics. Doing some extra work at home was routine for many of the academics and ranged from spending a few minutes checking emails or writing a to-do list, to spending hours doing intensive teaching or research work. An interesting point from this study was that some academics hadn’t considered some tasks like checking emails in fact to be ‘work’ even though they may have spent 20-30 minutes every evening at this activity. On average knowledge workers can receive 75 or more emails per day (Beaton, 2007), therefore, spending some time in the evenings clearing a few emails from the inbox may be perceived as a time saving strategy for ‘proper’ work the next day.

The vocational nature of academic work and being highly absorbed in this work was also reflected in evening activities, for example, a senior academic in the humanities referred to reading novels at night and at the weekends that interested him but were also his lecturing subject matter. His work and home lives were highly integrated and he was very satisfied with this high level of integration and having low levels of detachment from work. Indeed, it has been put forth as a question whether knowledge workers who are highly absorbed in work that they enjoy and work extra hours (unpaid) can differentiate work from leisure (Lewis, 2003). Recent research has shown that in cognitively demanding jobs with high cognitive resources (classified as active jobs under the JDC model), low cognitive detachment from work was associated with more active learning and creativity (De Jonge, Spoor, Sonnentag, Dormann, & van den Tooren, 2012). Furthermore, Demerouti et al., (2012) have suggested that high work enjoyment may act as a buffer against insufficient daily recovery, therefore, protecting some employees from resource drain.

Recovery research states that employees benefit from engaging in activities after work which don’t draw on the same resources as required during work (Brosschot et al., 2005). However, many of the academics in this study regularly engaged in work in the evenings therefore, re-activating the same systems used during work, which should
imply resource drain and fatigue. Notably, some academics were functioning well under these circumstances, while others were not. A possible explanation may be made by reference to a recent study, which has stated that there are three different types of detachment from work: emotional, cognitive and physical (De Jonge et al., 2012). De Jonge et al., (2012) suggest that emotional and physical detachment from work are important in order to prevent emotional exhaustion and health problems, while high levels of cognitive detachment from work may negatively impact on elements of performance (i.e. creativity and active learning). It may be that in this study, some of the well functioning participants with highly integrated work and home lives were able to emotionally detach from work while simultaneously having a low cognitive detachment from work. On the other hand, some academics may not have been able to physically, emotionally or cognitively detach from work, therefore, negatively affecting their functioning. However, this area deserves further research attention, as it has been shown that for highly engaged employees (Sonnentag, Mojza, et al., 2008) and employees experiencing flow at work (Demerouti, Bakker, Sonnentag, & Fullagar, 2012), detachment from work is beneficial in terms of improving positive affect and conserving energy. In addition, it has been noted that workers facing high demands benefit from detaching from work, as detaching from work protects well-being and work engagement (Sonnentag, Binnewies, et al., 2010).

Similar to the findings in Study 2, the weekend played a major role in recovery for a subset of the academics. Given the demanding nature of academic work and the practice of working in the weekday evenings, this may be a beneficial recovery strategy as previous research has shown the weekend period to be important for recovery (Binnewies, Sonnentag, & Mojza, 2010; Zijlstra & Rook, 2009) and maintaining work performance (Binnewies et al., 2010). In addition, a number of academics noted that they could more easily detach from work at the weekend than during the working week. However, for another subset working on the weekends was normal and routine. This is problematic from a recovery viewpoint, as lack of time both during the working week and at the weekend to replenish and restore resources may have negative health and well-being implications.
Also, another negative recovery trend noted in the interviews was the practice of not taking lunch or coffee breaks at work. Research indicates that taking breaks during work time is beneficial. For example, it has been reported that engaging in respite activities (e.g. relaxing, socialising) during work breaks was associated with higher levels of positive affect during and after the breaks (Trougakos, Beal, Green, & Weiss, 2008). Furthermore, taking breaks during work has been shown to improve performance and reduce fatigue (Tucker, 2003). Sanz-Vergel et al., (2010) recommend that breaks be used during the working day as a means of facilitating recovery. In addition, it has been recommended that organisations facilitate the taking of breaks and promote their health benefits to employees (Demerouti et al., 2012).

In addition, a number of academics reported that they would recover from work during their summer holidays. All of the academics who availed of this recovery strategy worked very long hours, worked weekends and generally felt they did not have time to recover during the working week. However, this strategy tends not to be effective in the long term as past research has shown that the recovery benefits associated with holidays fade out quite rapidly and well-being can deteriorate quickly after return to work (de Bloom et al., 2010; de Bloom et al., 2009).

While passive activities as a means of recovery were most frequently engaged in by the academics in this study, many academics also recounted the recovery and detachment benefits associated with physical exercise. Mastery activities also appeared to be particularly useful for academics in drawing attention away academic work to other areas of focus. However, both mastery and physical activities require time and effort, and in this study many of the academics were time poor, in that long working hours did not leave time available for other interests. In addition, some academics did not have the physical or mental energy needed to engage in activities other than passive ones.

Similar to the findings from Study 2, engaging with and caring for young children was also found to be beneficial for recovery in this study. This finding is line with previous research findings which note that family activities are regarded by working parents as positive and engaging (Offer & Schneider, 2008). Indeed, a qualitative study of male
academics (N=12) reported that family time is regarded as a psychological buffer from work, which allows academics to gain perspective on their work (Reddick et al., 2012). Offer & Schneider suggest that positive family experiences may aid working parents in recovering from work. Conversely, there were no references in this study to the role of household work as an important means of recovering and detaching from work. Research suggests that household work is perceived more negatively than childcare/family activities (Offer & Schneider, 2008). These findings lend support to the calls in recovery research for household tasks and childcare to be differentiated as two separate activities in future recovery studies.

When the participants in this study reported on their ability to detach from work, two subgroups emerged. One group reported generally having difficulties in detaching from work whilst the other group generally detached more easily. It was found that some of the academics had poor recovery related self-efficacy. Recovery related self-efficacy has been defined as “an individual’s expectation of being able to benefit from recovery and recovery opportunities” (Sonnentag & Kruel, 2006, p.202). Some academics felt that their inability to detach from work was a personality trait, therefore, unchangeable. However, this is a misperception as research has shown that ability to recover is not a stable personality characteristic (Sonnentag & Fritz, 2007). Conversely, a number of academics had good recovery related self-efficacy, believing that they had an innate ability to detach from work. Equally important in the context of not being able to detach from work was the prevalence of working at home in the early mornings, evenings and weekends for a subset of the academics. Previous research has noted that low spatial work-home boundaries are negatively related to work detachment (Sonnentag, Kuttler, et al., 2010).

The interviewees were evenly divided in their opinions as to whether not detaching from work was a positive or negative issue. For one subset of academics low work detachment was regarded as inherently negative, from both personal and work productivity viewpoints. Many in this group felt that detaching from work was healthier and more balanced and that their work performance was better as a result. This viewpoint aligns with research on detachment which has shown that being highly engaged in work during
the day in combination with having psychological distance from work during ‘free time’ is the most beneficial for positive affective states (Sonnentag, Mojza, et al., 2008) and preserving energy (Demerouti et al., 2012).

However, another subset regarded not detaching from work as a positive issue, conducive to problem solving. It has been suggested that low work detachment may potentially be positive, in that it allows for problem solving (De Jonge et al., 2012) and innovative thinking and that this might be important, particularly for highly job involved individuals (Fritz & Sonnentag, 2005). Fritz et al., (2010) have also reported that too much or too little detachment from work can cause productivity problems. Therefore, although some academics may have felt that their productivity was enhanced by not detaching from work, it has been noted that work detachment is particularly important for highly engaged workers (Sonnentag et al., 2008). De Jonge et al., (2012) note that what is most important is that the person finds the right balance with regard to detaching and recovering from work. Some of the academics in this study appear to have found this balance however others had not.

The interviewees described in depth a number of the previously identified barriers to detachment, for example, work overload, long working hours, and information technology. For example, Internet access at home, personal laptops, tablets and the increasing use of smart phones were highlighted as barriers to detachment by a number of academics. Smart phones in particular which have work email activated were negatively appraised (by smart phone owners and non-owners alike) as the person is constantly made aware when a new work email arrives. Some academics felt powerless in the face of such technology to detach from work. As previously stated in an inter-country study of executives, mobile devices are “like owning a cat. You don’t know who’s in charge” (Crandell, 2007, p. 41).

Furthermore, all academics noted that their ability to detach from work was regularly compromised due to features of academic life, such as very busy time periods (i.e. during semester), lingering work issues and also interpersonal problems with colleagues. Some
academics felt that detaching from work was becoming progressively more difficult over time as their workloads increased and that there was an ‘always on’ mentality becoming more prevalent in academia than in comparison to years ago.

Although Sonnentag & Kruehl (2006) previously found that role ambiguity was not related to ability to detach from work in a sample of teachers, in this study, academics who had transferred to academia from industry were challenged by role ambiguity. Not knowing exactly what was required for one’s role was associated with stress and inability to detach from work. Constant ruminating over whether or not one’s performance was sufficient and in line with that of colleagues appeared to be a hindrance for detachment from work.

9.3.3 Boundary management

With reference to Clark’s (2000) border theory, the findings from this study revealed that the majority of academics largely maintained blended boundaries between their work and home lives. This is consistent with recent findings in the literature (Gornall & Salisbury, 2012; Ylijoki, 2013) on the management of work-home boundaries in academia, which showed that academics largely have blurred boundaries between work and home. While the classification of blended is employed in this study, in a number of cases the term blurred could equally be applied, whereby the lines between work and home were so flexible and permeable that the person was experiencing spillover problems.

The findings on border work revealed that for many of the academics their homes became extensions of the workplace as all the academics brought work home to various degrees. Remote access to work email and the internet allow academics to work virtually from anywhere, therefore, physical boundaries were difficult to maintain. However, the academics who had home offices generally tried to maintain some distance from work by only doing their academic work in that office space. In addition, long working hours and high work intensity blurred the temporal boundaries between work and home for the academics and the only relatively strict boundary adhered to was to keep part or all of the weekend free from work. This finding of maintaining boundaries around weekend time supports the finding from Study 2 that the weekend played an important role in allowing
academics to recover from their work. The importance of boundary gatekeepers in easing or detracting from boundary crossing was also demonstrated.

Within this study, there were numerous references to the role of information technology in blurring the boundaries between work and home and preventing psychological detachment from work. This is consistent with previous research on the role of information technology in blurring the borders between the work and home domains, see for example Fenner & Renn (2004) and Valcour & Hunter (2005). Home computers, laptops, internet access and smart phones allow academic work to cross easily into the home environment. Always being connected to work via these devices negatively impacted on some of the study participants, with some going to extreme measures (i.e. selling a newly purchased i-phone) to try to restore some distance from work. Gornall & Salisbury (2012, p.140) have stated that in academia “it does seem that there are also instances when technology use may be on the wrong side of exploitative or intrusive.” In this study, technology use and availability certainly contributed to a sense of being tethered to work for some of the academics, while for others, answering emails at home whilst having a coffee wasn’t even perceived as work.

While on one hand always being connected to work may be perceived as a necessity owing to heavy workloads. On the other hand, engaging with communication technology after work has been found to contribute to self-report and spousal reports of work-life conflict (Boswell & Olson-Buchanan, 2007) and is considered to be a new source of stress for academics (Menzies & Newson, 2008). Indeed, Boswell & Olson-Buchanan (2007) noted that highly job involved and ambitious university (non-academic) employees who reported greater use of information technology had increased levels of work-life conflict.

According to Border Theory (Clark, 2000) work-home integration and work-home segmentation are at opposite ends of a spectrum, neither of which is better than the other, what is important is the degree to which the level of segmentation and/or integration is working for the person. On one hand the study findings revealed that the majority of academics felt that having boundaries between work and home were positive and
beneficial for long term health and well-being. On the other hand however, the interviewees were divided on whether or not they felt having boundaries was possible in academia. Indeed, a small number of academics even felt that having boundaries put them at a competitive disadvantage and that they were perceived to be less committed than other academics with more blurred boundaries.

A negative issue emerged in the interviews, whereby academics who had suffered considerable work-related stress and stress-related health problems (requiring considerable absences from work) felt that only by having had this negative experience had they been able to set up boundaries between their academic work and their home life. One female academic even felt that all new academics had to burn out early in order to manage being an academic in the long term.

Border theory suggests that each person has to find their optimum level of integration/segmentation and that they are an active player in setting up their work-home interface boundaries. In reality, having work and home completely segregated or completely integrated is rare (Rau & Hyland, 2002). It was found in Study 1 that academics desired a greater level of segmentation than they currently had between their home and work roles. Therefore, in this study academics’ preferences for segmentation and integration were more closely examined. When the work-home boundaries in the current study were compared with the desired boundaries an interesting pattern of findings was observed. For a subset of the interviewees their boundaries were perceived to be adequately working for them. However, another group desired greater segmentation between their work and home life. One senior male academic had blurred boundaries due to his current position but was content for the boundaries to stay blurred for a set period of time until he moved out of this (heavy administrative) role. This willingness to blur boundaries for periods of time is reflective of having an ‘alternating boundary management’ pattern (Kossek & Lautsch, 2012).
A noteworthy finding in relation to the theme of ideal versus actual levels of segmentation/integration was that many academics felt that desiring greater segmentation between work and home did not fit with organisational values. Indeed, some felt that having greater levels of segmentation between work and home was associated with being viewed as less committed than those who maintained more blurred boundaries. Having personal values which are incongruous with organisational values has been shown to cause negative affect, cognitive and emotional distancing from the institution and can lead to lower satisfaction and commitment (Rothbard et al., 2005).

The findings from this study on border management are generally consistent with the viewpoint of Kinman (2012) who stated that academics have difficulty in maintaining boundaries between work and home. However, a small number of academics had segmented their home and work life, thereby, going against the perceived general norms and expectations around integrating work and home. The ability to work remotely and the facilitation of work at home through the use of personal phones and laptops significantly contributed to blurred boundaries between home and work in this study. While the academics acknowledged that having boundaries was more conducive to their well-being, they were divided in their opinions as to whether the maintenance of strict boundaries between home and work was possible in academia. Boswell & Olson-Buchanan (2007) have stated that organisations need to recognise the personal costs to employees associated with always staying connected to work. Kossek & Lautsch (2012) have also recommended that managers receive training on differing types of boundary management styles and their implications. These types of awareness and training initiatives may aid organizations to become more adaptive to the changing needs of their employees. Furthermore, Bosewell & Olson-Buchanan (2007) have recommended that organisations provide programmes for employees designed to help them achieve their desired level of balance between home and work.
9.3.4 Stress and Health

Although the interviewees in this study were not asked any specific questions pertaining to work-related stress or stressors, work-related stress and stress related ill health featured quite heavily in the interviews for a subgroup of academics. Fulfilling the academic ideal of devoting long hours to research work in the face of heavy teaching and administrative duties appears to have been overwhelming some academics. A particular issue of concern from these findings is that some of the junior academics in the early stages of their careers referred to burning out. Furthermore, other academics were concerned that they would burn out in the future if their workloads did not change. The all-consuming nature of academic work in parallel with increasing levels work intensity may not be sustainable in the long term. Heavy work demands were identified in Study 1 as a predictor of long working hours for male academics and a predictor of work-life conflict and psychological strain for both males and females. In Study 2, work intensity/overload was identified as a barrier to recovering and detaching from work. Furthermore, in this study, work intensity was associated with reports of stress-related ill health and substantial periods of sick leave for a subgroup of academics.

