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THE LINK BETWEEN OFF CAMPUS WORK FOR STUDENTS, REDUCED ACADEMIC PERFORMANCE AND INCREASED MENTAL HEALTH ISSUES

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Abstract

Despite the Free Fees Initiative (introduced in 1996), Irish students pay an annual registration fee of €3,000 [1]. This fee, in combination with rising accommodation and living costs, means that the annual cost of college education ranges from €4,340 (living at home) to €8,206 (rented accommodation) [2]. Notwithstanding student need-based grants and financial support from parents [2], it is inevitable that some students have to combine/support their university life with paid employment [3]. Soliz et al. (2016) state that “the number of hours students are working during college appears to be increasing”. Research on the effects of off-campus work on student performance are contradictory [4], with some studies suggesting no negative impact and others suggesting that 0-9 hrs part-time work/week can result in minimal negative effect whilst longer hours can show greater negative effects on study-time [5] and academic performance [6]. Interestingly, studies also show work-based benefits of part-time work i.e. students develop transferrable labour market skills which can ultimately increase employability post-college [7]. However, college life is not solely about attending lectures, it is also about the extracurricular social participation/interaction (i.e. sports/societies) that has a beneficial effect, both on academic performance and on the ‘growth’ of the individual [8] [5]. Working during third level education means that there is less time to devote to these activities and in turn can lead to increased levels of stress and feelings of isolation. A study in 2017, showed an increase in the percentage of Irish students seeking “help with depression, anxiety, relationships problems and academic issues has reached unprecedented levels ... a 40 per cent increase in demand for counselling over the last 10 years, with waiting lists for counselling services at many colleges” [9].

In this paper, the authors present the results of a survey of 180 engineering and informatics students comprising 109 undergraduate (UG) students and 71 postgraduate (PG) students. The purpose of this survey was to identify (1) the numbers engaged in off-campus work per year of the degree programme, (2) students’ perceptions of whether or not a link exists between off-campus part/full time work and stress/depression, (3) whether their off-campus work affects their academic performance, attendance and energy and enthusiasm for third level, (4) how they believe the university can best support them in this university-work conflict and (5) the benefits of working off-campus during term time.

Note : Anecdotal commentary from the students is presented in italics in [].

Keywords: Employment Control Framework, higher education, student performance, student registration fee, cost of college education, off-campus work, transferrable labour market skills, extracurricular social participation, student stress, student isolation, student counselling, university-work conflict, mental health.

1 THE IRISH HIGHER EDUCATION (HE) LANDSCAPE

The Irish higher education (HE) landscape ‘boasts’ 7 universities, 14 institutes of technology and a number of independent higher education colleges. Leading the strategic and research development of higher education in Ireland is the Higher Education Authority (HEA) with the “objective of creating a coherent system of diverse institutions with distinct missions” [10]. The HEA is also involved in reviewing the quality assurance procedures in Universities. Ever since 1980, higher education (HE) has been central to economic and societal change in Ireland with greater than 50% of the current workforce

