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Title	Peer Influences on adolescent body image in Ireland
Author(s)	Kenny, Ursula
Publication Date	2017-03-31
Item record	<a href="http://hdl.handle.net/10379/6774">http://hdl.handle.net/10379/6774</a>

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# **Peer Influences on Adolescent Body Image in Ireland**

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BSc. Nutritional Science

**A thesis submitted for the degree of Doctor of Philosophy**

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**March 2017**

## **AUTHOR'S DECLARATION**

I declare/certify that, except where acknowledged, all parts of this thesis were undertaken by myself. The information contained in this thesis has not been used to obtain a degree in this, or another University.

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Ursula Kenny

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## **ACKNOWLEDGEMENTS**

Firstly, I would like to express my deep sense of gratitude to my primary supervisor Dr Colette Kelly, for her guidance, support, patience and encouragement during my PhD journey. Colette, you became, and will forever remain, a truly inspirational role model to me. The knowledge and experience I have gained from you over the past four years go far beyond any academic attainment I have achieved. I would also like to thank you for the joy and enthusiasm you had for my research from start to finish, and for helping me to develop, both as a researcher, and as an individual. I would also like to thank you for always believing in me, every step of the way, I would never have gotten here without you. Lastly, thank you for becoming a true friend of mine over the past four years, a friendship that I will forever value. A sincere thank you Colette, it has been an honour to be your PhD student and I will miss you.

I would also like to express a special thank you to my co-supervisor, Dr Michal Molcho, during my journey to getting this PhD. Thank you Michal for all the support, assistance, and advice you provided me with over the past four years. You always assured me that everything would be okay, at times when I doubted myself, and encouraged me to keep going, even when I did not feel I could manage. I would also like to thank you for your constant input on my research during the course of my PhD; input that always helped to stimulate and progress my research project and mind in new and exciting directions. Lastly, I would like to thank you for your friendship and belief in me since arriving to the National University of Ireland, Galway (NUI, Galway). Thank you dearly Michal.

I also wish to express my thanks to the Discipline of Health Promotion at NUIG, which provided continuous support whenever I needed it. I would also like to thank my present and past colleagues who are/were also studying for doctorates, especially Lindsay Sullivan who sat beside me for two years and encouraged me to believe in myself from the moment we became friends. I would also like to thank my GRC supervising committee – Professor Saoirse Nic Gabhainn, Dr Mary-Pat O'Malley Keighran and Dr Caroline Heary for providing me with their expert advice and for assisting me in tackling all the PhD obstacles I encountered.

To my friends, in Ireland and abroad, thank you for taking the time to express your interests in my work, and for encouraging me to do my very best. Sophie, Hilary and Grace, your work ethic has inspired me from a young age and you represent the truest friends one could wish for.

To my family, I would like to express a sincere thank you to my parents, Annette and Martin, and to my sisters, Nicola, Natasha and Zara, and my brother Nigel. Each one of you encouraged me to pursue this PhD and inspired me in your own unique ways. I am deeply thankful to all the times you listened to me when I came running to you with PhD worries or success stories. You always helped me to tackle my fears and ensured to acknowledge any PhD achievement I had reached. You made my PhD journey so much easier for me, through your joyous and supporting presence alone. I will be forever thankful to each of you for that; I love you all so much.

Lastly, I would like to sincerely thank my partner and my best friend Shane, for his endless encouragement, understanding and support during my PhD journey. I can wholeheartedly say that the love and care you provided me with on a daily, weekly, monthly and yearly basis got me through this PhD. I will be eternally grateful for the faith you had in me; I love and appreciate you always.

## **ABSTRACT**

Body image, which represents how one sees, thinks, feels and acts toward their physical appearance, is a pressing issue for adolescents. National studies in Ireland have highlighted that adolescents are dissatisfied with their body image, wish and/or attempt to alter their body shape, and feel self-conscious about social events and sports participation as a result of poor body image. Parents, peers and the media have been identified as playing a key role in adolescent body image development; however, peers have received the least attention of the three to date. This study thus aimed to explore in-depth, whether, how, and to what extent the peer context influences adolescent body image. This thesis was written and submitted by publication; see appendix 1 for a copy of each journal article.