Entering into academia via non-traditional routes, for example, from industry appears to be stressful for a number of reasons. First, consistent with the public perception of academia as a low stress occupation, ‘new academics’ did not realise the intensity associated with academic work and the demanding nature of this career path. Furthermore, the university and departmental management may also be at fault as new academics struggled with role ambiguity, as work and performance expectations were not adequately defined, and also due to the generally unstructured nature of academic work. It has previously been noted that new academics may not be able to judge whether or not the work they have completed is sufficient both on a day to day basis and with regard to unspoken or implicit organisational work expectations (Halpern, 2008). This ‘sink or swim’ type of culture where new academics are largely left to their own devices may no longer be appropriate given the face paced nature of academic work and the demanding nature of teaching. Simple strategies such as a more detailed induction process for new staff along with a mentorship programme may help to address role ambiguity and ultimately improve the productivity of new academics.
Within this study, many of the academics felt that they had too much administrative work. Administrative work was regarded as time consuming and some felt that it detracted from what they considered to be core academic work. This finding is consistent with previous academic studies, for example Tight (2010) reported that administrative work is the least liked part of academic work, but the part that has increased over time relative to research and teaching. Ylijoki (2013) in a qualitative study reported that many academics regarded administrative work as ‘wasted work’ as opposed to ‘productive work’. Having to devote large amounts of time to administrative and managerial tasks therefore, may be considered stressful by many academics, as it firstly adds to overall workload, and secondly, detracts from time available for research and teaching work.

Stress related to balancing the work-home interface did not feature heavily in this study. This may have been due to the fact that many of the male and female academics with caring responsibilities had put in place quite strict strategies to prevent work from negatively impacting on their families. Strategies employed included not bringing work home, availing of parental leave to reduce working hours, only working at home when children were asleep, skipping lunch breaks in order to leave promptly at 5pm in order to have time to spend at home with family.

A range of positive and negative coping strategies were identified which were used to cope with academic work. For example, walking was identified as a means of recovery in this study but also as a means of de-stressing by many academics. Conversely, negative coping strategies were also referred to, for example, comfort eating. Another negative coping strategy employed was classed as psychologically ‘opting-out’ and is a concern from an organisational perspective. Some academics indicated their lack of desire to progress up the university hierarchy via promotion, due to the perceived additional workload associated with higher positions. Other negative organisational behaviours included psychologically disengaging from colleagues and management and not responding to emails and requests for information.
9.3.5 Gender

One of the objectives of this study was to determine if there was a gendered nature to accounts of recovery, detachment and boundary management in academia. It was observed that the male and female academics in this study were more similar than not on a number of these fronts. Both groups reported similar barriers to recovery and detachment (e.g. long working hours, heavy work demands and high work intensity).

Research has shown that recovery and detachment from work can be linked to work-life conflict (Demerouti et al., 2007). Within the context of this study, combining academic work with caring for young children reduced opportunities to engage in mastery, physical and social activities after work. Interviewees noted that hobbies which were time intensive (e.g. golf) or required consistent attendance (e.g. team sports) were not perceived as feasible when caring for young children. Reddick et al., (2012) have also noted that male academics reported foregoing physical exercise and sacrificing leisure time in order to spend greater time with family and at work, and noted that this pattern of behaviour has also previously been found in female workers (Milkie & Peltola, 1999). But most academics in this category were happy to forgo such hobbies as it allowed greater time to be spent with children. Both academic men and women with young children equally described the time squeeze associated with combining full time academic work and caring responsibilities, but equally both groups described the benefits of spending time caring for children as a recovery technique.

It has been noted that for female academics significant tension exists when trying to combine work and family demands (Wolf-Wendel & Ward, 2003), however, in this study difficulties regarding work-life balance issues were infrequently referred to by females. Both male and female academics with young children in this study did refer to being more conscious of the fact that their working time was constrained, in that, if for example the crèche closes at six o’clock, then you have no choice other than to be there. In addition, the opinion that it was unfair on children to work at home was also prevalent in this sub-group. Female academics referred to how their work behaviours had changed to become more focused and efficient and behaviours like skipping lunch were advocated in order to leave early to have more time with young children.
In general, most of the female academics in this study tried to maintain stricter physical boundaries between the work and home domains. Strategies such as not bringing work home, not working at home, returning to the office to work if work was required (outside of office hours) were employed. This is a positive strategy as the maintenance of spatial boundaries between work and home has been shown to facilitate detachment from work (Sonnentag, Kuttler, et al., 2010). Conversely, most of the male academics regularly worked at home in the evenings. This finding is consistent with the findings of Study 1 and Study 2. This finding of greater work-home integration in male academics differs from the findings of a recent qualitative study of 12 male academics, which found that male academics in an American university reported compartmentalising their work and home roles as a major coping strategy (Reddick et al., 2012). This is interesting given that all of the American academics were on the tenure-track which entails an onerous amount of time and dedication to work, whereas all of the male academics in this study bar one had full-time, permanent positions.

Despite the male academics greater propensity for conducting additional work during free time, overall, the male and females did not differ significantly with regard to their views on detaching and recovering from academic work. This finding corresponds with the diary study findings that male and female academics did not differ in perceived ability to detach and recover from work over the course of a week. It may be the case, that factors other than gender are more significant for recovery and detachment from work in academia, such as, work enjoyment, the experience of flow and engagement at work, personality characteristics (e.g. workaholism) and caring responsibilities.

9.3.6 Reflexivity in the interview study
Within all research designs, it is vital to address concerns with regard to bias and efforts taken to ensure the accuracy of analysis results. Within qualitative studies, there is a need for researchers to maintain an awareness of the multiple influences they may have on the research process (Gilgun, 2010). The principal researcher in this study is employed as a full time academic within the Irish university sector, therefore, was familiar with the work setting and context of the interviewees. However, by having a
research assistant conduct the interviews the potential for the principal researcher to influence the data collection stage of the research was minimised.

It must be noted that during the initial contacts between the interviewees and the principal researcher when the interviews were being arranged and during conversations held with a number of interviewees post-interview the issues of confidentiality and ensuring that interviewees could not be identified were raised. Therefore, both the principal researcher and research assistant were made keenly aware of the personal nature of the information being provided by the participants, therefore, a paramount concern during the write up process was ensuring that the interviewees could not be identified. In order to ensure that reflexivity was addressed throughout the interview process a number of post-interview de-briefings were held between the principal researcher and research assistant in order to ensure that the interview schedule was followed and the data collection was as objective as possible.

The themes generated and presented in the results chapter were collated after a process of reading and re-reading the interview transcripts, followed by repeated cross-case comparisons and the process of thematic analysis recommended by Braun & Clark (2006). The accuracy of the interpretation of the data and results presented here are supported due to the fact that the interview transcripts were independently analysed by the research assistant for her minor thesis project, and the results presented in her project, although less detailed are in line with the findings presented here. This is encouraging also, as the analysis for this thesis was conducted using NVIVO software, while the analysis conducted by the research assistant was conducted manually. Finally, the minor themes were grouped in the four major themes discussed previously based on discussions between the researcher and PhD supervisor.

9.3.7 Study Strengths and Limitations
Within this study, there are a number of limitations which must be acknowledged. First, the sample size could be considered low, in comparison with some published studies of interviews with academics, for example, see Monroe, Ozyurt, Wrigley, & Alexander,
(2008) and Acker & Armenti (2004). However, it can be difficult to determine how many interviews are required (Bryman, 2008). In this study, time constraints were a limiting factor to the sample size, as the data collection period was restricted to a one month period (due to the availability of the research assistant and academics’ holidays). It has been noted that small samples can be sufficient in qualitative interview studies. For example, Cropley & Millward (2008) reported findings from a study of eight interviews and Montgomery et al., (2009) reported findings from an interview study with 12 participants. Furthermore, it has been shown that in a homogenous interview sample, theoretical saturation occurred after 12 interview transcripts were thematically analysed (Guest, Bunce, & Johnson, 2006).

A second limitation is that all interviewees were sourced from a single institution; therefore, the perspectives of the academics may be influenced by the particular context of institutional practices, organisational norms, resources available, etc.

The use of thematic analysis as the method of analysis for the interview data may be perceived as a limitation as thematic analysis is not theory bound, and there is a lack of agreement in the literature on what thematic analysis actually consists of, leading to a perception of it as an ‘anything goes method’ (Braun & Clarke, 2006). However, thematic analysis has a number of benefits especially to novice qualitative researchers, in that, it is very flexible and because it is not theory bound, it can be used across different theoretical frameworks. There tends to be a lack of detail on qualitative analysis methods in published studies (Attride-Stirling, 2001), which was encountered as a barrier to making an informed decision on appropriate analysis methods in this study. The thematic analysis approach was chosen based largely on Braun & Clark’s (2006) argument for the benefits associated with the use of thematic analysis in qualitative research and their very user friendly step-by-step guide to employing thematic analysis in psychological studies.

One barrier to the interpretation of the detachment and recovery findings in this study must be acknowledged. During the course of the interview, some of the interviewees used the terms ‘recovery’, ‘detachment’ and ‘switch-off’ interchangeably, therefore, interpreting whether or not the interviewee meant recovered or detached when he/she
used the three terms interchangeably was not always immediately apparent. In fact, one interviewee felt that all three terms meant the same thing and could make no differentiation between being recovered, being detached and being switched off.

Notwithstanding the limitations outlined, there are also a number of strengths to this study which must be considered. This study illustrates the diversity of views which exist within academia towards work-home integration/segmentation, the vocational nature of academic work and psychologically detaching from work. This qualitative data supplements and supports many of the quantitative findings from Study 1 and Study 2, therefore, enhancing the overall project findings and providing a detailed and complete account of the variables of interest.

This study is also significant as it attempted to qualitatively examine recovery and detachment taking gender into consideration, in line with recommendations in the literature for gender differences in recovery to be examined. Despite the lack of gender differences observed within the study findings, the importance of the caring status of academics in relation to post-work recovery and the integration of academic work and home life were highlighted.

An additional strength of this study was the use of an independent interviewer to conduct the 14 interviews. It has been noted that the social interaction component of the interviewer-interviewee relationship poses a threat to the validity of qualitative analysis (Roller, 2012). As the principal researcher in this study worked full time within academia, by employing a research assistant to conduct the academic interviews, it avoided the introduction of any preconceptions, expectations or biases of the principal researcher into the interview dialogues. The research assistant closely followed the interview schedule and avoided becoming engaged in discussions with the interviewees.

Finally this study provided detailed information on the boundary work conducted by academics and the difficulties they faced in trying to maintain boundaries between their work and home lives. This information may be useful in designing interventions for academics in relation to boundary management and achieving the desired level of integration/segmentation between home and work lives.
9.3.8 Summary and Conclusion

In this study stressors associated with academic work such as workload, increasing levels of administration, role ambiguity and performance pressure were described in detail with the emotional impacts of these stressors also illuminated. The findings also give insight into the dilemma of many academics in having to ensure that their personal lives are not consumed by their work, despite the high level of enjoyment they gain from this work. Within this study it appears that many academics had found their optimum recovery/work balance and were well-functioning, however, others had not yet achieved this balance and were not well-functioning. Self belief in one’s own ability to recover was revealed as important in this study for both detaching and recovering from work. Maintaining strict boundaries between work and home was largely perceived to be positive for health and well-being. The power of information technology in blurring work home boundaries and interfering with ability to detach and recover from work was also illustrated. Stress-related ill health as a result of working in a demanding academic environment was also highlighted in this study. Finally, male and female academics did not differ greatly in their views with regard to detaching and recovering from work. The findings from this study are important as they aid in illustrating and contextualizing many of the findings from Study 1 and Study 2. The findings may help to inform the design of interventions for academics to aid in achieving optimum levels of detachment and recovery from work and in maintaining boundaries between work and home.
10.1 Introduction

The original catalyst for this project were the findings of a study of work-life balance in a single university in Ireland, which highlighted a take-up gap in work-life balance policies, barriers to work-life balance (e.g. long work hours, work intensity), gender equity issues and a tension between family life and academic life (Hodgins et al., 2005). The current project sought to extend the research in this area by examining the work hours culture and levels of work-life conflict across the Irish university sector. Study 1 used multi-group structural equation modeling to examine the effects of individual factors (i.e. job involvement, workaholism), organisational factors (i.e. work intensity, organisational work time norms, organisational support, supervisor support), and life circumstances (i.e. dependents) on work hours, work-life conflict and psychological strain in Irish academics and evaluated the moderating effects of gender in this context. Study 2 used a diary study methodology and examined the post-work activities of academics, and the levels to which post-work recovery and detachment were achieved. Measures of well-being and work-life conflict were also included in Study 2. Gender and workaholism were examined in relation to all variables in the diary study. Study 3 used an interview methodology in order to examine post-work recovery and detachment strategies of academics in greater depth. Work-home boundary management and the interface between work and home also formed part of this study. Overall, the three studies provided rich insights into the nature of work-life conflict in Irish academics and suggest many useful directions for future research. The discussion provides an overview of study findings, highlights study limitations and points to implications and directions for future research.

10.2 Study 1 – Survey questionnaire study

The first objective of Study 1 was to examine levels of self-reported working hours, work-life conflict and psychological strain in Irish academics. The findings revealed a trend towards long working hours amongst the Irish academics who responded to the
survey, with male academics reporting working longer hours than female academics. The culture of long working hours in the three Irish institutions is consistent with findings on working hours of academics from a number of other countries (Gornall & Salisbury, 2012; Kinman & Jones, 2003, 2004; Misra et al., 2012; O’Laughlin & Bischoff, 2005; Tight, 2010). In this study, it was also shown that most academics felt un-rewarded for their diligent efforts both from a financial and promotional perspective. According to the Effort-Reward Imbalance Model (Siegrist, 1996), in a situation where there is a lack of reciprocity between efforts and rewards, stress and dissatisfaction can result. In addition, it was also found that the higher the working hours, the lower the perceived fit between work and home life for academics in this study, which according to the person-environment fit theory may lead to stress (Voydanoff, 2008). The academics in this study also reported a desire for a greater level of work-home segmentation than they currently had.