having a third level qualification [1]. Between 1980 and 2014, 20% of school leavers progressed to third level education compared to nearly 60% of school leavers today. “Parents’ obsession with ensuring their children progress to third-level is a key reason why Irish workers are among the most overqualified in Europe for the jobs in which they are working” [11]. Consequently, Ireland has “one of the highest third level participation rates in Europe” [12]. In the academic year 2013–2014, in excess of 208,000 students enrolled at Ireland’s 7 universities, 14 Institutes of Technology and 6 colleges (HEA 2015). Given high enrolment numbers, the Irish HEA is increasingly conscious of the need to re-examine the HE funding landscape. An Expert Group on Future Funding of Higher Education in Ireland argues that the current funding system is “not fit for purpose” [1]. If HE is to become a key enabler to restoring living standards and prosperity as Ireland emerges from the economic downturn of 2008-2013, then Cassells (2016) contends that the current funding system needs to be reformed to recognise the increasing financial pressures on both families of third level students and also on third level institutions themselves. Between the years 2008-2015, HE direct/recurrent state funding fell from nearly €1.4bn to just over €900m [12]. Meanwhile, the implementation of the Employment Control Framework (ECF) (part of the National Recovery Plan 2011-2014 agreed with the EU/International Monetary Fund (IMF) in the Programme for Financial Support [13]) resulted in a reduction in the numbers of academic staff directly funded by the State. With ECF restrictions on both replacing retiring staff and hiring new staff, the number of university academic staff fell by more than 300 in the 7 years up to 2015 [12]. This reduction in academic staff numbers had a correspondingly negative impact on the academic staff:student ratios. Irish universities currently have a staff:student ratio of approximately 1:19 [14], which compares very unfavourably with those universities which have the best staff:student ratio i.e. the Medical College of Wisconsin (1:0.6), Rush University (1:2.1), Showa University (Japan) (1:2.5), Yale University (1:4.4) etc. [15]. In order to ensure that Ireland’s HE institutions will continue to play a pivotal role in the future economic development of Ireland [16], Cassells (2016) argues that the HE sector needs targeted investment in the following areas:

- **Core Funding:** To improve the staff:student ratios and supports and services, Bruton (2017) argues for “additional annual funding of €600 million by 2021 and €1 billion by 2030”. The “estimated cost of reducing the staff:student ratio by 1 is €61 million” [14]. Currently, the easing of the restrictive nature of the employment control framework is making a positive impact on the staff:student ratio.
- **Capital Funding:** In order to cater for increased student numbers and ensure up to date facilities and infrastructure, over €5.5 billion needs to be invested from now to 2030.
- **Student Support:** With the increasing costs associated with third level education, an “additional €100 million is needed to deliver a more effective system of student financial aid”. Interestingly, the debate is ongoing regarding the division of the funding burden on the exchequer, the student or the student’s family, and enterprise and employers.

2 COST OF STUDENT LIFE

The Free Fees Initiative (introduced in 1996) abolished third level tuition fees and required students “to pay a nominal charge. Under this system, public funding accounted for 84% of overall expenditure. This policy continued up until the recession of 2008. Since then, the level of fee has more than tripled” [1]. Currently, Irish students pay an annual registration fee of €3,000 making Ireland the second most expensive country in Europe for student fees [17]. Whilst the current annual registration fee at NUI Galway stands at €3,000, President of NUI Galway, Dr. Jim Browne recently suggested that this annual fee be increased to €6,000 to fund/cover the cost of HE [17]. For those students who are ineligible for the means tested student grant system and who do not work part-time whilst at college, this could result in them accruing college debts of greater than €24,000. This figure excludes costs associated with rent, transport and maintenance. A 2017 Zurich Cost of Education Survey found that the average annual cost for a student renting accommodation was €3,866 compared to €2,628 for student accommodation. While soaring accommodation costs have forced some students to live at home, this may not be a viable option for other students based on their choice of both course and college.

The cost of tuition, in combination with rising accommodation and living costs, means that the annual cost of college education in Ireland ranges from €4,340 (living at home) to €8,206 (rented accommodation) [2]. However, this remains significantly less expensive than the cost of third level education in the United Kingdom (UK), where home students can be charged tuition fees of up to (and in some places exceeding) £9,250 (€10,400) a year [17]. Meanwhile, in North America, college tuition fees “have doubled almost three times since 1980, significantly outpacing inflation. Today, student loan debt is the highest in history, at over US \$1 trillion” [18].