The study used a multi-method approach. The first phase of this study adopted a qualitative approach to explore young peoples' (n = 111) perceptions regarding the modes and the nature (positive/negative) of peer influence(s) on adolescent body image, as well as the role of friendships and routes to body image improvement. Peers were found to exert their influence via a variety of direct (peer teasing, peer exclusion, peer pressure and peer conversations) and indirect (peer modelling and peer surveillance) modes, and have a predominately negative influence on body image. A thematic model was also constructed to further illustrate the peer influence process; which focuses on the negative influences that peers can exert on body image in particular. The model proposes that the peer influence process is cyclic in nature with respect to body image, with one influence having an impact on the next, in addition to the former. Results also revealed that adolescents view and describe friendships differently and more positively than peer relationships with regards to body image, and do not feel that body image can be improved amongst adolescents.

The second phase of this study adopted a mixed methods approach in order to examine the factors that influence adolescent body image in Ireland. A youth participative approach, which involved focus groups with 74 adolescents, was first conducted to seek out their views on two survey items, which resulted in one being chosen for the 2013/14 Health Behaviour in School Aged Children (HBSC) survey in Ireland. The survey results from 4481 adolescents revealed that six key factors

influence adolescent body image, including appearance-related evaluations, physical activity and food, clothing experiences, peers, the media and/or other people.

Literature exploring evolving forms of peer influence, such as cyberbullying and associations with body image is limited. The third phase of this overall study thus adopted a quantitative approach, using a survey design, to investigate the relationship between cyberbullying and friendship dynamics on body image among adolescents in Ireland. Logistic regression analyses with 7320 cases indicated that both cyberbullying and friendship dynamics are significantly associated with adolescent body image, and further that friendship dynamics mediate the relationship between cyberbullying and adolescent body dissatisfaction.

Given the findings of this study, the importance of addressing the prevention of body dissatisfaction as a health promotion issue, and the explicit role of peers is warranted. The creation of supportive peer environments represents an important avenue through which body image concerns, and thus adolescent health can be addressed. Future interventions aiming to promote positive body image among this population group need to consider the important role peers can play in their research design.

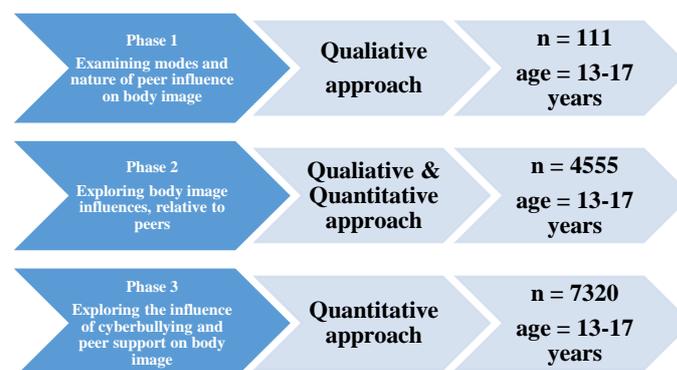
*Keywords: Body image, Body image influences, Peers, Adolescence, Ireland*

# CHAPTER 1: INTRODUCTION

## 1.1 Purpose Statement

The aim of this study was to explore peer influences on adolescent body image in Ireland, and to explore other influencing factors relative to peers. The overarching research question includes, how and to what extent do peers influence adolescent body image in Ireland? In order to answer the research question and aforementioned aim, this study employed a multi-method design. The purpose of using a multi-method design was to first qualitatively explore conceptual descriptions of body image, the mechanisms through which peers influence body image, whether peers influence body image differently to friends, and how body image can be improved for youth living in Ireland. The quantitative phase examined the key factors that influence adolescent body image, and analysed two under-explored peer influences, namely cyberbullying and peer support on adolescent body image in Ireland. Figure 1 shows a summary of the multi-method design applied in this study. The findings from each phase of this study were submitted for publication. Each of the journal articles are attached in appendix 1. This introductory chapter provides an overview of the main components of this study. Firstly, it will introduce the concepts of body image, adolescence and peer relationships, and how they interlink. The chapter will then highlight the link between peer influences, adolescent body image and health promotion. Finally, the chapter will identify gaps in the research literature, discuss the rationale for this study and will state the general aim and the research questions addressed in the overall study.