Male and female academics reported similar levels of work-life conflict in Study 1, a finding which is consistent with the general findings in the literature (for example, see Byron, 2005) but inconsistent with previous work-life conflict studies in academia where conflicting findings have been reported. For example, it has been reported that academic men have higher levels of work-life conflict (Winefield et al., 2008) and that academic women have higher levels of work-life conflict than academic men (Cantano et al., 2010). When life-work conflict was examined, it was found that female academics with children experienced higher levels of life-work conflict than female academics without children; conversely, there was no difference in levels of life-work conflict experienced by male academics with and without children. Worryingly for female academics in this study, despite working fewer hours than male academics and reporting equal levels of work-life conflict, female academics reported higher psychological strain, higher perceived work demands and higher perceived organisational expectations to work long hours than male academics.

The second objective was to evaluate a model designed to examine the impact of personal factors (workaholism, level of job involvement), organisational factors
(organisational support, supervisor support, work intensity, work hour expectations) and individual factors (number of dependents) on work hours, work-life conflict and psychological strain. A parsimonious model of structural relationships was first evaluated and rejected. This model proposed that exogenous personal, individual and organisational factors have direct positive and negative effects on work hours and that their effect on work-life conflict and psychological strain is fully mediated by work hours. The alternative model, which provided a better fit to the data, proposed that work hours partially mediated the relationship between exogenous variables and both work-life conflict and psychological strain. This alternative model allowed for direct effects of exogenous variables on work-life conflict and psychological strain, and also assumed that gender moderated these effects. The second model, although less parsimonious and more complex than the first model, highlighted a number of important similarities and differences across men and women.

Notably, a number of similarities and differences were observed across male and female academics in the predictors of work hours. Job involvement and lower organisational expectations were significant predictors of long working hours for both male and female academics. However, higher work intensity and having children predicted longer work hours for men only.

As hypothesised, long working hours predicted higher levels of work-life conflict for both men and women, which is consistent with previous findings that academic work pressures have the potential to spillover into personal life (Kinman & Jones, 2004). Additional predictors of work-life conflict for both male and female academics included high work intensity, high work drive and lower organisational support. However, there were additional unique predictors of work-life conflict observed for men that were not observed for women. Specifically, lower work enjoyment and higher work involvement predicted higher work-life conflict in men, but not women.

The final outcome variable in the model was psychological strain. As predicted, higher work-life conflict predicted higher psychological strain for both men and women. Other
unique predictors of psychological strain included higher work drive and higher work intensity. In addition to other influences in the model, high work enjoyment predicted lower psychological strain in men, but not women. These findings are important as they highlight both the complex nature of direct and indirect influences on working hours, work-life conflict and psychological strain in academia and highlight similarities and differences across men and women in this context. Furthermore, the findings support calls within the literature to move away from examining mean gender differences in work-life conflict to focus on gender differences in antecedents and consequences (Korabik et al., 2008). These findings are discussed in more detail below in the section on implications and directions for future research.

In line with previous studies of stress in academia, the third objective of Study 1 was to examine the impact of occupational level on all study variables. The study findings revealed a significant impact of occupational level across a number of outcome measures. Professors reported significantly higher levels of job satisfaction, job involvement and work enjoyment than all other occupational levels. Professors and senior lecturers reported more family involvement than more junior academics and finally professors reported greater job control than more junior academics.

10.3 Study 2 – Diary study

Study 2 followed on from Study 1 by further examining patterns in working hours and work behaviours of academics over the course of a week (during teaching semester). This study also revealed a trend of long working hours, with 80% of the academics working in excess of 40 hours a week, 30% of whom worked in excess of the 48 hour per week legal limit. The impact of heavy work demands and high work intensity on long working hours over the course of a week were revealed. Finishing off work at home and doing additional work at home was commonplace due to a perceived lack of time during normal office hours to complete all work tasks. Negative practices such as not taking rest days (e.g. weekends), holidays and lunch breaks were prevalent for a substantial number of academics in Study 2. The trends in work practices of the academics are concerning, as long working hours coupled with a lack of rest breaks is
not conducive to recovery. Having sufficient time to rest and replenish resources is vital for long term well-being and performance (Bakker, van Emmerik, et al., 2008; Demerouti et al., 2009; Sonnentag, 2001, 2003).

The first objective of Study 2 was to determine the strategies used by academics to recover and detach from work. The analysis of post-work activities revealed that working in the evenings at home and working on weekends was routine for a substantial number of academics. Male academics were more likely than female academics to work in the evenings and at weekends. Conversely, female academics spent greater time in the evenings and at weekends than male academics engaged in household and caring activities, in line with general trends on the division of household tasks and use of leisure time (Darcy & McCarthy, 2007; Lee et al., 2007; OECD, 2011; Saxbe et al., 2011). Men spent more of their free time engaged in either work or passive activities relative to other activity types, while females spent more of their free time engaged in household/caring activities relative to all other post-work activities. The pattern of post-work activities corresponds with the suggestion that the ‘breadwinner’ role of the male still persists as does the ‘primary carer’ role of the female (Nelson & Burke, 2002).

The second objective was to determine which strategies academics reported as being more or less successful in facilitating recovery. The quantitative analysis revealed that engaging in physical and social activities promoted recovery more than engaging in housework, however, there was no difference in recovery experience ratings between housework and engaging in passive activities. However the qualitative analysis revealed that passive activities were referred to most frequently by participants as aiding their post-work recovery. Engaging in physical activities, socializing and family time were also identified to a lesser extent in the qualitative responses as methods which aided in recovering from work. Although the superior recovery benefits associated with physical activities and mastery activities in the evenings have been highlighted relative to engaging in passive activities (Demerouti et al., 2009; Garrick et al., 2008), Sonnentag (2001) did find that engaging in passive activities in the evenings resulted in higher well-being for a sample of teachers. Furthermore, it has been recommended that
individuals decide what recovery strategies work best for them and that finding an optimal balance of recovery / detachment is necessary (De Jonge et al., 2012; Sonnentag & Natter, 2004). For academics working in a long work hours culture, engaging in passive activities may be perceived as most attractive as these activities are undemanding, however, incorporating even a small amount of physical or social activities into one’s weekly routine may have long term recovery and detachment benefits (Sonnentag, 2001; Sonnentag & Natter, 2004; Zijlstra & Sonnentag, 2006). The weekend was highlighted in the qualitative diary entries as a significant time for rest and recovery to occur, while quantitative analysis revealed that fatigue levels were lower on Saturday and Sunday than in comparison with Monday to Friday and recovery and detachment levels were higher at the weekend versus earlier in the week.

The third objective was to examine gender differences and workaholism differences in post-work recovery and detachment strategies used by Irish academics. Notwithstanding the gender differences observed in post-work activities, the only other significant gender difference observed in Study 2 was a greater propensity for male academics to engage in mastery activities in the evenings and weekends relative to female academics. However, when the diary data was analysed taking workaholism type into consideration, an interesting patterns of findings was observed. Inconsistent with previous findings in the literature, the two workaholic groups (i.e. workaholics and enthusiastic workaholics) did not spend a greater amount of their free time than low drive workers engaged in work. Nevertheless, workaholics and enthusiastic workaholics reported significantly poorer ability to recover or detach from work when compared with low drive workers. In addition, both workaholic groups reported higher levels of work-related cognitive intrusion than low drive workers. Furthermore, workaholics reported significantly higher fatigue and emotional exhaustion over the course of the week than either the enthusiastic workaholics or the low drive workers. Finally, both the enthusiastic workaholics and workaholics reported higher levels of strain-based work-life conflict than low drive workers, while the enthusiastic workaholics alone also reported higher levels of time-based work-life conflict than workaholics and low drive workers. These findings offer new insights into the nature of work-life conflict and post-work activities of workaholics.
and non-workaholics and add to the knowledge base on workaholism and post-work recovery and detachment. See Section 10.6 for a more in-depth discussion of the workaholism findings across Study 1 and Study 2.

The final objective of Study 2 was to identify the barriers to successful recovery and detachment from work. The barriers to recovery and detachment were identified via content analysis of the open-ended diary question responses. Barriers to recovery and detachment identified included: feeling compelled to work in evenings and at weekends, preoccupation with work, heavy workloads and work-related travel. Study 2 was significant also in that an analysis of the work-related thoughts of academics in the evenings was conducted. This qualitative analysis revealed that the academics were more prone to highlight negative thoughts as opposed to positively reflecting on their work. Anxiety, guilt and frustration were commonly identified emotions in the analysis. Female academics reported more worry and rumination than the male academics.

10.4 Study 3 – Interview study

Study 3 was designed to follow-up on significant findings from Study 1 and Study 2. Unfortunately due to an unequal distribution of workaholism types in the interviewee sample, a more in-depth analysis of the relationship between workaholism and recovery could not be conducted. However, the interview study did allow for the broad issues of recovery, detachment and work-home boundaries to be considered with regard to gender. Also, in Study 1 it was found that academics desired greater segmentation between their home and work lives. Importantly, the interview study allowed the subject of work-home boundaries, boundary work and boundary maintenance to be addressed in greater depth.

The first objective of Study 3 was to determine how detachment from work was achieved and how this impacted on recovery and the home domain. The qualitative findings from Study 3 corroborated a number of the quantitative findings from Study 2. Based on the findings of Study 3, the home could be regarded as an extension of the workplace because most academics brought work home with them and/or conducted
work at home, particularly male academics. Working in the evenings has negative implications for recovery as time available to recover may be reduced and previous research has shown that engaging in work in the evenings detracts from recovery and detachment from work (Sonnentag, 2001). While working during the weekday evenings was commonly reported by academics in Study 3, using the weekend to recover from work was again identified as one of the main recovery strategies, in line with the findings from Study 2. Using weekend time to recover from the demands of work is a positive strategy as research shows that the weekend plays an important role in allowing workers to rest and re-energise in advance of the coming week (Zijlstra & Rook, 2009). However, a generalized sense of being time poor was reported by many of the interviewees and this impacted on choices of recovery activities. For instance, physical activities and social activities were less frequently reported as recovery strategies relative to family activities or passive activities.

A more systematic analysis of the interviewees’ views on detachment revealed other patterns. Specifically, the interviewees were divided into two groups based on their perceived ability to detach from work. Half of the group reported difficulties detaching from work, whereas the second group reported a greater ability to detach. A number of academics attributed their detachment problems to poor recovery related self-efficacy (i.e. an innate belief that their personality did not allow detachment), whereas for others their ability to detach easily from work was perceived to be a learned habit or due to clearly segmenting one’s work and home life. When questioned as to whether or not achieving detachment from work was positive or negative the academics were again divided. Half of the interviewees regarded detachment from work as positive, as it was perceived to facilitate greater work-life balance, and was more conducive to health and well-being and also work-related productivity. However, other academics regarded detaching from work as negative, as remaining cognitively tuned into work allowed problem-solving to occur (both consciously and sub-consciously), therefore increasing work productivity. Furthermore, the viewpoint that work was perceived as an enjoyable activity was also voiced; therefore, there was no reason to detach from work in the evenings. Research has noted that highly engaged employees benefit from detaching
from work (Sonnentag, Mojza, et al., 2008), however, more recently it has been suggested that physically and emotionally detaching from work is important to protect health and well-being while high levels of cognitive detachment negatively affects work performance (De Jonge et al., 2012). The interview study findings illustrates the subtle differences that occur from person to person in what is perceived as necessary and optimal with regard to detaching from work and also suggest that more research be conducted into the different forms of detachment identified by De Jonge and colleagues.

Many of the recovery/detachment barriers identified in Study 2 were also identified and elucidated in more detail in this study, for example, periods of high work intensity, high workload, interpersonal problems and information technology. Information technology was identified as an influential barrier to detachment as it was a means through which academics remained connected to work whilst at home and thus impeded detachment.

The second objective was to determine whether there was a gendered nature to interviewees’ accounts of recovery, detachment and boundary management. While the male and female academics did not generally differ in their views, a number of minor differences were observed. For example, female academics tried to a greater extent to have strict physical boundaries between work and home and females also perceived not detaching from work as more negative than male academics. The gender analysis also revealed the importance of the caring status of academics with regard to recovery and detachment. Academics with children were more conscious of their constrained working time and tried not to work at home as it detracted from family time. Use of family time as a recovery method was also favoured over other recovery strategies by academics with children. This is positive from a recovery perspective as engagement in childcare activities has been shown to enhance recovery from work (Offer & Schneider, 2008; Reddick et al., 2012). However, it may not be positive from an organisational perspective as a recent investigation into the culture of higher education concluded that “To be a successful academic is to be unencumbered by caring” (Lynch, 2010, p.63). This mismatch between the culture of higher education institutes and the findings suggesting that care duties may facilitate recovery and enhance well-being among
academics highlight a potentially maladaptive and unnecessary tension between family and the organization.

The final objective of Study 3 was to examine how academics managed boundaries between work and home and to determine whether their boundaries were perceived as facilitating the desired level of integration/separation. The analysis revealed that the majority of academics did not maintain strict boundaries (temporal, physical or psychological) between their work and home lives. Indeed, there were mixed views regarding whether or not academic work was compatible with strong boundaries between work and home life. Paradoxically, having boundaries was generally regarded as more positive for health and well-being, but this view was countered by the view that having boundaries was also associated with a perception of being less committed to one’s work. Again, these findings with regard to perceptions of work-home boundaries highlight a tension between organisational culture and reality, in that, having certain boundaries between work and home may aid in protecting both well-being and productivity, however, employees may perceive that having boundaries is incompatible with academic life if the organisational culture dictates that productivity can only be achieved by having high levels of work-home integration (i.e. with no boundaries). Frone (2003) noted that research on work-home boundaries can broaden our understanding of work-life balance and that it can help to define conditions that minimize and maximize work-life balance. The interview study illustrates the degree to which ‘optimal’ work-life balance arrangements can vary from person to person, ranging from considerable integration and good functioning (in terms of health and well-being) to considerable separation and good functioning. Sub-optimal work-life balance arrangements which did not facilitate good functioning were also evidenced in this study. Therefore, the results from the investigation of work-home borders and boundary management in the interview study supports the view that Border Theory (Clark, 2000) offers a means of capturing the complexities and paradoxical effects of work-life integration and conflict.
In addition to the stated objectives, additional issues were discussed and explored in Study 3, relevant to the findings of Study 1 and Study 2. Some of the most poignant reflections on academic work and long working hours in Study 3 revealed that despite working diligently for substantial periods of time, for some academics a sense of underachievement and dissatisfaction prevailed. Multiple work demands and a constant sense of pressure to be more productive coupled with less time for academic pursuits owing to heavy administrative demands contributed to a questioning of the current role and activities of academics. A lack of time to read and do ‘true academic work’ was highlighted in both the diary and interview studies as a problem for many academics. This has previously been referred to as the loss of ‘timeless time’ for research and reflection (Ylijoki & Mäntylä, 2003), and reflects a growing trend in academic institutions towards time compression and a focus on productivity and efficiency (Menzies & Newson, 2008). Soliman & Soliman (1997) have noted that dissatisfaction with academic work, or the combination of teaching, research and administrative duties can negatively impact on quality of work.