To help defray the cost of third level education, the Irish state funds a means tested student grant scheme via SUSI (Student Universal Support Ireland). Eligible students can avail of maintenance support and/or have their tuition fees paid [19]. In 2015, 57,819 students “received maintenance payments ranging from €305 to €5,915, as well as having their student contribution paid to their college for undergraduates” [20]. As it currently stands, an average of 53% of all Irish HE students avail of a student support grant, ranging from 74.43% (Letterkenny Institute of Technology) to 27.07% (University College Dublin). Just over half of the students at the National University of Ireland, Galway (51.42%) are in receipt of student grants [21]. However, almost 50% of the Irish student body who are ineligible for the student grant scheme, have to rely on bank loans, working part-time or depend on family financial support or a combination of all three [22]. Furthermore, notwithstanding state funded student support grants and financial support from parents [2], it is inevitable that some students will be required to combine their university life with paid employment [3]. Soliz et al. (2016) state that “the number of hours students are working during college appears to be increasing” [7]. Darolia (2014) contends that over 80 percent of all undergraduate American students work while in college with recent students being more likely to work more hours than in the past [6]. Regardless of the fact that for some students, part time college work is a lifestyle choice, for others, given the gap between income and the soaring cost of college education, working part-time during college is mandatory in order to reduce financial debt [23].

3 EFFECTS OF OFF CAMPUS WORK ON STUDENTS

Research on the effects of working part time (whilst at college) on student performance are contradictory [4], with some studies suggesting no negative impact and others suggesting that 0-9 hrs part-time work/week can result in minimal negative effect whilst longer hours can show greater negative effects on study [5] and academic performance [6]. Interestingly, studies also show that part-time work can result in work-based benefits [7]. Allen (2015) contends that “going out and finding a job and finding a way to successfully combine it with college work and life shows great initiative, true grit, and multitasking ability” [24]. The need to be disciplined, organised and efficient at time management, in addition to gaining enhanced problem solving skills and the opportunity to develop social skills, whilst becoming more financially solvent are some of the many advantages to working part time during college. Billet and Ovens (2007) (cited in [23]) found that “part-time working facilitates individual reflection upon future career direction” as greater exposure to and experience of the working environment can support students in making better and more focussed career choices. However, studies by (Davies, 2000; Neill et al., 2004; Richardson et al., 2009 cited in [23]) show that “full-time students in HE who work part-time, are often motivated by financial necessity rather than a desire to enhance future employability prospects”. Neill et al.(2004) cited in [23] argue that working 15 hours per week is the “optimum beyond which part-time work may become disadvantageous. Nonetheless, the literature remains inconclusive”.

Notwithstanding, the financial and non-financial benefits (i.e. organisational and soft skills such as communication, responsibility, problem solving etc.) of working part/full time while at college, the time spent working can have an impact on the time available for study [6](Harrison & Chudry, 2011 cited in [23]). This in turn can have implications on both retention rates and academic performance. However, research on the relationship between working part time and academic performance are contradictory. While studies in North America ((Astin, 1993; Furr & Eling, 2000; Wenz & Yu, 2010) cited in [4]), the UK ((Callender, 2008; Humphrey, 2006) cited in [4]) and Northern Ireland ((McVicar & McKee, 2002) cited in [4]) show a negative relationship, other studies indicate either the opposite or no significant effect [4]. Meanwhile, research by Argentin (2010), Triventi & Trivellato (2008) cited in [4] shows that students who work a moderate amount of time outside college have lower drop-out rates compared to non-working students. However, this begs the following questions; what is the definition of a moderate amount of time? and what is the impact on the drop-out rate of those who spend a significant amount of time working part/full time?

In addition to the effects on academic performance and retention, the need to work part/full time (in order to provide additional income) can have implications on extracurricular social participation/interaction activities/events. Participation in sports/societies can have a beneficial effect, both on academic performance and on the ‘growth’ and health of the individual [8] [5]. Students who

work during third level can have less available time to devote to these activities (depending on the hours worked and when) which can lead to increased levels of stress and feelings of isolation. A study in 2017, showed an increase in Irish students seeking “help with depression, anxiety, relationships problems and academic issues has reached unprecedented levels ... a 40 per cent increase in demand for counselling over the last 10 years, with waiting lists for counselling services at many colleges” [9].