Figure 1: Overall study design



## **1.2 Body Image**

### *1.2.1 Defining Body Image*

Body image has been defined as a multidimensional construct, reflecting perceptual and attitudinal dimensions regarding one's physical appearance (Cash & Smolak, 2011). The perceptual dimension refers to estimation of one's size and appearance, while the attitudinal dimension relates to feelings and attitudes toward one's body (Gardner, 2011). This definition suggests that the concept of body image represents one's perceptions, thoughts and feelings about his or her body. Perceptions of body image may be positive or negative, or may fall somewhere in between. Traditionally, measures assessing positive and negative body image positioned both constructs as opposite ends of one body image continuum, with positive body image representing body satisfaction and negative body image representing body dissatisfaction. However, empirical research has shown that positive body image is a more comprehensive construct than body dissatisfaction, which will be discussed later in this section (Tylka & Wood-Barcalow, 2015; Frisén & Holmqvist, 2010).

Body image concerns may also be global, whereby an individual is concerned with their overall appearance (e.g. shape, weight, or size) or, site-specific, whereby an individual is concerned with specific characteristics or parts of the body (e.g. facial, skin and hair characteristics, fitness, strength and muscularity; Wertheim & Paxton, 2012). In addition, chronic physical illness and disability (e.g. cleftlip, cancer, spina bifida, and scoliosis) are risk factors for body image concerns, as they impact how one visually looks, how the body functions and how one perceives themselves and is perceived by others (Masnari, Landolt, Roessler, Weingaertner, Neuhaus, Meuli & Schiestl, 2012; Feragen & Borge, 2010). This study however focused on the impact of peers on body image perceptions among adolescents outside of this domain (i.e. those who were not suffering from a chronic illness and/or disability).

### *1.2.2 Negative Body Image*

Negative perceptions of body image are often measured in the form of body dissatisfaction, a construct reflecting the level of discontent an individual feels towards his/her physical appearance (Crowther & Williams, 2011). Adolescence, in

particular, represents a vulnerable time for the onset of body dissatisfaction; a disturbance that has been shown to increase in severity through young adulthood in longitudinal research (Slane, Klump, McGue & Iacono, 2014); and that has been linked to numerous negative psychological and behavioural outcomes among adolescents overtime. In a 5-year follow up study, Neumark Sztainer, Paxton, Hannan, Haines & Story (2006) reported that lower body satisfaction predicted higher levels of dieting, unhealthy weight control behaviors, binge eating and lower levels of physical activity among adolescent girls and boys. Gender differences also emerged, in that lower body satisfaction was found to be predictive of lower fruit and vegetable intake among girls and higher levels of smoking among boys. Moreover, in a 13-year prospective study, Blashill & Wilhelm (2013) revealed that adolescent boys who were of average weight and viewed themselves as either very underweight (very underweight distorted) or overweight (overweight distorted) reported significantly higher levels of depressive symptoms over the 13-year study period, compared to boys who accurately viewed their weight as average. Further, in a 4-year prospective study, Rhode and colleagues (2014) found that elevated body dissatisfaction predicted the onset of eating disorders among girls at ages 13, 14, 15 and 16 in the 4-year study period; while BMI did not predict eating disorders at any age.

### *1.2.3 Positive Body Image*

Positive body image, on the other hand, refers to attitudes and behaviours that reflect a healthy acceptance of and appreciation for the body, both physically and functionally, that go beyond the absence of body dissatisfaction (Tylka & Wood-Barcalow, 2015). Research has suggested that the core features of positive body image consist of body appreciation, an internal orientation toward the body and satisfaction with the body's capabilities. Tylka & Wood-Barcalow (2015) have suggested that body appreciation comprises (a) an acceptance of one's body, both assets and flaws; (b) respect for and attendance to one's physical needs, through engagement in health-promoting behaviours; and (c) protection of one's body by cognitively rejecting unrealistic beauty ideals presented in the media. Second, internal body orientation has been described as a focus on what the body can do and how it feels as opposed to how it looks; and finally, functional body satisfaction has

been referred to as an approval of and satisfaction with the physical capabilities of one's body.

#### *1.2.4 Conclusion*

Given the complexity of body image, both positive and negative, it is now recognised that the construct is influenced by a range of factors (McCabe & Ricciardelli, 2005); all of which will be outlined in the literature review chapter (chapter 3).