Furthermore, Study 3 highlighted some of the negative health effects associated with lack of recovery from work combined with high levels of occupational stress. Early career stage burnout and concerns about burning out were significant in this study for a subsection of academics. Some junior academics in particular struggled early in their careers due to role ambiguity. A range of both positive and negative stress coping methods were highlighted in this study. Physical exercise in the form of walking was considered to be a good de-stressor by many academics. However, negative coping methods, such as over/under eating, smoking, alcohol consumption and disengaging from work (e.g. reduced motivation, reduced communication with colleagues) also featured a ways in which academics tried to cope with their work.

With regard to the generalizability of the findings of this project, it must be noted that in the early stages of the project the scope reduced from a national study to a multi-institute study due to the refusal of three of the seven Irish universities to participate in the study and the non-response of the other university to the request to conduct the initial study.
Furthermore, in Study 2, one university did not respond to the request to conduct the diary study, therefore, reducing the number of participating universities to two. Finally, in the interview study, academics from only one university were interviewed. Therefore, it is not possible to generalize the findings of these studies beyond the samples employed. However, together, the three studies provide rich insights into the nature of work-life conflict in Irish academics and suggest many useful directions for future research. See section 10.8 for more details on future research options.

10.5 Gender

Throughout the three studies in this project, gender was incorporated as a variable. As noted by Hass (1995, p. 115) “Gender boundaries set up a hierarchical structure of constraints and opportunities which can affect work-family linkages.” Furthermore, it has been noted the roles and experiences of women and men remain entrenched in gendered assumptions which have significant impact upon paid work and the integration of work with other aspects of life (Gambles et al., 2006). Therefore, this project aimed to comprehensively analyse gender as a variable of relevance for understanding working hours, work-life conflict and post-work recovery in Irish academics.

Ylijoki (2013, p. 248-249) has noted that the level of commitment required for academic work “…is at a standard that anyone would find hard to live up to, particularly women academics still having more family responsibilities than their male colleagues.” This statement is somewhat supported by the findings across all three studies in this project, in that male academics consistently reported working longer hours than females. Thus, male academics in this study appeared to be fulfilling the ‘ideal academic’ role to a greater extent than female academics. Consistent with this view, it has been noted that ‘ideal worker’ status is directly linked to number of hours worked, with greater hours equating to a more desirable worker (Lewis, 2001). Furthermore, Study 2 revealed that males engaged in more negative work practices than females, such as not taking breaks during work or not taking holidays, while Study 2 and Study 3 also revealed that men worked more often at the weekends than women.
The findings from Study 2 indicated that the time available for work for female academics was constrained by their greater responsibility for household/caring activities in the evenings and at weekends. Furthermore, although time spent in different work activities was not directly measured in this project, recent research has found that female academics are likely to do significantly less research than male academics (Misra, et al., 2012). Doherty (2010) has suggested that female academics do less research owing to the need to use one’s own discretionary time for research. By not dedicating equally long hours to work, female academics may be competitively disadvantaged and suffer more from work-related stress as indicated in Study 1. It has been noted that an intractable tension exists in academia between professional success and family responsibilities (Monroe, et al., 2008). Furthermore, Monroe et al., (2010, p.221) stated that “It is not gender that imposes limits on women’s professional success. It is children, family and domestic duties.”

As already noted, female academics reported poorer functioning across a number of measures. For example, in Study 1 female academics reported higher psychological strain, higher perceived work intensity and higher perceived organisational expectations to work long hours. Study 2 revealed that female academics were more prone to worry and rumination than male academics. This may be explained by reference to some of the known challenges faced by female academics working in the university sector. According to Fielden & Cooper (2002) females typically work in what can be considered ‘masculine’ workplaces/organizations and Lewis (2001) argues that a male model of work is deeply embedded in most organisational cultures. Lynch (2010) has noted that universities are traditionally patriarchal institutions. Masculine organizations strongly adhere to the ideal worker norm (Lewis, 2001). The ideal worker norm assumes that workers can put the job first no matter what (Gambles et al., 2006) and give unending attention and time to their work role without interference from family/home roles, and because of this females may face an increased number of barriers to career progression and potentially higher levels of stress when compared with their male counterparts (Fielden & Cooper, 2002).
The behaviour required to progress within academia and other institutions is transmitted to employees both formally and informally through a process of socialization. Socialization thereby defines what is considered normal, acceptable and successful behaviour. Drago et al., (2001) summarise this process by stating that “Pay and promotion systems, rules around working time, and beliefs of those from previous generations who have succeeded as ideal workers and currently manage our organizations, are all built upon the presumption that only ideal workers should be hired, retained, and rewarded” (Drago, Crouter, Wardell, & Willits, 2001, p.3-4). The interview study revealed that a number of academics believed that working long hours was regarded more favourably at an organisational level, and that maintaining a large degree of work-home segmentation was regarded less favourably. Indeed, it was noted by female academics who tried to compress their work into a 40 hour week and who tried to maintain segmented work and home lives, that they were probably not regarded as committed academics and that they were at a promotional disadvantage. It may be the case that female academics perceive that they are expected to cope with high work intensity and that they are expected to work long hours similar to their male colleagues. However, as they are not in a position to work these long hours, stress and psychological strain ensues. As evidenced in Study 2, female academics were more prone to worry and rumination than male academics, with concerns in relation to workload, meeting deadlines, and interpersonal issues with staff and students all featuring in the qualitative analysis.

This masculine model of work may have been appropriate in the past, but now is less relevant to workplaces employing large numbers of female workers and dual-earner couples. Workplaces with long established ‘traditional’ or ‘ideal worker’ work cultures have assumed male oriented work practices and therefore can subtly cause inequitable conditions for female workers (Doherty, 2010; Doherty & Manfredi, 2006b; Gambles et al., 2006; Mayer & Tikka, 2008). In addition, as shown in Study 3, academic men, particularly men with children also have caring and household duties to perform, and academic men equally benefited from spending time with their families, in terms of positive affect, social support and recovery. However academic men who engage
actively in their family/home role may also be subtly disadvantaged by ideal worker expectations within the workplace.

With regard to work-life conflict and gender an interesting set of findings were observed. Consistent with the general findings in the literature (Byron, 2005), mean differences in levels of work-life conflict were not observed in Study 1 when men and women were compared. Furthermore over the course of a week in Study 2, no gender differences were observed in mean levels of either strain or time-based work-life conflict and life-work conflict. The finding of no gender differences in mean levels of work-life conflict in two studies is inconsistent with previous work-life conflict studies in academia where gender differences have been observed, both with female academics reporting higher levels of work-life conflict (Cantano et al., 2010; O'Laughlin & Bischoff, 2005) and male academics reporting higher levels of work-life conflict (Winefield et al., 2008). However, Study 1 illustrated the importance of examining gender differences in both the antecedents and outcomes of work-life conflict, as it was shown that gender moderated the relationship between a number of the exogenous variables and the outcome variables. Through the use of structural equation modeling a more nuanced examination of gender differences in work-life conflict was allowed. This method allowed contextual influences and variable interactions to be examined, therefore providing a more comprehensive examination of gender differences in work-life conflict in academia.

Many qualitative studies have noted the particular difficulties faced by female academics (Acker & Armenti, 2004; Bailyn, 2003; Monroe et al., 2008; Probert, 2005) and more recently male academics (Reddick et al., 2012) trying to balance the demands of an academic career with demands of family and home life. Indeed, Reddick et al., (2012) noted in their study of work-life conflict in academia, that male academics unanimously agreed that female academics were at a greater a greater disadvantage in academic institutions due to their greater responsibility for home and caring roles and that work-life conflict was a more significant issue for female academics. Although in this project, academic men and women experienced equal levels of work-life conflict, women
ultimately reported higher levels of psychological strain and worry. That is not to say that the male academics were immune from negative influences, but it appears that the high levels of work enjoyment experienced by male academics buffered them against some of these negative effects.

Addressing the gender issues which related to working hours and work-life conflict within academia is fraught with difficulties because both workplace culture and the home environment must be addressed. As stated by Korabik et al., (2008, p.229) “To change these circumstances will require a complete overhaul of our present socio-cultural system. This will be incredibly difficult to bring about and will take many years, if not generations, to accomplish”. However, both Halpern (2008) and Korabik et al., (2008) have noted that raising awareness in relation to gender-role stereotyping is an important first step, in both academia and beyond. Williams (2007) has stated that ‘unexamined stereotypes’ affect behaviour while Korabik et al., (2008) note that gender is a social cue, with the power to effect evaluations, leading to biases in selection, performance reviews and promotion. By raising awareness of gender stereotyping in organisations a greater understanding of work-family issues for both men and women may occur. Male and female academics may equally benefit from interventions (both organisational and individual) which address improving recovery and detachment and optimising work-home boundaries.

10.6 Workaholism
As discussed in the literature review, very few studies have analysed the impact of workaholism on work-life conflict and recovery within the academic setting. Therefore, the current study makes an important contribution to our understanding of workaholism and its impact on work-life conflict, well-being, recovery and detachment in academics. Study 1 highlighted the negative impact of high work drive on reported levels of work-life conflict and psychological strain and also the buffering effect of high work enjoyment on strain (for men only). Furthermore, Study 2 revealed that the drive element of workaholism was significantly correlated with negative affect, cognitive intrusion, affective rumination, problem-focused rumination and an inability to detach
from work. Conversely, high work enjoyment was significantly correlated with high positive affect and low negative affect. These findings correspond with the general view in the extant literature, that the work drive factor of workaholism is more significant in causing negative outcomes (McMillan & O’Driscoll, 2004) than the work enjoyment factor. The diary study results with regard to detachment and recovery also illustrate this point. While both enthusiastic workaholics and workaholics displayed more difficulty in recovering and detaching from work in comparison with low drive workers, the workaholics were unique in that only they experienced significantly higher levels of fatigue and emotional exhaustion than the low drive workers.

However, with regard to work-life conflict, the enthusiastic workaholics were less well-functioning as they reported significantly higher levels of both strain and time-related work-life conflict than low drive workers, while the workaholics only displayed higher strain-based conflict. Therefore, although the enthusiastic workaholics experienced more conflict than either the workaholics or low drive workers, the qualitative analysis revealed that they reported less negative emotions in relation to work than the workaholics. Again, it may be the case that the high work enjoyment experienced by the enthusiastic workaholics offsets the impact of work-life conflict on emotion.

The pattern of differences between the workaholics and enthusiastic workaholics in Study 2 are relevant to the current debate on workaholism versus work engagement. Work engagement is defined as “a positive, fulfilling work related state of mind that is characterized by vigor, dedication and absorption” (Schaufeli, Salanova, Gonzalez-Roma, & Bakker, 2002, p. 74). Although workaholics and highly engaged workers may on the surface appear similar, engaged workers lack the compulsive drive that is inherent to workaholism (Bakker, Schaufeli, Leiter, & Taris, 2008). Research has shown that work engagement is linked to positive outcomes, whereas workaholism is linked to negative outcomes (Gorgievski & Bakker, 2010; Shimazu & Schaufeli, 2009). It has been suggested that the work enjoyment factor of workaholism is not a core part of work addiction (Mudrack, 2006) and therefore, only obsessive (drive-related) workaholism should be considered in workaholism studies (van Wijhe et al., 2012). However, based
on the pattern of findings in this study, it is recommended that Spence & Robbin’s (1992) typology of workaholism continues to be employed in workaholism research. Although in Study 1, work drive predicted negative outcomes (i.e. higher levels of work-life conflict and psychological strain), high work enjoyment only buffered male academics from strain. Furthermore, Study 2 indicated that, at least in relation to work-life conflict, enthusiastic workaholics experienced more time-related work-life conflict than either workaholics or low drive workers and similar levels of strain-related work-life conflict to workaholics. Furthermore, although the workaholics reported higher levels of negative emotions in relation to work, it was noted in the qualitative analysis that the diary entries of a number of the enthusiastic workaholics reflected high levels of anxiety, worry and negative emotion over the course of the week. Therefore, the differences between workaholic types and non-workaholics in relation to work-life conflict should be further explored.

Based on the workaholism findings of this project, from a health promotion perspective the question that must be addressed is whether or not individual or organisational interventions can be used to reduce the negative impacts of workaholism in the academic setting. Andressen et al., (2013) have noted that there is currently a lack of research on interventions and treatments for workaholism, while acknowledging that Burwell & Chen (2008) have made some useful recommendations for interventions. For example, positive psychotherapy, quality of life therapy, workplace work-life balance interventions, and training managers to recognise workaholic behaviour. Challenges to interventions and treatments for workaholism are the fact that most workaholics deny their work addiction (Robinson, 1998) and that societal factors such as a positive view towards a strong work ethic and working long hours encourage and support workaholism (Burwell & Chen, 2008). As noted by Robinson (2000, p. 34) workaholism is regarded by many as “the best dressed mental health and family problem of the 21st century”.

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Within the diary study, a number of the academics acknowledged that they had difficulty in detaching and recovering from work and that they would need help to put in place positive strategies to enhance their abilities in this context. Although the overall number of academics expressing this view was low, finding a group of academics willing to participate in a recovery/boundary management intervention could form the basis of a pilot intervention for both workaholics and non-workaholics struggling with these issues. Flaxman et al., (2012) have suggested a number of interventions which could be implemented to increase psychological detachment from work and reduced cognitive intrusion and perseverative thinking, such as, encouraging the pursuit of more active or engaging activities during non-work time (as this requires attention to be focused away from work) and mindfulness training programmes to address perseverative thinking.

At an organisational level, it has been recommended that unrealistic work expectations and impossible job descriptions be addressed as they may facilitate the development of workaholism (Fassel, 1990). Within the context of this study, the difficulties of managing heavy workloads, high work intensity was evidenced, as universities strive to increase productivity with more limited resources (Ogbonna & Harris, 2004; Ylijoki, 2013). Therefore, addressing workload and reviewing productivity expectations could in theory help to address some of the organisational factors which support workaholic behaviour. However, as noted by Doherty & Manfredi (2006) university management may not be willing to address these thorny issues.

10.7 Practical Implications
From an organisational management and occupational health and safety perspective, the fact that a significant portion of academics are working well in excess of the legal time limits set out in the Working Time Act (1997) is a concern. The average 48 hour working week stipulated as the weekly maximum is set at a level to prevent health issues known to be associated with long working hours. Therefore, the work practices adhered to by many academics may negatively affect their psychological and physical health in the long term. Addressing this issue is problematic given that academics generally value their autonomy and the ability to self-direct their working time. In addition, a large
portion of academic work is conducted remotely outside of the university setting, therefore, university management must decide whether it is possible to address and/or control this unseen work. Dooris et al., (2012) note that healthy universities focus not only on the delivery of key institutional priorities but are also able to anticipate, identify and respond to public health challenges, such as the health effects associated with long working hours within its employee population.