4 METHODOLOGY

The new norm regarding part/full time work whilst in HE and the increase in students requiring counselling services begs the question; is there a link between working part-time and increased mental health issues? Further, given that “universities can no longer assume that the majority of students will be able to give their full-time attention to academic studies” [4], how can colleges facilitate the work-university conflict and better support their students? In this paper, the authors present the results of a survey of 180 students comprising 109 undergraduates (UG) and 71 postgraduate (PG) engineering and informatics students. Of the 180 students surveyed, 38.3% (69) work part/full time. The purpose of this survey is to identify (1) the numbers engaged in off-campus work per year of the degree programme, (2) students’ perceptions of whether or not a link exists between off-campus part/full time work and stress/depression, (3) whether their off-campus work affects their academic performance, attendance and energy and enthusiasm for third level, (4) how they believe the university can best support them in this university-work conflict and (5) the benefits of working off-campus during term time.

5 RESULTS & DISCUSSION

180 engineering and informatics students at different stages of their degree programmes, were surveyed (Fig. 1).

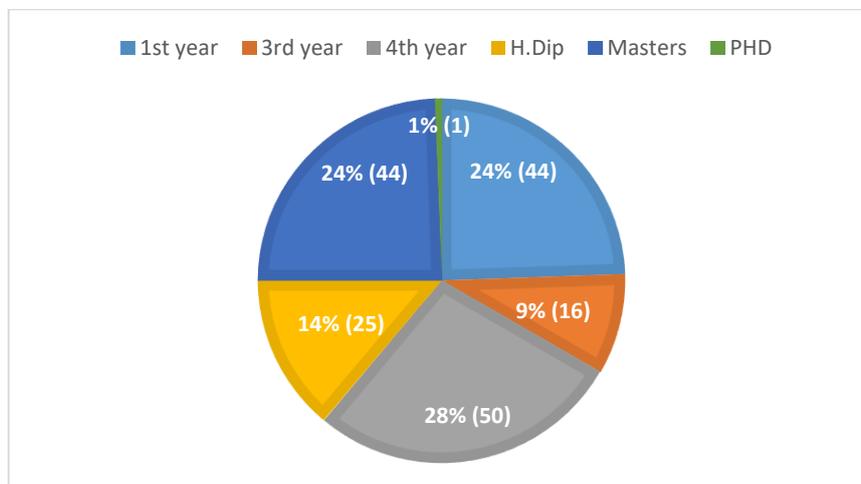


Figure 1 : Breakdown of the respondents by year (UG)/programme of study(PG)

The findings from this survey are presented and discussed thematically in the following sub sections.

5.2 Theme 1 : The numbers engaged in off-campus work per year of the degree programme

Of the students surveyed, 38.3% (n=180) indicated that they either worked part/full time whilst in college. A breakdown of each of the cohorts surveyed who worked part/full time is as follows; 36% of first year students (n=44) (of which 19% were female (n=16)), 75% of 3rd year students (n=16) (of which 25% were female (n=12)), 32% of 4th year student (n=50) (of which 6% were female (n=16)), 40% of H. Dip. (Higher Diploma) students (n=25) (of which 10% were female (n=10)), 32% of Masters students

(n=44) (of which 21% were female (n=14)) and 100% (n=1) of Ph.D. students (a female) work part/full time (Fig. 2).

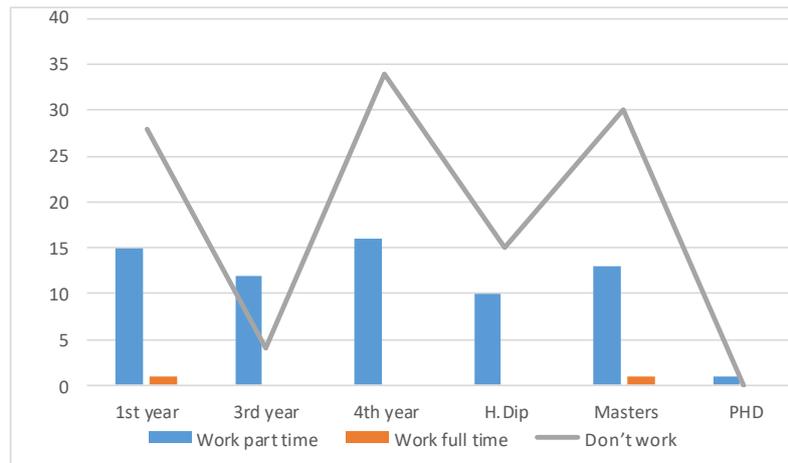


Figure 2 : Respondents working part and full time and not working at all during college