### **1.3 Adolescent Body Image in Ireland: Current Status**

#### *1.3.1 Quantitative Research Studies*

Body image has been identified as an issue of concern by and amongst adolescents in Ireland. In a national survey examining young peoples' perceptions of and attitudes toward body image, a total of 43% of 2156 participants aged 10 to 21 years reported that they were dissatisfied with their body image and more than half reported that comparison with others negatively impacts their body image (O'Connell & Martin, 2012). Moreover, cross-sectional surveys in Ireland have further highlighted the extent of the issue amongst Irish youth. Lawler & Nixon (2011) found that 81% of girls and 55% of boys aged 12 to 18 years reported a desire to alter their body shape; while Kelly, Molcho & Nic Gabhainn (2010) found that 13% of non-overweight children, aged 10 to 17 years, reported that they were on a diet in 2010; a figure which increased to 16% in 2014, in the subsequent survey (Gavin, Keane, Callaghan, Molcho, Kelly & Nic Gabhainn, 2015).

#### *1.3.2 Qualitative Research Studies*

Qualitative studies concerning adolescent body image in Ireland have also made some interesting revelations. Kierans & Swords (2016) recently explored, via focus groups, adolescents' (n = 39) perceptions of the influential processes occurring within the Irish appearance culture, amongst those aged 12 to 14 years. In terms of the distal environment, the authors reported that adolescents are predominately influenced by the appearance-related values and behaviors of their peers, and to a lesser extent of their family. Decisions to conform to an appearance culture was

specifically influenced by peer acceptance and rejection, as well as both parental and peer modelling. In terms of the proximal environment, the mass media was mentioned by both boys and girls as having an influence on adolescents' appearance ideals; however, girls appeared to be influenced by the appearance behaviours and body shapes of their favourite celebrities, whilst boys alluded to the types of body ideals required for athletic success. Personal attributes, such as having a strong sense of self-confidence and resilience were believed to play a role in whether or not adolescents partook in the appearance culture they are subjected to and surrounded by. In addition, gender-specific traits, such as boys feeling that they must look tough and bulky for girls and girls feeling that they must appear thin and attractive for boys, were identified as playing a role in whether adolescents sought to attain a specific appearance ideal.

In a separate qualitative investigation that aimed to gain insight into body image concerns and dieting practices of adolescent girls (n = 124) aged between 15-16 years, revealed via a series of focus groups, that the media, celebrities and peers play a central role in the aetiology of body dissatisfaction and disordered eating practices (Mooney, Farley & Strugnell, 2009). In terms of the media, the girls outlined how attractive actors and actresses are used in popular television shows; which subsequently makes them feel "bad" about themselves. Concerning celebrities, the girls revealed that they aspired to look as thin as idolised celebrity figures and attempted to follow regimented dieting plans that they perceived such celebrities followed. The girls also admitted that they engaged in extreme dieting practices in order to enhance their popularity with opposite sex peers, to avoid appearance criticism from same-sex peers, to enhance self-confidence and self-assurance levels and/or to enhance how they looked prior to a social event, such as a 'disco'.

### *1.3.3 National Reports*

National reports have also highlighted body image as a pressing issue for young people in Ireland. In the most recent report, which aimed to examine the key barriers and contributors to a healthy lifestyle in the lives of children and adolescents, 34 participants aged 13 to 17 years reported that body image, media influences, self-harm and eating disorders represent the key barriers to a healthy lifestyle for

adolescents living in Ireland (Martin, Horgan & Scanlon, 2016). In terms of body image, the adolescents reported that they feel judged based on “how they look” and are under pressure to conform to a particular body image (“bulky” for boys and “thin” for girls). In order to achieve narrow body ideals, they spoke about how some adolescents engage in unhealthy practices, including taking steroids, using lip pumps (for fuller lips), smoking for weight loss, crash diets and “starving oneself” (Martin et al. 2016). Moreover, in an additional report, which aimed to examine the factors that influence adolescent mental health in Ireland, boys and girls aged 12 to 18 years reported that poor self-image is the leading contributing factor that negatively influences mental health (McEvoy, 2009). Similar to the previous report mentioned above (Martin et al., 2016), findings revealed that adolescents feel judged based on how they look, particularly in relation to weight, beauty, clothes and/or appearance-related stereotypes. The report also highlighted that some adolescents feel pressurised to look and be like celebrities pictured in magazines and girls feel that boys expect them to look “magazine style”. The consequences of poor self-image were also mentioned, which included leading to a lack of confidence, a loss of individuality, eating disorders, as well as comfort and obsessive eating habits.