This issue is further complicated by the drivers of long work hours identified in these studies. For example, on one hand highly job involved academics may put in long hours due to the highly absorbing nature of their work, whereas on the other hand, some academics may work long hours due to heavy work demands, high work intensity and pressure for greater productivity. According to Burke & Fiksenbaum (2008) a central issue in the relationship between hours worked and well-being is whether one works long hours out of choice or one is pressurized to work long hours. There may be significant differences in the impacts upon employees’ health if they have voluntarily worked long hours as opposed to having long hours imposed upon them. Indeed, control over work hours has been found to influence perceived stress levels (Hall & Savery, 1986). This idea is also supported by Karasek’s (1979) Job Control-Demand model of occupational stress, where decision latitude (job control) is regarded as a buffer against the development occupational stress. Notably, in Study 1 it was observed that professors reported more job control than more junior academics and also reported higher levels of job satisfaction than more junior academics. It was also observed in Study 1 that high job control was negatively correlated with psychological strain, work-life conflict and life-work conflict.

Whilst the importance of work intensity and demands as drivers of long working hours across the three studies is worrying, it is not unexpected. As a result of the implementation of the Croke Park Agreement (part of the overall governmental response to the recession and general economic climate in Ireland) anecdotal reports indicate that work pressures on academic staff have increased in Ireland over the past five years. Increased work loads have occurred as a result of a recruitment ban, the non-
replacement of academic staff (e.g. retirees), losses of academic staff (e.g. discontinuation of fixed term contracts), increased work requirements (e.g. additional teaching weekly hours) and a drive for greater accountability and transparency (i.e. increased levels of documentation). The qualitative findings from Study 2 and Study 3 describing heavy work demands and high work intensity is consistent with reports of heavy academic workloads in other countries (Acker & Armenti, 2004; Cantano et al., 2010; Kinman & Jones, 2003; Ylijoki, 2013).

An obvious response to this finding is to recommend that university management take heed of workload and work intensity as significant issues related to potential personal and health problems for their academic staff. For the long-term well-being and health of the academic population, workload should ideally be addressed through means of workload planning. Ensuring equitable workloads across staff is a major strategic process which can be beneficial for the institution if done well (Barett & Barett, 2006). However, Irish universities must be willing to engage with the issues of workload and intensity, as it has been shown in a British university study that university management may not see the need to address overwork of academics due to lack of alternative employment options for many academics (Doherty & Manfredi, 2006a). Indeed, research shows that leadership (Dellve, Skagert, & Vilhelmsson, 2007) and gaining management support for health promotion initiatives within the workplace is necessary for success (Hodgins, Griffiths, & Whiting, 2012; Shutler-Jones, 2011). Shutler-Jones (2011) has noted that institutional commitment is a pre-requisite for achieving significant, meaningful and sustainable changes in well-being and engagement in the higher education sector. Addressing workload is further complicated by the significant amount of ‘invisible’ work conducted outside the workplace and outside of traditional office hours. Job control and academic freedom are highly valued, and the level of work enjoyment experienced by many academics when working leads to tricky questions as to at what point work becomes leisure. It has been noted that over-work may be voluntary and occur without any organisational rewards (Peiperl & Jones, 2001). Therefore, addressing workload and work intensity will require the use of multi-level interventions which address cultural norms, organisational practices and individual behaviours.
The qualitative diary and interview data gained in Study 2 and Study 3 indicated that many academics did not know how to switch off effectively from work and a number of study participants noted that they could benefit from advice on how to psychologically detach from work and maintain stricter boundaries between home and work. Research suggests that recovery experiences are malleable and can be promoted via training programmes (Hahn, Binnewies, Sonnentag, & Mojza, 2011). Hahn et al., (2011) have shown that participation in a recovery intervention that involved both educational aspects, group and individual exercises focusing on four recovery experiences (psychological detachment, relaxation, control and mastery during non-work time) caused positive improvements in detachment, relaxation and control. Additional benefits included better reported sleep quality, increased recovery-related self-efficacy, lower levels of stress and negative affect up to three weeks after the intervention. Therefore, designing a recovery intervention programme for academics and other university employees may aid employees struggling in the face of high work demands and long working hours. Raising awareness of the benefits associated with particular types of after work activities (i.e. physical activity and mastery) may foster a more proactive approach towards personal recovery in both academic and non-academic employees.

Demerouti et al., (2012) have suggested that organisations should facilitate the taking of breaks by employees. Addressing this issue within the university setting could be an initial starting point for a more extensive recovery intervention programme. Steps to raise awareness of the importance of taking breaks with both management and all university employees should be investigated. However, improving awareness alone will not have the desired outcomes. Management need to determine how best to set an example and foster a culture where taking breaks is acceptable. However, this issue is entwined with the issue of workload and expectations around workload and productivity.

Considering the issues around burnout and stress revealed in Study 3, particularly early career burnout, university management should put measures in place to provide greater support for junior academics. Clearer expectations around role requirements and productivity requirements, in parallel with performance reviews for example, may help
to address these issues. A mentorship programme where a junior academic could ask a more senior academic for advice in relation to role requirements may also be of use.

10.8 Overall Study Strengths

Upon review of the three studies conducted, there are a number of strengths associated with the whole project which must be considered. Firstly, this study began in an exploratory fashion with the aim of investigating working hours, work-life conflict and psychological strain within the Irish university sector, as no such study had been previously conducted. From the beginning a decision was made to investigate both the work and non-work domains of academics, as Eby et al., (2005) in their review of work-family research noted that the home domain had received far less research attention when compared to the work domain. By studying both the work and non-work domains of academics, a comprehensive view of the work-home interface was obtained, which ultimately strengthened the overall project.

A second overall strength was that this project addressed a number of gaps identified in the literature. Specifically, gender differences in the antecedents and consequences of work-life conflict were investigated which furthered our understanding of the complex nature of work-life conflict and the moderating role of gender. In addition, gender differences in psychological detachment from work were investigated in both the diary and interview studies, as this issue had previously been highlighted as requiring attention by Cropley & Millward (2009). The impact of long working hours on work-life conflict and psychological strain were also examined in line with calls in the literature for greater attention to be given to work hours and their impacts. Finally, it must be noted that the incorporation of workaholism into this project addressed a noted gap in the literature, that is, the lack of research on the influence of personality variables on work-life conflict. The results from the survey and diary studies adds to the limited research on workaholism in relation to both recovery and work-life conflict.

Through the use of a mixed-method design, incorporating both quantitative and qualitative elements, a rich dataset was collected which allowed the investigation of macro, meso and micro level issues relevant to work-life conflict in academia. The
inclusion of the diary method and interviews as part of the overall study design addressed the calls within the work-family literature to use more innovative methods and qualitative methods when studying work-life conflict. Indeed, few diary studies have been conducted within the academic setting. Diary methods are particularly useful as they allow the dynamic nature of the constructs of interest to be examined and are regarded as providing findings that are more comparable to real life than traditional survey instruments. The inclusion of open-ended questions in the diary instrument was also innovative as few qualitative diary studies have been conducted within academia and/or in relation to post-work recovery.

An additional strength of this study was the study of work-home boundary management and Border Theory (Clark, 2000) in the interview study. To date, this topic has been under-studied, despite the fact that work-home boundaries play an important role with respect to both post-work recovery and work-life conflict. The interview study provided in-depth detail on preferences of academics with regard to work-home segmentation and integration and the practicalities of managing work-home borders.

Finally, this study is important as it highlighted a number of potential threats to the well-being of Irish academics (e.g. long working hours, high work demands, inconsistent post-work recovery), but also indicated practical measures which can be taken at the organisational and individual levels to maintain the health and productivity of Irish academics e.g. taking breaks during work, engaging in physical exercise after work, partaking in hobbies which prevent rumination, etc.

10.9 Future Research
The studies suggest a number of fruitful areas for future research. Notably, research on work-life balance interventions (Jones, Burke, & Westman, 2006b) and recovery interventions is limited (Hahn et al., 2011). Research into suitable interventions for academics in particular should be considered, as conventional work-life balance polices do not seem to be addressing the needs of academics and many academics are struggling to consistently and fully recover from work. Study 1 and 2 findings suggest that
organisational interventions directed at workload, role ambiguity and organisational support may be necessary, as are individual level interventions that focus on working time, post-work recovery, psychological detachment and workaholism, due to their potentially negative influence on well-being. A major challenge for intervention work in this area is how best to untangle intrinsically positive and negative drivers of long working hours. The suggested pathways between long working hours and health, including insufficient recovery and poor lifestyle behaviours (van der Hulst, 2003), could be a starting point for further research and intervention work, assuming researchers can work with institutions and individual academics to design a new work plan that facilitate both productivity and sustained well being. Furthermore, as this study shows, a gender neutral approach to these issues at the organisational level may not capture the complexity of gender differences in the relationship between the academic work context, work-life conflict, recovery, detachment and psychological strain in men and women. As noted by Green et al., (2000, p. 8) a mix of health promotion strategies may be required in order to achieve both environmental change as well as individual behaviour change. Multi-level and multi-dimensional actions will be required “to achieve and sustain impact.”

Future recovery/detachment studies in academia could incorporate more diverse data collection methods, for example, greater use of experience sampling methods (Snir & Zohar, 2008), physiological measures of post-work recovery (Saxbe et al., 2011), spousal reports of recovery (Sonnentag, Kuttler, et al., 2010) and longitudinal designs to examine factors that impact on changes in levels of recovery and detachment over time (Binnewies et al., 2009). One limitation of Study 2 is that is relied upon self-reported recovery measures rather than objective measures that might provide an index of recovery (e.g. physiological measures). There may be a mismatch between objective and subjective indices in this regard and future diary studies should seek to include both types of measures when examining the effects of post-work activities on recovery levels. Given the pattern of findings in Study 3, where some academics functioned well despite low recovery time and an inability to detach from work, future investigations of detachment from work in academia could use qualitative methods to explore the roles of
the three types of detachment (i.e. physical detachment, emotional detachment and cognitive detachment) suggested by deJonge et al., (2012) in facilitating recovery and psychological well-being.

In comparison with cross sectional studies that have employed global measures of work-life conflict, Study 2 findings also highlight the added value of the diary study methodology, which can offer a more nuanced view of the work-home interface. Montgomery et al., (2009) have stated that “daily studies of inter-role conflict may provide a closer approximation to reality than cross-sectional or longitudinal studies” (p. 456) and offer a view of the dynamic nature of the constructs of interest. Therefore, it is recommended that diary methodology, both qualitative and quantitative and other forms of experience sampling methods be incorporated in future studies of work-life conflict within academia.

Workaholism has been identified as a construct worthy of further investigation based on the findings from Study 1 and Study 2. While there is general consensus that workaholism is a personality trait, it has been noted that experiences and events in one’s environment may activate and support workaholism (Burke, Matthiesen, & Pallesen, 2006). Future workaholism studies in academia should investigate whether particular aspects of academic work within the university setting facilitate the onset of workaholic type behaviour patterns. In the research to date on occupational stress and work-life conflict, many studies in other countries compare differing types of third level education institutes, for example, older versus newer universities in Britain and Australia (Tight, 2010; Winefield et al., 2008). A similar cross-comparative study of workaholism and its effects in Irish third level institutions (e.g. universities and institutes of technology) may shed further light on how organisational cultures impacts on the development of workaholism.

Furthermore, following on from the findings in Study 2 that workaholics report poorer well-being than enthusiastic workaholics, despite the fact that both groups had problems recovering and detaching from work, an intervention study could be designed to attempt
to get workaholics to focus more on the positive features of their work, in order to promote work enjoyment. Burchell & Chen (2008) have noted that many new positive psychology therapies could be applied to the treatment of workaholism, assuming that workaholics both recognise this personality characteristic in themselves and decide that they require help.

Finally, given the finding in Study 1 that supervisor support did not predict any of the outcome variables in the hypothesised model, further investigation into the impact of supervisor support on work-life conflict and psychological strain in academia is warranted. It may be interesting to investigate the role of supervisors as ‘gatekeepers’ between work and home, in line with Clark’s Border Theory (2002) and it’s suggestion that gatekeepers play an important role in facilitating or preventing easy transitions of employees between their work and home domains.

10.10 Conclusions
This study examined the work and non-work behaviours of academics in order to evaluate the challenges associated with combining academic work with home and family demands. A long work hours culture was demonstrated amongst Irish academics included in the study, with factors such as heavy work demands and high work involvement identified as significant drivers of long working hours in both male and female academics. Male academics in this study appear to be fulfilling the role of the ‘ideal academic’ to a greater extent than females by working longer hours and devoting more of their discretionary time to work. Conversely, female academics faced greater constraints on their working hours than male academics owing to their greater responsibility for household and caring activities in the home. Notably, female academics enjoyed their work less than males and experienced more psychological strain and higher levels of worry and anxiety than males. The study also demonstrated the negative effects of workaholism in relation to work-life conflict, post-work recovery and detachment and well-being, and further research on this personality characteristic is warranted given its potential impact on work-life conflict and post-work recovery. The study also demonstrated the usefulness of Border Theory (Clark, 2000) in elucidating the
practicalities of managing the boundaries between work and home. While this study has added to the knowledge base on academic work and its effects on well-being, and identified a number of areas for future research, the challenge for health promotion practitioners moving forward involves creating awareness of the harmful effects of overwork and promoting evidence-based practices designed to reduce work-life conflict and improve post-work recovery in academics.

This study is also significant in that it contributed to the knowledge base across a number of areas of research, in particular, workaholism, boundary management and the work-home interface, gender differences in predictors and consequences of work-life conflict, post-work recovery and psychological detachment from academic work. Additionally information was provided on working hours, work-life conflict and psychological strain in academics in the Irish university sector. Furthermore, the findings from this study have a number of practical implications for the university sector. Issues such as long working hours, high work intensity, inability to psychologically detach from work and/or maintain adequate work-home boundaries were shown to negatively impact on the well-being of academics. Universities need to proactively address these issues through the use of both organisational level and individual level interventions. The healthy university setting approach could be an appropriate mechanism to begin to address such issues if the scope of work is extended to include the health and well-being of academic and non-academic university staff as well as university students.
References


De Jonge, J., Spoor, E., Sonnentag, S., Dormann, C., & van den Tooren, M. (2012). "Take a break?!" Off-job recovery, job demands, and job resources as predictors


Grzywacz, J. G., & Marks, N. F. (2000). Reconceptualizing the work-family interface: An ecological perspective on the correlates of positive and negative spillover


the 17th Annual Convention of the Society for Industrial and Organisational Psychology.


16th October 2008

RE: Permission to contact staff

Dear xxxx

I am writing to request your permission to contact academic staff in xxxx in relation to my PhD study entitled ‘An analysis of work-life balance, employee stress and health in the Irish university sector’. A part of my study includes an electronic questionnaire survey sent to a quota sample comprising ten percent of the total number of academic staff in the seven Irish universities.