Of the 69 students who worked either full/part time whilst in college, the majority were males (83%). Only two students (4th year students) did so as a lifestyle choice (i.e. *[for the sake of experience, to have something to do][to get experience and to make money]*), the remainder (97%) did so out of financial necessity; i.e. to cover the cost of rent/living/food/transport/tuition bills/college supplies/extracurricular activities [*Can't afford college without working on the weekends* (3rd year female)]. This result is in keeping with studies by (Davies, 2000; Neill et al., 2004; Richardson et al., 2009 cited in [23]) which showed that full-time students who work part/full time, are often motivated by financial necessity rather than a desire for experience or to develop future employability skills. In their reasons for working whilst at college, some of the respondents indicated a desire to alleviate the financial burden on their families. [*Don't want to have to fully rely on parents*] [*Happier to spend my own money than money that isn't mine so I can do recreational activities and not feel guilty about spending it*]. A number of the respondents were self-funding their college education. 16 students (1st years (n=4), 4th years (n=4), H. Dip. Students (n=4), 3rd year student (n=1) and Masters students (n=3)) worked anything from 5 to 8 hours/week with the majority working on Fridays, weekends and holidays. 37 students worked from 11 to 20 hours/week with the majority working Fridays, weekends and evenings. The most common work days were Thursdays, Fridays, Saturdays and Sundays, with some alternating between Mondays and Wednesdays in favour of Thursdays. For some students, the hours and days worked depended on the availability of hours. 2 Masters students each worked 28 hours/week, with the first working 2 days part-time in addition to 2 full days, and the other student working 4 days/week. 14 students worked from 20 to 28 hours/week. One 4th year student worked 30 hours/week whilst another 4th year student worked 35 hours/week. Both those students needed to work out of financial necessity. A study by Soliz & Long (2016) found that "older students are more likely to work longer hours" [7]. However, analysis of the results (Fig 3) shows that proportionally more younger students (aged 18-22) work longer hours (21-35 hours/week) than the older students (aged 23-28+), whilst the latter seem to favour working 11-20 hours/week.

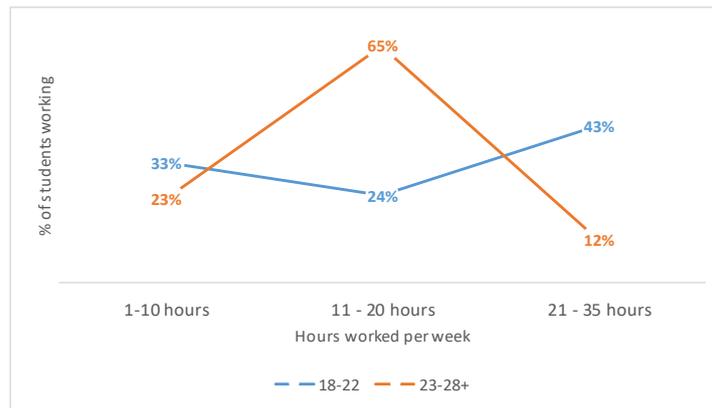


Figure 3 : Hours worked versus age range

5.2 Theme 2 : Students' perceptions of whether or not a link exists between off-campus part/full time work and stress/depression