#### *1.3.4 Conclusion*

In light of the aforementioned studies and reports, it is clear that a substantial proportion of adolescents in Ireland are dissatisfied with and/or are concerned about their body image; feelings, attitudes and perceptions which may subsequently give rise to health-compromising behaviours and poor mental health. As such, it is important to understand the factors that influence body image, how these factors influence young people and what leads to both positive and negative body image experiences.

## **1.4 Adolescence**

### *1.4.1 Defining Adolescence*

Adolescence, which has been described as a passage from childhood to adulthood (Salmela-Aro, 2011), is one of the most dynamic and complex transitions in the lifespan (Story, Neumark-Sztainer & French, 2002). The adolescent period is

roughly considered to range from 11 to 19 years of age; which has been broadly categorized into three stages, consisting of early adolescence (approximately 11 to 13 years), middle adolescence (approximately 14 to 17 years) and late adolescence (approximately 17 to 19 years; Salmela-Aro, 2011). Transitions to adulthood have been defined sociologically in terms of marriage and family formation, completion of education and entrance into the work force. As these transitions are occurring at later ages in contemporary society than traditionally, some researchers (Salmela-Aro, 2011; Steinberg, 2011; Tanner & Arnett, 2009) have proposed that the period between 19 and 25 years should be treated as a separate developmental period, which has been coined ‘emerging adulthood’.

The adolescent experience is marked by a gradual unfolding of biological, psychological, and social transformations (Patton & Viner, 2007); all of which are described in more detail in the following section. However, it is important to note that while each adolescent experiences various developmental transitions during this period, it is understood that these changes are culturally dependant (Gowers, 2005). In the developing world, for example, the adolescent stage barely exists, as children as young as 12 years are expected to engage in full time work and acquire adult roles. In developed countries however, adolescence is acknowledged as a developmental stage, spanning several years and leading to independence from one’s respective family.

All three stages of adolescence represent periods of high vulnerability for body image concerns (Frisén, Lunde & Berg, 2015; Bucchianeri, Arikian, Hannan, Eisenberg & Neumark-Sztainer, 2013). The present thesis however, primarily focuses on individuals in middle-adolescence (youth aged between 13-18 years), as well as on those transitioning to and from this period.

## *1.4.2 Developmental Stages of Adolescence*

### *1.4.2.1 Biological Changes*

The beginning of adolescence is largely defined by a biological event. Puberty, which is associated with changes in the brain and how the brain regulates the production of the sex hormones, represents one of many biological changes occurring during this life stage. Pubertal onset varies by as much as 4 to 5 years

across individuals (Parent, Teilmann, Juul, Skakkebaek, Toppari, & Bourguignon, 2003), however, the age at which girls and boys attain their final pubertal milestones, overlap, substantially (11.0 to 14.1 years for females, 11.5 to 16.5 years for males; Bordini & Rosenfield, 2011). In terms of pubertal progression, each sex proceeds through puberty in different ways (Bogin, 2011). Boys experience voice deepening and the growth of the testes, penis, pubic and facial hair; whereas girls grow breasts, experience menstruation, and grow pubic hair (Gowers, 2005).

Body weight changes, including increases in fat and muscle tissue, are also associated with pubertal onset; however, such changes also differ for both boys and girls. Girls' hips widen relative to their shoulders and waist, they gain more fat tissue than boys do, and at a faster rate; which results in girls finishing puberty with a muscle-to-fat ratio of approximately 5 to 4 and boys with a muscle-to-fat ratio of approximately 3 to 1. Pubertal development for males leads to a broadening of the shoulders relative to the hips and to an increase in muscular development and physical strength (Abbott & Barber, 2010). Changes in height represent an additional biological change in adolescence, with a typical growth spurt occurring at 11 years of age in girls and 13 years of age in boys (Gowers, 2005). For the adolescent, these fundamental biological changes represent a dramatic challenge, requiring an adjustment to and acceptance of changes in the physical self.