In order to complete my survey, academic staff at xxxx will be chosen using a stratified sampling technique and contacted via email to participate. Participation is voluntary. The questionnaire survey takes 15 minutes to complete.

Ethical approval for this study has been granted by the Ethics Committee at NUI Galway, and there should be no disruption to staff at xxxx at all. If you have any further queries in relation to the study, please give me a ring on 091 493465, or e-mail victoria.hogan@nuigalway.ie

Yours sincerely

Victoria Hogan
Lecturer
Dept Health Promotion
NUI Galway
Dear Staff Member

I am writing to ask you to complete a 15 minute survey that will help us to better understand the issue of work-life integration amongst Irish academic staff. The findings of this study will be used to inform the design of interventions that seek to enhance both worker well-being and productivity. This study is being conducted as part of my PhD thesis in the Department of Health Promotion, NUI, Galway, where I have been working for the past few years. Your participation would be greatly appreciated.

Permission to contact staff at your institution and conduct this survey has been granted by your Registrar. Your name and contact details have been identified through your institution website. Ethical approval for this study has been received from the NUI Galway Ethics Committee. The survey responses are completely confidential and cannot be linked back to individual participants. You can begin the survey by clicking on the following link -

I understand that your time is precious, and because the questionnaire responses are anonymous, to those of you who have completed the survey if you could email me with the word ‘completed’, this will ensure no reminder emails are sent to you. If you choose not to complete the questionnaire I would be most grateful if you could reply to this message with the words ‘unable to participate’

Best regards

Victoria Hogan
Lecturer
Dept Health Promotion
NUI Galway
Appendix 3

ACADEMIC WORKING TIME QUESTIONNAIRE

Section 1 - Consent

Dear participant,

Thank you for taking the time to complete this questionnaire. This survey is designed to investigate working time and work-life integration, stress and health in academic employees. The questionnaire should take no more than 15-20 minutes to complete. All responses will remain anonymous; your computer’s IP address will not be stored or associated with your completed questionnaire. In addition, all responses will remain confidential and results will be reported as a group, not individually.

Thank you again for your help

1. By checking below I have provided informed consent

☐ Yes, informed consent granted.

Section 2 – Your Job

1. Please indicate your job category:
   - Professor/Associate Professor
   - Senior Lecturer
   - College Lecturer
   - Junior (below bar) lecturer
   - Fixed term lecturer
   - Other (please specify)_____________________

2. Is your job?
   - Full time ☐
   - Part time ☐

3. Is your job?
   - Permanent ☐
   - Fixed term contract ☐
4. How long have you worked for the university?

<table>
<thead>
<tr>
<th>Less than 1 yr</th>
<th>1-3 yrs</th>
<th>3-5 yrs</th>
<th>5-10yrs</th>
<th>More than 10 yrs</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

5. How many hours are you contracted to work per week? ______

6. How many hours do you actually work per week (on/off site)?

<table>
<thead>
<tr>
<th>0-10</th>
<th>11-20</th>
<th>21-30</th>
<th>31-40</th>
<th>41-50</th>
<th>51-60</th>
<th>&gt;60</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

7. Please indicate how often you work before 9am and after 5pm Monday to Friday

- Never ☐
- 1-2 times per week ☐
- 3-4 times per week ☐
- Everyday ☐

8. Please indicate how often you work at weekends

- Never ☐
- Rarely ☐
- Sometimes ☐
- Often ☐
- Always ☐

9. Are you rewarded for working more hours? Yes ☐ No ☐

If yes, please specify rewards

____________________________________________________

10. How far do you live from your workplace?

<table>
<thead>
<tr>
<th>&lt; 5 miles</th>
<th>6-10 miles</th>
<th>11-20 miles</th>
<th>&gt; 20 miles</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>
11. On average, how long does your journey to work take?
   - <15 minutes
   - 16-30 minutes
   - More than 30 minutes
   - An hour or more

**Section 3 - Your level of Job Involvement**

Please indicate to what extent you personally agree or disagree with these statements.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Neither agree nor disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>The most important things that happen to me involve my job</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Most of my interests are centred around my job</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>I am very much involved in my job role</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>To me, my job is a very large part of who I am</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>My job is a very important part of my life</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
</tbody>
</table>
Section 4 - Your Job and Stress

Please indicate to what extent you personally agree or disagree with these statements.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Disagree</th>
<th>Agree, but I am not at all distressed</th>
<th>Agree, and I am somewhat distressed</th>
<th>Agree, and I am distressed</th>
<th>Agree, and I am very distressed</th>
</tr>
</thead>
<tbody>
<tr>
<td>I have constant time pressure due to a heavy work load.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I have many interruptions and disturbances while performing my job.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I have a lot of responsibility in my job.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I am often pressured to work overtime.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Over the past few years, my job has become more and more demanding</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I am treated unfairly at work.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>My job promotion prospects are poor.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I have experienced or I expect to experience an undesirable change in my work situation. My employment security is poor</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Section 5 - Your Job and Commitment

Please indicate to what extent you personally agree or disagree with these statements.

<table>
<thead>
<tr>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>I get easily overwhelmed by time pressures at work.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>As soon as I get up in the morning I start thinking about work problems.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>When I get home, I can easily relax and 'switch off' work.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>People close to me say I sacrifice too much for my job.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Work rarely lets me go, it is still on my mind when I go to bed.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>If I postpone something that I was supposed to do today I'll have trouble sleeping at night.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

Section 6 - Job Control

Please indicate to what extent you personally agree or disagree with the following statements.

<table>
<thead>
<tr>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Neither agree nor disagree</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Your job requires you to learn new things</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Your job requires a high level of skill</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Your job requires that you do things over and over</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Your job allows you freedom to decide how you do your job</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>You have a lot of say about what happens in your job</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>
### Section 7 - Time spent at Work

Please indicate to what extent you personally agree or disagree with each statement as it pertains to your job.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Neither agree nor disagree</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>My supervisor does not expect me to work more than my scheduled hours each day (e.g., 8 to 5 or a particular shift)</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>My supervisor always expects me to &quot;go the extra mile&quot;, even if that means staying late at work</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>My supervisor often expects me to work at home in the evenings and on the weekends</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>If I work very long hours, I will probably receive a bonus or a raise</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>If I work long hours, I will probably gain more status or prestige within my department</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>If I work long hours, I will probably be promoted</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
</tbody>
</table>
### Section 8 – Job Satisfaction

Please rate your level of satisfaction with each of the following features of your present job:

<table>
<thead>
<tr>
<th>Feature</th>
<th>Extremely dissatisfied</th>
<th>Very dissatisfied</th>
<th>Moderately dissatisfied</th>
<th>Not sure</th>
<th>Moderately satisfied</th>
<th>Very satisfied</th>
<th>Extremely satisfied</th>
</tr>
</thead>
<tbody>
<tr>
<td>Your job overall</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>The work itself</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>The physical work conditions</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Relationships with your line manager</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Your promotion prospects</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Your rate of pay</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Your hours of work</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Your job security</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Your opportunities to use initiative</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>The intellectual stimulation you receive</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
</tbody>
</table>
### Section 9 - Workaholism

Please indicate to what extent you personally agree or disagree with each statement.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Neither agree nor disagree</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>My job is so interesting that it often doesn't seem like work</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>I seem to have an inner compulsion to work hard</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>My job is more like fun than work</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Most of the time my work is very pleasurable</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>It's important to me to work hard, even when I don't enjoy what I'm doing</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Sometimes when I get up in the morning I can hardly wait to get to work</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>I often feel there is something inside me that drives me to work hard</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>I like my work more than most people do</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>I seldom find anything to enjoy about my work</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>I feel obliged to work hard even when it's not enjoyable</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>I often find myself thinking about work, even when I want to get away from it for a while</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>I do more work than is expected of me strictly for the fun of it</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Between my job and other activities I'm involved in I don't have much free time</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>I feel guilty when I take time off work</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>
Section 10 - Your level of Family Involvement

Please indicate to what extent you personally agree or disagree with these statements.

<table>
<thead>
<tr>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Neither agree nor disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>The most important things that happen to me involve my role as a spouse and/or parent</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Most of my interests are centred around my spouse / family</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>I am very much involved in my role as a spouse and / or parent</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>To me, my family / spouse role is only a small part of who I am</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
</tbody>
</table>

Section 11- Your job and your home life

Please indicate how often you have experienced the following during the last year.

<table>
<thead>
<tr>
<th>All the time</th>
<th>Frequently</th>
<th>Some of the time</th>
<th>Rarely</th>
<th>Never</th>
</tr>
</thead>
<tbody>
<tr>
<td>Your job reduces the effort you can give to activities at home</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Stress at work makes you irritable at home</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>The things you do at work help you deal with personal and practical issues at home</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Having a good day on your job makes you a better companion when you get home</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Personal or family worries and problems distract you when you are at work</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Responsibilities at home reduce the effort you can devote to your job</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Talking with someone at home helps you deal with problems at work</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Your home life helps you relax and feel ready for the next day’s work</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
</tbody>
</table>
Section 12 - Your Work – Life Fit

As you read the following statements, think about how descriptive each statement is for your current schedule. Please indicate to what extent you think your job and home life fit with each other

<table>
<thead>
<tr>
<th>How well does your current work day schedule meet your work needs?</th>
<th>Very poorly</th>
<th>Poorly</th>
<th>About 50/50</th>
<th>Well</th>
<th>Very well</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>On the days that you work, how well does your schedule of work hours meet your needs?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>How well does the overall flexibility of your current work schedule meet your needs?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Taking into account your current work hours and schedule, how well is your work arrangement working for you?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Taking into account your current work hours and schedule, how well is your arrangement working for your wife/partner?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Taking into account your current work hours and schedule, how well is your arrangement working for your child(ren)?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Taking into account your spouse’s work hours and schedule, how well is (his/her) work arrangement working for you?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Taking into account your spouse’s work hours and schedule, how well is (his/her) arrangement working for (him/her)?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Taking into account your spouse’s work hours and schedule, how well is (his/her) arrangement working for your child(ren)?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

10. Please rate your current position on the following scale

- My work and home lives are completely separate □
- My work and home lives are mostly separate □
- My work and home lives are somewhat separate □
- There is no separation between my work and home lives □
11. Please rate how you would **ideally like to be**

- My work and home lives would be completely separate □
- My work and home lives would be mostly separate □
- My work and home lives would be somewhat separate □
- There would be no separation between my work and home lives □

**Section 13 - Organisational Support**

Please indicate to what extent you personally agree or disagree with these statements.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Neither agree nor disagree</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>My organization has many programmes and policies designed to help employees balance work and family life</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>It is easy to find out about family support programmes within my organisation</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>My supervisor supports any company policy that helps employees with families</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>My supervisor measures people on their overall productivity, not simply hours spent in the office</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
</tbody>
</table>

**Section 14 - Your Health**

1. In general, would you say your health is….

<table>
<thead>
<tr>
<th>Poor</th>
<th>Fair</th>
<th>Good</th>
<th>Very good</th>
<th>Excellent</th>
</tr>
</thead>
<tbody>
<tr>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
</tbody>
</table>

2. Thinking about your physical health, which includes physical illness and injury, for how many days during the past 30 days was your physical health not good?

   ______

3. Thinking about your mental health, which includes physical illness and injury, for how many days during the past 30 days was your physical health not good?

   ______
4. Please indicate the frequency with which the following symptoms occurred over the past 6 months

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Never</th>
<th>Rarely</th>
<th>Sometimes</th>
<th>Often</th>
<th>All the time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Have your feelings been easily hurt?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Have you got tired easily?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Have you become annoyed and irritated easily?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Has your thinking got mixed up when you have had to do things quickly?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Have you done things on impulse?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Have things tended to get on your nerves and wear you out?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Has it been hard for you to make up your mind?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Have you got bored easily?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Have you been forgetful?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Have you had to clear your throat?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Has your face got flushed?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Have you had difficulty in falling or staying asleep?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

Section 15 – Demographic information

1. Are you? : Male ☐ Female ☐

2. How old are you?

   Under 20 ☐ 20-29 ☐ 30-39 ☐ 40-49 ☐ 50-59 ☐ 60 or over ☐

3. Are you?

   Single ☐ Married ☐ Widowed ☐ Separated ☐ Divorced ☐ Living with partner ☐

4. If you have a spouse or partner, does he/she work

   Full time ☐ Part time ☐ Does not work ☐
Section 16- Your Family

1. Are there any adult dependents (e.g., elderly) in your household?
   Yes □  No □  If yes, how many ...........

2. Are there any children in your household?
   Yes □  No □  If yes, how many ...........

   a. If yes, how many children do you have in each of these age groups?
   < 5 years ___  6 – 10 years ___  11-15 years ___  16-18 years ___

3. Do you need to organise childcare (formal or informal) for your children?
   Yes □  No □

4. How satisfied are you with the arrangements you have for child care?

   Very satisfied □  Satisfied □  Neutral □  Dissatisfied □  Very dissatisfied □

5. How often do you have interrupted sleep at night due to your children waking?

   Never □  About once a month □  About once per week □  2-3 times per week □  4-6 times per week □  Every night □

THANK YOU FOR COMPLETING THIS QUESTIONNAIRE
## Appendix 4 - Responses to open-ended question on rewards for long work hours

<table>
<thead>
<tr>
<th>Response Category</th>
<th>Occupational Position</th>
<th>Gender</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ability to keep up with workload</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Get more done</td>
<td>College lecturer</td>
<td>Male</td>
</tr>
<tr>
<td>I can keep up with my workload!</td>
<td>College lecturer</td>
<td>Male</td>
</tr>
<tr>
<td>It is only possible to do my work in an extended working week</td>
<td>Professor</td>
<td>Female</td>
</tr>
<tr>
<td>But there is not enough time during the working week to attend my teaching duties and conduct research............</td>
<td>College lecturer</td>
<td>Female</td>
</tr>
<tr>
<td><strong>Improves quality of work</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No, but I believe that my students are rewarded with an improved learning experience.</td>
<td>College lecturer</td>
<td>Male</td>
</tr>
<tr>
<td>I am satisfied with the better quality of work that results.</td>
<td>Junior Lecturer</td>
<td>Male</td>
</tr>
<tr>
<td><strong>Financial rewards</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Payment for night classes</td>
<td>College lecturer</td>
<td>Female</td>
</tr>
<tr>
<td>Extra money for correcting exams /essays</td>
<td>Junior lecturer</td>
<td>Female</td>
</tr>
<tr>
<td>I receive a pittance of €15k for running an MA programme which actually takes up more time than my.....</td>
<td>College lecturer</td>
<td>Female</td>
</tr>
<tr>
<td>For marking papers only</td>
<td>College lecturer</td>
<td>Female</td>
</tr>
<tr>
<td>For after hours lectures (i.e. evenings) yes, get paid overtime, but for all other work no.</td>
<td>Junior lecturer</td>
<td>Female</td>
</tr>
<tr>
<td>Rewarded with external research money</td>
<td>College lecturer</td>
<td>Female</td>
</tr>
<tr>
<td>I am well paid.</td>
<td>Senior lecturer</td>
<td>Male</td>
</tr>
<tr>
<td>As editor of a science journal I receive a small honorarium</td>
<td>Professor</td>
<td>Male</td>
</tr>
</tbody>
</table>
### Promotion / career progression