Depression is a major global mental health with over 300 million people worldwide suffering [24]. Given HE pressures; from financial to academic, university students are at a high risk for depression [25]. A study in 2017, showed an increase in Irish students seeking “help with depression, anxiety, relationships problems and academic issues has reached unprecedented levels ... a 40 per cent increase in demand for counselling over the last 10 years, with waiting lists for counselling services at many colleges” [9]. The survey highlights that 26 students working an average of 14 hours/week (9 of whom worked 20 hours and greater/week) indicated high stress levels from working part/full time. They perceived that this amount of work (outside academic work) impacted strongly (in a negative fashion) on their study, their social life, their energy and enthusiasm for third level education and ultimately their results. These 26 students also ranked high stress levels due to working part/full time with depression and mental health issues. Overall, 65% of students (n=68) perceived a strong to very strong linkage between part/full time work and depression. Of those students, 15% were in 4th year and working an average of 16 hours/week (2 of whom worked 30-35 hours/week). Each of these students also indicated that working part/full time negatively affected study, social life and their enthusiasm and energy for university. Given the ‘full’ workload in 4th year with the focus on the final year project, it is understandable that students would feel under stress and pressurised (one student selected a 9 out of 10 to show the strength of the link between the stress from working part/full time and depression). [I stopped working Sunday for the final year]. Further, given that working part/full time means even less available time for study and extracurricular social participation/interaction (i.e. sports/societies), it is understandable that working students can feel increased levels of stress and a sense of isolation. “Humans have a profound need to connect with others and gain acceptance into social groups ... people suffer when relationships deteriorate and social bonds are severed” [26]. A positive correlation between social isolation and predictors for depression was identified [27]. Of the respondents, 37% (n=68) (working on average 16.3 hours/week although 40% worked 20-35 hours/week) perceived a very strong negative link between working part/full time and socialisation. One 3rd year student when asked how the university could better support him as he worked part time, suggested greater access to counselling services.

5.3 Theme 3 : Whether off-campus work affects their academic performance, attendance and energy and enthusiasm for third level

Soliz et al (2016) contend that many first years “struggle to manage their time and maintain focus on their studies [7]. The added time constraints caused by a job may make these skills, which are already difficult to develop, impossible to maintain”. Of the 69 students who work part/full time, 6% (4) said that their working outside college did not impact on their study or their results. All 4 were first years who worked an average of 6 hours/week at weekends. 32% (working an average of 16.33 hours/week, with 23% working in excess of 20 hours/week) indicated a strong to very strong negative effect of part/full work on their academic performance. However, whilst they perceived a medium effect of part/full time

work on attendance (partly explained by their perception that that all module resources are readily available on Blackboard, sometimes in advance of lectures), they indicated a strong negative effect on their energy and enthusiasm for university and on their study time. Analysis of the PG students (n=24), working an average of 16 hours/week, shows that they viewed working part/full time as having a slight to medium effect on their academic performance. This could be partly explained by their age and greater organisational skills. Interestingly, researchers have highlighted a U shaped relationship between the risk of students dropping out of college and the number of hours they worked part/full time during college (Dundes & Marx, 2006; McKechnie et al., 2010, Moulin, Doray, Laplante, & Street, 2013 cited in [4]). This is something to bear in mind given the upward trend in the numbers of students engaged in part/full time work; especially first year students.

5.4 Theme 4 : How they believe the university can best support them in this university-work conflict

In answer to the question, what is the purpose of third level, respondents indicated; to educate, prepare, impart knowledge, *[provide a foundation to develop expertise in preferred topics through theoretical and experimental studies alongside gaining key inputs from peer-based reviews that provide teamwork and communication skills]* and *[fundamentally, to teach people how to think, engage with difficult ideas and develop a critical thinking faculty]*. Respondents believed that the university could better serve them; through; more online modules; no classes on a Friday evening or on a Monday morning, a repeat of classes, greater leniency on deadlines and greater empathy and understanding from academics, longer terms, later college opening hours, reduced fees, greater subsidies on canteen food and a more organised Continuous Assessment (CA) workload agreed by all lecturers on a programme.