#### *1.4.2.2 Psychological Changes*

Adolescence has also been characterised as a time when individuals begin to explore and examine psychological characteristics of the self, in order to discover whom they really are and how they fit into the social world in which they live (Steinberg & Morris, 2001). During early adolescence, youth begin to develop a sense of what they want or enjoy; and begin to observe how their actions and behaviours influence their immediate surroundings, both at home and school, as well as their relationships with family members and peers (Trejos-Castillo & Vazsonyi, 2011). As they mature further, critical and independent thinking, information processing and more advanced moral reasoning begin to develop. As such, youth begin to think in a self-directed and self-regulating manner, similar to that of adults (Steinberg, 2005). Further, the capacity to set personal goals and understand how others think begins to evolve (Sawyer, Afifi, Bearinger, Blakemore, Dick, Ezeh & Patton, 2012). A combination

of the above psychological changes and advancements, allow youth to develop a sense of personal identity that reflects who they are, what they believe in, how they think and how they behave with and react towards others.

#### *1.4.2.3 Social Changes*

The adolescent years are also associated with various social changes, including the gradual diminishing role of parents, an increasing role of peers, changes in the school setting; and in late adolescence, a transition from school to the worlds of work, university and/or childrearing (Sawyer et al., 2012). This thesis however, is focused on school-aged adolescents, thus, the social changes discussed in this section will be applicable to this stage of their lives, rather than the social transitions associated with emerging adulthood.

During adolescence, young people spend a large amount of time in the school setting, thus, the time spent with a wide range of peers increases and the formation of distinct peer groups occurs. As such, the prominence of peers begins to override that of parents (Brown, 2004). The peer context provides an important setting for the formation and maintenance of friendships, for the development of social and problem solving skills, for empathy development, for the acquisition of peer behaviours and attitudes, for social comparison and identification and for the establishment of one's social status (Trejos-Castillo & Vazsonyi, 2011; Buhs, Ladd & Herald, 2006). The peer context also allows adolescents to help each other cope with the physical changes of adolescence and/or with the acquisition of adult-like roles and/or responsibilities. Furthermore, the importance of and activities with opposite-sex peers increases during adolescence (Steinberg, 2005). The initiation of romantic relationships during adolescence is believed to be directly influenced by family relationships; in that family expectations and values, regarding dating and expressing love greatly influence this process (Trejos-Castillo & Vazsonyi, 2011). Both peer friendships and romantic relationships formed during adolescence, thus provide youth with an opportunity to test and display their developing social identities.

As adolescence progresses, youth tend to have an improved capacity to control peer influences, and resultantly, peer influences begin to decline (Palaniswamy & Ponnuswami, 2013). By late adolescence, it has been noted that adolescents desire a

sense of independence and individuality, rather than striving towards peer similarity (Palaniswamy & Ponnuswami, 2013). Furthermore, by the later stages of adolescence, there is a tendency to become more selective regarding the peers whom constitute one's friendship circle. As such, friendship groups become narrower, with the influence of the larger peer group becoming less pronounced than the influence of one's immediate friendship circle (Palaniswamy & Ponnuswami, 2013). The differentiation between friendships and peer relationships however, will be discussed in a later section.

### *1.4.3 Conclusion*

In summary, the combination of social, biological and psychological changes that occur in adolescence, makes this period a highly challenging and vulnerable time for adolescents (Sawyer, Afifi, Bearinger, Blakemore, Dick, Ezeh & Patton, 2012), as their awareness of and sensitivity towards each of these changes is heightened. Although the biological transformations experienced during adolescence are perhaps more observable than the psychological and social changes, all three are equally profound. Indeed, other transitions are experienced across the life span that may impact how one thinks, feels and acts, however, the aforementioned transitions are particularly salient during adolescence because they occur simultaneously, at different levels, causing temporary disruptions in how adolescents experience changes in their inner (e.g. identity, self-perception) and outer worlds (e.g. peers and parental relationships). As such, the period of adolescence was deemed an especially important period for the examination of body image concerns, within this research study.