<table>
<thead>
<tr>
<th>Career advancement</th>
<th>Senior lecturer</th>
<th>Male</th>
</tr>
</thead>
<tbody>
<tr>
<td>Promotions</td>
<td>Professor</td>
<td>Male</td>
</tr>
<tr>
<td>Would attribute accelerated successful promotion to this workrate.</td>
<td>Senior lecturer</td>
<td>Female</td>
</tr>
<tr>
<td>Promotions</td>
<td>College lecturer</td>
<td>Female</td>
</tr>
<tr>
<td>Potential Career progression. Personal Fulfilment. No monetary reward.</td>
<td>Assistant Lecturer</td>
<td>Female</td>
</tr>
</tbody>
</table>

### Research output

| In the sense that this is when I get publications done and that brings benefits | Junior lecturer | Female |
| I have to raise my research profile, so all 'extra' work on research and publications brings indirect……….. | College lecturer | Female |
| More publications, better reputation for doing things on time | Senior lecturer | Female |
| Promotion based on research outputs | College lecturer | Female |
| Get more papers published and I enjoy writing a lot | College lecturer | Female |
| It frees time to do more interesting research! | College lecturer | Male |
| By 'work' here, I mean reading and writing related to my research. The more research-publications I……….. Not financially. Research gets done! | Senior lecturer | Male |

### Work enjoyment / personal fulfilment

<table>
<thead>
<tr>
<th>Enjoyment</th>
<th>Junior lecturer</th>
<th>Male</th>
</tr>
</thead>
<tbody>
<tr>
<td>Job satisfaction. Flexibility of working hours.</td>
<td>College lecturer</td>
<td>Male</td>
</tr>
<tr>
<td>Academic achievement</td>
<td>College lecturer</td>
<td>Male</td>
</tr>
<tr>
<td>Potential Career progression. Personal Fulfillment. No monetary reward.</td>
<td>Assistant Lecturer</td>
<td>Female</td>
</tr>
<tr>
<td>Get more papers published and I enjoy writing a lot</td>
<td>College lecturer</td>
<td>Female</td>
</tr>
<tr>
<td>Personal fulfilment of projects completed or progressed</td>
<td>College lecturer</td>
<td>Female</td>
</tr>
<tr>
<td>Personal satisfaction of doing the job as well as I can</td>
<td>Junior lecturer</td>
<td>Female</td>
</tr>
<tr>
<td><strong>Flexibility of working hours</strong></td>
<td>After</td>
<td>Gender</td>
</tr>
<tr>
<td>------------------------------------------------------------------------------------------------</td>
<td>-------</td>
<td>----------</td>
</tr>
<tr>
<td>Flexibility to take time off for personal reasons at other times</td>
<td>College lecturer</td>
<td>Female</td>
</tr>
<tr>
<td>I take back the hours during the week, but really it is impossible to say what is work and what isn’.....</td>
<td>Senior lecturer</td>
<td>Female</td>
</tr>
<tr>
<td>I operate flexitime in the sense that I make up in the evenings time taken during the day for family</td>
<td>College lecturer</td>
<td>Female</td>
</tr>
<tr>
<td>Job satisfaction. Flexibility of working hours.</td>
<td>College lecturer</td>
<td>Male</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Miscellaneous / General</strong></th>
<th>After</th>
<th>Gender</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not financially but personally - makes things easier!</td>
<td>Junior lecturer</td>
<td>Male</td>
</tr>
<tr>
<td>I do some consulting.</td>
<td>College lecturer</td>
<td>Male</td>
</tr>
<tr>
<td>Non-monetary</td>
<td>Senior lecturer</td>
<td>Male</td>
</tr>
<tr>
<td>Depends on the definition of rewarded</td>
<td>College lecturer</td>
<td>Male</td>
</tr>
<tr>
<td>None</td>
<td>Senior Lecturer</td>
<td>Male</td>
</tr>
<tr>
<td>Not applicable</td>
<td>College lecturer</td>
<td>Female</td>
</tr>
<tr>
<td>Output</td>
<td>Senior lecturer</td>
<td>Female</td>
</tr>
</tbody>
</table>
Appendix 5

Dear xxxx

I am writing to request your permission to email all academic staff in NUI Galway, to request their participation in the second study of my PhD (which I am undertaking here in the Discipline of Health Promotion). I previously conducted an electronic questionnaire survey of academic staff at NUI, Galway in 2008/2009, during the first stage of my work, which was approved by Professor Jim Ward on 01/08/2008.

This second study of my PhD seeks to analyse post-work recovery processes that Irish academics engage in, using a diary methodology. Participation in this study is voluntary, and will include only those academics who reply to the email and agree to participate. I am hoping to contact staff and conduct this study during the current Semester.

Ethical approval for this study has been granted by the Ethics Committee at NUI Galway, and there should be no disruption to staff at all. Please contact me if you have any further queries or would like additional information in relation to the study.
Appendix 6

Dear Academic Staff Member,

I am writing to you to request your participation in a study on work recovery and detachment activities that Irish academics engage in. This study forms part of a body of work which I am completing for my PhD. You may have previously completed an electronic questionnaire survey from me in 2008/2009 which investigated the effects of work hours and work intensity on health and well-being.

For this study, I am seeking volunteers to participate in a seven day diary study. It will require you to complete a short (<15min) diary once a day over the course of a working week (in the evenings from Monday to Sunday, just before you go to bed). The data from this study will aid in the identification of processes which aid academics effectively ‘switch off’ from work and also barriers to effective recovery and detachment from work.

Permission to contact staff at your institution and conduct this study has been given by your Registrar. Your name and contact details have been identified through your institution website. Ethical approval for this study has been received from the NUI, Galway Ethics Committee. Participants in this study and their institutions will not be identifiable in the write up of the findings and / or any papers generated from this work.

If you would like to participate in this study, then please reply to this email as soon as possible, as data collection must be completed before the end of the teaching semester. I will need your name and postal address, in order to send you your diary questionnaires and some further instructions. All participants in this study, who complete all seven questionnaires over the course of the week will be entered in a draw for a €200 gift voucher for Amazon.

Please feel free to forward this email to any of your colleagues who may be interested in participating. I would be happy to answer any questions you have in relation to this study, so please feel free to contact me.

Thank you for your time.

Yours Sincerely,

Victoria Hogan
Appendix 7

Work recovery & detachment study

Diary Completion Instructions

Introduction
Thank you for taking part in this diary study. This study forms part of a body of work being undertaken by Victoria Hogan for a PhD in Health Promotion.

This study is designed to allow you to indicate your work and home activities on a daily basis, over the course of a week. This study aims to explore recovery and detachment strategies used by Irish academics and to assess the extent to which these strategies are successful.

All information collected during the course of this diary study will remain strictly confidential. No information will be used in the write up of this work which would allow diarists to be identified.

Instructions for Diarists
1. Please complete the pre-diary screening questionnaire before you begin to record information in your diary. This questionnaire is designed to elicit some background information prior to you completing your diary. The questionnaire should take 10-15 minutes to complete. This questionnaire can be returned with the daily diaries in the return envelope.

2. You are asked to complete a diary questionnaire each day over the course of a week. The diary should be completed during the evening (before you go to bed) and indicate the various work and non-work activities that you engaged in during the day. Please begin your diary entries on a Monday evening.
3. You have received five weekday questionnaires and two weekend day questionnaires for completion during the course of the week. (Please ensure that you are using the correct questionnaire for the day in question).

4. Once you have completed all the diary questionnaires, please use the envelope provided to return the materials.

5. If you have any queries on any aspect of the project, please contact me at victoria.hogan@nuigalway.ie

Thank you again for your participation in this project, it is greatly appreciated.
Appendix 8

Pre-diary Questionnaire

Thank you for taking the time to complete this questionnaire. This questionnaire is designed to elicit some background information prior to you completing your diary. The questionnaire should take 10-15 minutes to complete.

This questionnaire should be completed in advance of beginning the daily diaries. It can be returned with the daily diaries in the return envelope.

SECTION 1

Q1. I consent to participate in this questionnaire survey

Yes ☐ No ☐

Q2. Do you agree to participate in the diary study?

Yes ☐ No ☐

Q3. Would you be willing to participate in an interview to further explore issues related to work recovery and detachment?

Yes ☐ No ☐

If yes, please enter your name and email address

_________________________________________________________
SECTION 2

Q4. Are you

Male □ Female □

Q5. How old are you

<25 □ 36 – 45 □
26 – 35 □ 46 – 55 □
36 – 45 □ 56 – 65 □
36 – 45 □ 65+ □

Q6. Please indicate your job category

Professor □ Senior Lecturer □
Junior (below bar) lecturer □ Fixed term lecturer □
College Lecturer □ Other □
Fixed term lecturer □

If you ticked other, please specify ________________________________

Q7. Is your job

Full time □ Part time □
Q8. How many hours do you usually work per week? (Both on and off site)

- <20 □
- 21-30 □
- 31-40 □
- 41-50 □
- 51-60 □
- >60 □

Q9. Are you

- Single □
- Married / living with partner □
- Separated / divorced □
- Other, please specify
  ______________________________________________________

Q10. Are there children in your household?

- Yes □
- No □

If yes please specify number of children and ages of children _________________
  ______________________________________________________
Q11. Please indicate how often you do the following practices using the rating scale provided:

<table>
<thead>
<tr>
<th>Practice</th>
<th>Never</th>
<th>Rarely</th>
<th>Sometimes</th>
<th>Often</th>
<th>Always</th>
</tr>
</thead>
<tbody>
<tr>
<td>Take work home</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Work outside of office hrs (9am-5pm)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Take all rest days as planned (weekends / bank holidays)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Take at least the minimum amount of annual leave (20 days)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Take a lunch break (away from office)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Q12. This section of the survey asks you about the thoughts and behaviours you may engage in after work. Please rate each statement using the scale provided:

<table>
<thead>
<tr>
<th>Statement</th>
<th>Very seldom or never</th>
<th>Seldom</th>
<th>Sometimes</th>
<th>Often</th>
<th>Very often or always</th>
</tr>
</thead>
<tbody>
<tr>
<td>In my leisure time I think about things that have happened at work</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Do you find it easy to unwind after work?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>I make myself switch off from work as soon as I leave</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>After work I turn work issues over and over again in my mind</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Are you irritated by work issues when not at work?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>I find solutions to work-related problems in my free time</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Do you become fatigued by thinking about work-related issues during your free time?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Do you leave work issues behind when you leave work?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>When not at work, I think about unfinished goals</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Do you find yourself doing other things in order to stop thinking about work related issues?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Are you troubled by work-related issues when not at work?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>My work related thoughts are repetitive</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Do you find yourself thinking about work-related issues when you are not at work?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Question</td>
<td>Very seldom or never</td>
<td>Seldom</td>
<td>Sometimes</td>
<td>Often</td>
<td>Very often or always</td>
</tr>
<tr>
<td>-----------------------------------------------------------------------------------------------------------------------------------------</td>
<td>----------------------</td>
<td>--------</td>
<td>-----------</td>
<td>-------</td>
<td>----------------------</td>
</tr>
<tr>
<td>After work I tend to think of how I can improve my work-related performance</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Do you feel unable to switch off from work?</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Do you become distressed about work-related issues during your free time?</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>In my free time I find myself re-evaluating something I have done at work</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Do you think about tasks that need to be done at work the next day?</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>I find thinking about work during my free time prevents me from relaxing</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>I am able to stop thinking about work-related issues in my free time</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Are you annoyed by thinking about work-related issues when not at work?</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>When not at work, do you feel worried by deadlines at work?</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>I find thinking about work during my free time helps me to be creative</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>When not at work, do you have trouble getting to sleep because of work-related issues?</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Do you wake spontaneously from your sleep at night?</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Do you wake up too early in the morning?</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
</tbody>
</table>
**SECTION 4**

Q13. Please indicate to what extent you personally agree or disagree with each statement.

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neither agree nor disagree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>My job is so interesting that it often doesn't seem like work</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>I seem to have an inner compulsion to work hard</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>My job is more like fun than work</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Most of the time my work is very pleasurable</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>It's important to me to work hard, even when I don't enjoy what I'm doing</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Sometimes when I get up in the morning I can hardly wait to get to work</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>I often feel there is something inside me that drives me to work hard</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>I like my work more than most people do</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>I seldom find anything to enjoy about my work</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>I feel obliged to work hard even when it's not enjoyable</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>I often find myself thinking about work, even when I want to get away from it for a while</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>I do more work than is expected of me strictly for the fun of it</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Between my job and other activities I'm involved in</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>I don't have much free time</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>I feel guilty when I take time off work</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
</tbody>
</table>
Q14. This scale consists of a number of words and phrases that describe different feelings and emotions. Read each item and then mark the appropriate answer in the space next to that word. Indicate to what extent you have felt this way during the past few weeks. Use the following scale to record your answers:

<table>
<thead>
<tr>
<th>Very slightly or not at all</th>
<th>A little</th>
<th>Moderately</th>
<th>Quite a bit</th>
<th>Extremely</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

**Rating**

Active
Alert
Attentive
Determined
Enthusiastic
Excited
Inspired
Interested
Proud
Strong

**Rating**

Afraid
Scared
Jittery
Nervous
Irritable
Hostile
Guilty
Ashamed
Upset
Distressed

*Thank you for completing this questionnaire*
Appendix 9

Week Day Diary Questionnaire

SECTION 1

Q1. Please indicate the day of week

<table>
<thead>
<tr>
<th>Day</th>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
<th>Saturday</th>
<th>Sunday</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
</tbody>
</table>

Please indicate the date and time of completion

________________________________________________________________________
Q2. How many hours did you work today?

- 0
- 1-2
- 2-3
- 3-4
- 4-5
- 5-6
- 6-7
- 7-8
- 8-9
- 9-10
- >10

Q3. Please rate your level of work intensity today.

<table>
<thead>
<tr>
<th></th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neither agree nor disagree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>I had constant time pressure due</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>to a heavy workload</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I had many interruptions and</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>disturbances while performing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>my job</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Due to pressure, I had to work</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>overtime</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Q4. Did you take a lunch break today, if so, please indicate the amount of time taken

- < 20 minutes
- 20-30 minutes
- 30-45 minutes
- 45-60 minutes
- >60 minutes
Q5. Did you take a coffee/tea break today, if so, please indicate the amount of time taken.