5.5 Theme 5 : The benefits of working off-campus during term time

Studies by Soliz (2016) show that part-time work whilst in college can result in work-based benefits i.e. students learn transferrable labour market skills which can ultimately increase employability post-college [7]. Of those surveyed, 22% (n=56), indicated that they worked for the experience, 14% for the skills gained (i.e. communication, discipline, organisational, budgeting etc.), 11% explicitly said for the money, 18% for the social advantages afforded by working, 9% for their CV, 5% for developing and maintaining a good work ethic and the remainder for keeping them busy outside college. 18% said there were no advantages to working part/full time whilst at college.

[Independence, social life, change of scenery from studying, feel good about myself being able to do something practically instead of all the theory based work at college. I wish college was more practical][I enjoy what I do. It's a different slant on life][Makes me organised, I believe it makes me a lot better at budgeting money][None. Would rather concentrate full time on postgrad.][Money mainly, also I've always had a part time full time job and I feel it has given me a great work ethic and allowed me to learn how to balance my life in work/social and education][Can increase focus to know that you have to set time aside each week to work. Makes it easy to plan ahead. My job is also career orientated so this will benefit my CV in the long run][I can only see disadvantages][It's a break from the routine of college everyday. I actually think of it as a social activity, as it is time spent with my friends I don't see everyday since I'm busy with college work][I might have a job to return to].

6 CONCLUSIONS

“The realities of student life have changed over recent years. Your time at university is meant to be the best of your life, we’re often told, and I’m doing my best to keep it that way. But financial pressures mean it’s far from carefree” [28]. In their reasons for working whilst at college, some of the respondents indicated a desire to alleviate the financial burden on their families. The survey indicates that 97% (67) of students who worked either full or part time whilst in college, did so out of financial necessity to cover the cost of rent/living/food/transport/tuition bills/college supplies/extracurricular activities. This result is in keeping with studies by (Davies, 2000; Neill et al., 2004; Richardson et al., 2009 cited in [23]) which show that full-time students who work part/full time, are often motivated by financial necessity rather than a desire for experience or to develop future employability skills. Proportionally younger students (aged 18-22) work longer hours (21-35 hours/week) than the older students (aged 23-28+), whilst the latter seem to favour working 11-20 hours/week. Further, given that working part/full time means even

less available time for study and extracurricular social participation/interaction (i.e. sports/societies), it is understandable that working students can feel increased levels of stress and a sense of isolation. Of the respondents, 37% (n=68) (working on average 16.3 hours/week although 40% worked 20-35 hours/week) perceived a very strong negative link between working part/full time and socialisation. However, whilst students perceived a medium effect of part/full time work on attendance partly explained by their perception that that all module resources are readily available on Blackboard, sometimes in advance of lectures, they indicated a strong negative effect on their energy and enthusiasm for university and on their study time. Part-time work whilst in college can result in work-based benefits i.e. students learn transferrable labour market skills which can ultimately increase employability post-college. As outlined by Riggert, Boyle, Petrosko, Ash, and Rude-Parkins (2006) (cited in [4]) "colleges and universities can no longer assume that the majority of students will be able to give their full-time attention to academic studies". This study shows that students believe the university could better serve them; through; more online modules; better timetabling, flexibility with deadlines, more organised CA and greater empathy and understanding. Extended services such as longer terms, later college opening hours, greater subsidies on canteen food would scaffold students financially. However, services come at a cost and as the current funding system is "not fit for purpose" [1]. It must play its part in becoming a key enabler to restoring living standards and prosperity as Ireland emerges from the economic downturn of 2008-2013. Cassells (2016) contends that the current funding system needs to be reformed to recognise the increasing financial pressures on both families of third level students and also on third level institutions themselves.

Notwithstanding the positive/negative impact of working part time on academic performance, retention and socialisation, it ultimately depends on the ability of the student to successively balance between: study, employment and leisure. However, as working increasingly becomes commonplace among third level students, Riggert, Boyle, Petrosko, Ash, and Rude-Parkins (2006) (cited in [4]) contend that "colleges and universities can no longer assume that the majority of students will be able to give their full-time attention to academic studies". This obviously has implications for the design and implementation of academic programmes, regarding retention, attendance, engagement, content delivery and assessment.

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