## **1.5 Peer Relationships and Friendships**

### *1.5.1 Defining Friendships*

A fundamental feature of friendships is that friends are similar to one another and share many characteristics in common. This similarity in friendships is known as homophily; which has been attributed to two processes, namely, partner selection and socialisation (Brown & Larson, 2009). That is, individuals are propelled to select each other as friends due to pre-existing backgrounds, tastes, values and interests. As

these characteristics are affirmed within the relationship, the partners are likely to grow even more similar to one another in response to peer modelling and pressures to conform. However, overtime, it is possible that friendships diminish and come to an end if partners begin to diverge in attitudes, behaviours and beliefs. In particular, early adolescence is associated with short-lived friendships; however, as individuals progress through adolescence, friendships become stronger and more stable (Brown & Larson, 2009). Furthermore, researchers have identified specific characteristics that can facilitate or inhibit adolescents' capacities to form effective friendships. Marsh, Allen, Ho, Porter & McFarland (2006) prospectively demonstrated that individuals in the early stages of adolescence with higher levels of ego development were more successful in forming close attachments to friends, establishing intimate friendships and achieving a high level of popularity amongst their peers, than same-age peers who were lower in ego development. Further, Parker, Low, Walker & Gamm (2005) found that feelings of jealousy towards a friendship exacerbates a sense of loneliness within adolescents, with girls reporting more jealous feelings over friendships than boys.

In addition, friends serve a number of important functions, both positive and negative, for the adolescent. Firstly, friends can act as sources of social support to youth who are rejected by their peers and/or can buffer the ill effects of negative family experiences (Bukowski, Motzoi & Meyer, 2009). Friends can also provide adolescents with a forum for the learning and refining of socioemotional skills and can teach them how to cooperate with others and how to take on different perspectives, new identities and new roles (Cronsnoe, 2000). Moreover, friends can contribute to adolescent happiness and well-being (Bukowski, Burhmester & Underwood, 2011); can facilitate the exploration of one's identity (McLean, 2005) and can help socially unskilled youth modify behaviours in ways that improve prospects for future peer and romantic relationships. Although friendships are supposedly founded on the principles of equality and reciprocity, it has been noted that in dyadic friendships, one partner often appears to have more power than the other (Giordano, Longmore, & Manning, 2006; Updegraff, Helms, McHale, Crouter, Thayer & Sales, 2004). However, Updegraff and colleagues (2004) found that adolescents with unequal distributions of control in friendships do not report less positive experiences than peers in more balanced friendships. Friends also have the

potential to exert a negative effect on adolescents. For example, relational victimisation (i.e. gossiping about a friend, as opposed to physical threats or beatings) has been found to predict high levels of social anxiety among adolescents (La Greca & Harrison, 2005). Although their impact can, at times, be negative, the lack of a friend during adolescence is predictive of increased unhappiness, loneliness and depression up to six years later (Pederson, Vitaro, Barker & Borge, 2007); whilst the loss of a friendship (friendship breakdown) is strongly associated with internalising and externalising problems in both girls and boys (Bakker, Ormel, Verhulst & Oldehinkel, 2010).

### *1.5.2 Defining Peer Relationships*

Friendships do not occur in isolation; rather, relationships among peers occur in an environment consisting of a multitude of interconnected dyadic relationships, commonly referred to as peer networks. By mid-adolescence, most interactions with peers occur within and between these networks (Brechwald & Prinstein, 2011). Peers who are not friends however, may represent a potentially more challenging context for adolescents. The peer context is not necessarily characterised by intimacy or reciprocity, rather it is highly dynamic and frequently involves a status hierarchy, which can evolve within and between peer groups (Brechwald & Prinstein, 2011; Brown, 2004). For example, within peer groups, one member might become the leader of a group; whilst between peer groups, certain groups may assume higher statuses than others.

The peer context often provides unsolicited information on how adolescents should conform to their peers or ideals (Giordano, 2003). Peers can signal, through their own behaviour, what type of behaviours are appropriate and accepted in certain situations, and accordingly, which behaviour is likely to lead to positive evaluation and social acceptance (Teunissen, Kuntsche, Scholte, Spijkerman, Prinstein & Engels, 2016). Adapting to the behaviour and norms of peers could therefore increase adolescents' sense of acceptance amongst peers and thus to the development of a favourable self-concept. Peers in the wider network may also serve as a more salient target for social comparison, as adolescents attempt to learn about who fits in

and why; and attempt to avoid the negative social sanctions associated with standing out.