- < 15 minutes □
- 15-30 minutes □
- 30-45 minutes □
- > 45 minutes □

**SECTION 3**

Q6. Please indicate (in minutes) how much time you spent after work on the following categories of activities

<table>
<thead>
<tr>
<th>Activity</th>
<th>Time allocated</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Work related</strong></td>
<td></td>
</tr>
<tr>
<td>(e.g. finishing a piece of work, preparing for the next day)</td>
<td></td>
</tr>
<tr>
<td><strong>Household/childcare</strong></td>
<td></td>
</tr>
<tr>
<td>(e.g. making dinner, doing laundry / helping children with homework)</td>
<td></td>
</tr>
<tr>
<td><strong>Low effort activities</strong></td>
<td></td>
</tr>
<tr>
<td>(e.g. watching television, taking a bath)</td>
<td></td>
</tr>
<tr>
<td><strong>Physical activities</strong></td>
<td></td>
</tr>
<tr>
<td>(e.g. going for a walk/run/cycle, team-sports)</td>
<td></td>
</tr>
<tr>
<td><strong>Social activities</strong></td>
<td></td>
</tr>
<tr>
<td>(e.g. meeting friends, calling a friend for a chat)</td>
<td></td>
</tr>
</tbody>
</table>
Q7. Please indicate the level to which you switched off from work during each of the activity categories

<table>
<thead>
<tr>
<th>Activity Category</th>
<th>Not true at all</th>
<th>Somewhat true</th>
<th>Mostly true</th>
<th>Very true</th>
</tr>
</thead>
<tbody>
<tr>
<td>While performing household/childcare activities I could switch off completely</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>While performing low effort activities I could switch off completely</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>While performing physical activities I could switch off completely</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
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<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
</tbody>
</table>

Q8. Please indicate your level of agreement with the following statements.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neither agree nor disagree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Today, I would have preferred more time for relaxing and recovering from work</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>I feel like I have recovered from work today</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
</tbody>
</table>
Q9. The following questions explore the extent to which you 'switched off' from work during your personal time. Please indicate your level of agreement with the following statements

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neither agree nor disagree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>I didn’t think about work at all</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>I distanced myself from my work</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>I got a break from the demands of work</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>I was routinely distracted by work related thoughts</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>I found myself rehearsing work related scenarios in my mind</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>I was preoccupied today with work related duties</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Today I found it hard to let go of work related feelings</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>
Q10. The following questions investigate relaxation and mastery activities you engaged in after work. Please indicate your level of agreement with the following statements.

<table>
<thead>
<tr>
<th></th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neither agree nor disagree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>I used time to relax</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I took time for leisure</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I did relaxing things</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I learned new things</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I did things that challenged me</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I did something to broaden my horizons</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I sought out intellectual challenges</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Q11. Please describe your overall level of recovery after work today (max 100 words).

_______________________________________________________________________
_______________________________________________________________________
_______________________________________________________________________
_______________________________________________________________________
_______________________________________________________________________
Q12. If you were thinking about work this evening, please describe the type of work related thoughts you were having. (max 100 words)

_______________________________________________________________________
_______________________________________________________________________
_______________________________________________________________________
_______________________________________________________________________
_______________________________________________________________________
_______________________________________________________________________
_______________________________________________________________________

Q13. Please indicate any additional points you would like to make with regard to switching off from work today. (max 100 words)

_______________________________________________________________________
_______________________________________________________________________
_______________________________________________________________________
_______________________________________________________________________
_______________________________________________________________________
_______________________________________________________________________
_______________________________________________________________________
Q14. Please indicate your level of agreement with the following statements.

<table>
<thead>
<tr>
<th></th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neither agree nor disagree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>My work kept me from my family/personal activities more than I would have liked</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>The time I devoted to my job kept me from participating equally in household activities and responsibilities</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>I missed family / personal activities due to the amount of time I had to spend on work responsibilities</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>When I got home from work I was too frazzled to participate in family/personal activities</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>I was so emotionally drained when I got home from work that it prevented me from contributing to my family</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Due to the pressures at work today, I was too stressed to do the things I enjoy</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
</tbody>
</table>
Q15. Please indicate your level of agreement with the following statements.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neither agree nor disagree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>The time I spent on family/personal activities interfered with my work responsibilities</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>The time I spent with my family caused me not to spend time in work activities that could be helpful to my career</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>I had to miss work activities due to the amount of time I had to spend on family activities</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Due to stress at home, I was preoccupied with family matters at work</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Tension and anxiety from my family weakened my ability to do my job</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Because I am often stressed from family responsibilities, I have a hard time concentrating on my work.</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
</tbody>
</table>
Q16. How fatigued do you currently feel?

<table>
<thead>
<tr>
<th>Fatigue Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not at all</td>
</tr>
<tr>
<td>Somewhat fatigued</td>
</tr>
<tr>
<td>Fatigued</td>
</tr>
<tr>
<td>Very fatigued</td>
</tr>
<tr>
<td>Extremely fatigued</td>
</tr>
</tbody>
</table>

Q17. Please indicate your level of agreement with the following statements.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neither agree nor disagree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>I feel emotionally drained from my work today</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>I feel frustrated by my job today</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
</tbody>
</table>
Appendix 10

Weekend Diary Questionnaire

SECTION 1

Q1. Please indicate the day of week

Monday ☐  Friday ☐
Tuesday ☐  Saturday ☐
Wednesday ☐  Sunday ☐
Thursday ☐

Please indicate the date and time of completion

________________________________________________________________________________________
SECTION 2

Q2. How many hours did you work today?

| 0 | 4-5 | 8-9 | 1-2 | 5-6 | 9-10 | 2-3 | 6-7 | >10 | 3-4 | 7-8 |

Q3. If you worked today, please rate your level of work intensity today.

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neither agree nor disagree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
<th>N/A</th>
</tr>
</thead>
</table>
I had constant time pressure due to a heavy workload

Q4. Please indicate why you needed to work today?

________________________________________________________________________________________

________________________________________________________________________________________

________________________________________________________________________________________

________________________________________________________________________________________
Q5. Please indicate (in minutes) how much time you spent today on the following categories of activities

<table>
<thead>
<tr>
<th>Activity</th>
<th>Time allocated</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Work related</strong></td>
<td></td>
</tr>
<tr>
<td>(e.g. finishing a piece of work, preparing for the next day)</td>
<td></td>
</tr>
<tr>
<td><strong>Household/childcare</strong></td>
<td></td>
</tr>
<tr>
<td>(e.g. making dinner, doing laundry / helping children with homework)</td>
<td></td>
</tr>
<tr>
<td><strong>Low effort activities</strong></td>
<td></td>
</tr>
<tr>
<td>(e.g. watching television, taking a bath)</td>
<td></td>
</tr>
<tr>
<td><strong>Physical activities</strong></td>
<td></td>
</tr>
<tr>
<td>(e.g. going for a walk/run/cycle, team-sports)</td>
<td></td>
</tr>
<tr>
<td><strong>Social activities</strong></td>
<td></td>
</tr>
<tr>
<td>(e.g. meeting friends, calling a friend for a chat)</td>
<td></td>
</tr>
</tbody>
</table>

Q6. Please indicate the level to which you switched off from work during each of the activity categories

<table>
<thead>
<tr>
<th>Activity</th>
<th>Not true at all</th>
<th>Somewhat true</th>
<th>Mostly true</th>
<th>Very true</th>
</tr>
</thead>
<tbody>
<tr>
<td>While performing household/childcare activities I could switch off completely</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>While performing low effort activities I could switch off completely</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>While performing physical activities I could switch off completely</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>While engaging in social activities I could switch off completely</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
</tbody>
</table>
Q7. Please indicate your level of agreement with the following statements.

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neither agree nor disagree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Today, I would have preferred more time for relaxing and recovering from work</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>I feel like I have recovered from work today</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
</tbody>
</table>

Q8. The following questions explore the extent to which you 'switched off' from work during your personal time. Please indicate your level of agreement with the following statements

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neither agree nor disagree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>I didn’t think about work at all</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>I distanced myself from my work</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>I got a break from the demands of work</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>I was routinely distracted by work related thoughts</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
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<tr>
<td>I found myself rehearsing work related scenarios in my mind</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>I was preoccupied today with work related duties</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Today I found it hard to let go of work related feelings</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
</tbody>
</table>
Q9. The following questions investigate relaxation and mastery activities you engaged in today. Please indicate your level of agreement with the following statements.

<table>
<thead>
<tr>
<th></th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neither agree nor disagree</th>
<th>Disagree</th>
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</thead>
<tbody>
<tr>
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<td></td>
</tr>
<tr>
<td>I took time for leisure</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I did relaxing things</td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I learned new things</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I did things that challenged me</td>
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<td></td>
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<td>I did something to broaden my horizons</td>
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<td></td>
</tr>
<tr>
<td>I sought out intellectual challenges</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Q10. Please describe your overall level of recovery today (max 100 words).

_______________________________________________________________________
_______________________________________________________________________
_______________________________________________________________________
_______________________________________________________________________
_______________________________________________________________________
Q11. If you were thinking about work today, please describe the type of work related thoughts you were having. (max 100 words)

__________________________________________________________________________

__________________________________________________________________________

__________________________________________________________________________

__________________________________________________________________________

Q12. Please indicate any additional points you would like to make with regard to switching off from work today. (max 100 words)

__________________________________________________________________________

__________________________________________________________________________

__________________________________________________________________________

__________________________________________________________________________
Q13. Please indicate your level of agreement with the following statements.

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neither agree nor disagree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>My work kept me from my family/personal activities more than I would have liked</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>The time I devoted to my job kept me from participating equally in household activities and responsibilities</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>I missed family / personal activities due to the amount of time I had to spend on work responsibilities</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
</tbody>
</table>

Q14. Please indicate your level of agreement with the following statement.

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neither agree nor disagree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>The time I spent with my family caused me not to spend time in work activities that could be helpful to my career</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
</tbody>
</table>
Q15. How fatigued do you currently feel?

<table>
<thead>
<tr>
<th>Not at all</th>
<th>Somewhat fatigued</th>
<th>Fatigued</th>
<th>Very fatigued</th>
<th>Extremely fatigued</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
</tbody>
</table>

Q16. Please indicate your level of agreement with the following statements.

<table>
<thead>
<tr>
<th>I feel emotionally drained from my work today</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neither agree nor disagree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>I feel frustrated by my job today</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neither agree nor disagree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
</tbody>
</table>
Appendix 11

Interview Schedule

Introduction

- Introduce yourself, introduce the study and what the study aims are
- Explain that you are looking for the views and opinions of the participants and that there are no right or wrong answers
- Explain the study methods, with regard to: taping of interviews, storage of data, confidentiality arrangements and anonymity in reporting findings
- Any questions
- Consent Form

Demographic information

1. Could you tell me about yourself
   - Note important information i.e.
     - Gender, marital status, family status

Work

2. Could you tell me about your work here at the university
   - How long have you worked here
   - Full time/part time position
o Have you both teaching and research responsibilities – could you describe

3. Please describe a typical week in your job

4. How would you describe the work intensity associated with your work
   o Note – ensure you allow the interviewee time to elaborate on this point and prompt if necessary to give more detail/examples

Home life

5. Describe a typical evening after work

6. How do you generally spend your weekends?

Leisure and Unwinding from Work

7. What do you do to relax after work?

8. Are their activities you would like to do, but don’t. Why not?
   o How do you relax at the weekend?

9. What is the most effective of unwinding after work, in your opinion?

Psychological Detachment

10. Can you tell me about switching off from work

11. Would you say there are times when it is easier to switch off or times when it is not?

12. During your free time, if you don’t switch off from work, do you regard this as a negative or positive issue
Work / Home Boundaries

13. Could you talk to me about boundaries between work and home life
   o Prompt - time boundaries, physical space, emotional

14. Is it possible to have such boundaries, is it good to have?
Appendix 12

Information Leaflet for Participants

A qualitative investigation of work/home boundaries, work recovery and detachment in Irish academics.

Research Team: Victoria Hogan and Sarah Lonergan

What is the project?
This study aims to explore work recovery, detachment and work/home boundary strategies used by Irish academics and to assess the extent to which these strategies are successful. This study involves one interview session, which is designed to allow you to tell us your personal experiences and give us your opinions and views. This data will be used in order to determine barriers to post work recovery and positive strategies which could be adopted by individual academics to help balance work and home life.

What will the information be used for?
The interviews for this study form part of a body of work being undertaken by Victoria Hogan for a PhD. in Health Promotion. Sarah Lonergan is conducting a number of these interviews under the supervision of Victoria Hogan for her minor dissertation for a MSc. Occupational Health & Safety and Ergonomics. The interview data will be analysed by the research investigators and be used in their PhD document and minor thesis document, respectively.

We will aim to publish our results in scientific journals but any information we have will be completely anonymous. Your name or any information that may identify you will not be used.

Your involvement
Participation in the study is entirely voluntary. You are free to withdraw from the study at any time. The information from this study will be kept strictly confidential and will not be made available to any other people.

The interview will take approximately one hour and will be arranged at a mutually convenient time. The interview will be recorded and some field notes will be taken.

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Appendix 13

Consent Form

Title of Study: A qualitative investigation of work/home boundaries, work recovery and detachment in Irish academics.

Thank you for reading the information leaflet. If you are interested in participating, we require your signature of consent. If you have any further questions about the study, please feel free to ask them now. Please read this form carefully before you provide your name and signature of consent.

Sarah Lonergan has explained this study and this consent form to me. She has answered all my questions to my satisfaction. I believe I understand what will happen if I agree to be part of this study.

I have read, or had read to me, this consent form. I have had the opportunity to ask questions and all my questions have been answered to my satisfaction. I freely and voluntarily agree to be part of this research study, though without prejudice to my legal and ethical rights.

PARTICIPANT'S NAME:

PARTICIPANT'S SIGNATURE:

Date:

Statement of investigator's responsibility: I have explained the nature, purpose, procedure, benefits, risks of, or alternatives to, this research study. I have offered to answer any questions and fully answered such questions. I believe that the participant understands my explanation and has freely given informed consent.

Investigator's signature:
Date:
Supplementary data from Study 2 indicating null gender effects on a number of diary measures.

Graph 14.1: Recovery after work by gender
Graph 14.2: Ability to psychologically detach from work by gender

Graph 14.3: Work related cognitive intrusion levels by gender
Figure 14.4: Relaxation/leisure after work by gender

Figure 14.5: Time-related work-life conflict by gender
Graph 14.6: Strain-related work-life conflict by gender

Graph 14.7: Time-related life-work conflict by gender
Graph 14.8: Strain-related life-work conflict level by gender

![Graph showing strain-related life-work conflict level by gender]

Figure 14.9: Post-work fatigue levels by gender

![Figure showing post-work fatigue levels by gender]
Figure 14.10: Emotional exhaustion by gender

[Graph showing the level of emotional exhaustion by gender over different days.]