Peer networks have been found to influence a variety of adolescent behaviors. Longitudinal research has demonstrated that peer socialisation and selection effects are predictive of adolescents' engagement in aggressive (Faris & Ennett, 2012), delinquent (Haynie & Payne, 2006), depressive and internalising behaviour (Conway, Rancourt, Adelman, Burk & Prinstein, 2011) overtime. Additional longitudinal research has indicated that peers are also implicated in adolescents' initiation or cessation of certain behaviours, including smoking (Green, Horta, De La Haye, Tucker, Kennedy & Pollard, 2013; Hall & Valente, 2007), drinking (Pesola, Shelton, Heron, Munafò, Maughan, Hickman & van den Bree, 2015) and marijuana use (Tucker, De La Haye, Kennedy, Green & Pollard, 2014; Pollard, Tucker, De La Haye, Green & Kennedy, 2014) overtime. Furthermore, socialising with peers who engage in risky behaviors has been found to negatively influence adolescent academic engagement in cross-sectional research (Stanard, Belgrave, Corneille, Wilson & Owens, 2010).

Peers, however, have also been noted to play a positive role in health-promoting behaviours in a number of cross-sectional studies. Salvy, Roemmich, Bowker, Romero, Stadler & Epstein (2009) reported that the presence of a peer among overweight youth and the presence of a friend among lean youth increases adolescents' motivation to engage in physical activity, however, the weight status of both the accompanying peer and friend were not considered in the study. Furthermore, Voorhees and colleagues (2005) reported that adolescent girls who have more physically active peers report higher activity levels themselves. Regarding sexual activity, Bayer, Cabrera, Gilman, Hindin & Tsui (2014) found that higher peer support reduced adolescents' likelihood of engaging in risky sexual behaviours, including both vaginal sex and precoital behaviors. Evidently, peer relationships have the potential to make a favourable contribution to a variety of adolescent health behaviours and have been found to positively influence adolescents' emotional well-being, self-beliefs, values of prosocial behaviours and social interactions (Wentzel, Baker & Russell, 2009).

### *1.5.3 Romantic Involvement with Peers*

Mixed-sex interactions increase in frequency and salience during early adolescence, when girls and boys combine their respective same-sex peer group circles (Gondoli, Corning, Salafia, Bucchianeri & Fitzsimmons, 2011). From these mixed-sex interactions, romantic relationships (mutually acknowledged on-going voluntary interactions) may develop (Collins, Welsh & Furman, 2009). Compared to other peer relationships, romantic ones typically have a distinctive intensity, commonly marked by expressions of affection and current or anticipated sexual behavior. Such relationships typically begin to emerge around 14 to 15 years of age (La Greca & Harrison, 2005) and may involve same or mixed-gender relationships (Collins, Welsh & Furman, 2009).

In terms of relationship quality, longitudinal research has reported that romantic relationships are often short-lived in early adolescence; however, overtime, as adolescence progresses, romantic relationships become more exclusive, dyadic, of longer duration and more sexually intimate (Meier & Allen, 2009). In an eight-year prospective study, Seiffge-Krenke (2003) reported that by late adolescence, individuals report greater closeness with and support from romantic partners than with and from best friends, parents and siblings. In terms of relationship investment, quantitative studies have revealed that boys have significantly less confidence than and similar levels of emotional engagement in relationships to girls (Giordano et al. 2006); and that girls are more relationship-focused than boys (Galliher, Welsh, Rostosky & Kawaguchi, 2004).

Romantic relationships have however been found to fulfil a number of important developmental functions in adolescence. According to cross-sectional research, involvement in high quality romantic relationships during adolescence is associated with fewer externalising symptoms, with greater academic self-efficacy and with fewer sexual partners, compared to adolescents' involvement in lower quality romantic relationships (Moosmann & Roosa, 2015). In addition, La Greca & Harrison (2005) revealed that the presence of a romantic relationship protects adolescents against feelings of social anxiety, while the negative qualities of a romantic relationship are predictive of depressive symptoms.

#### *1.5.4 Conclusion*

The above literature suggests that there is an important distinction between ‘friends’ and ‘peers’ in that they are conceptually different in terms of the type of relationship each provide. Both forms of social networks are clearly important contexts for healthy development in adolescence and become increasingly important reference groups that set values, beliefs and standards for behaviour during this life stage. Given the distinct and individual role of both peer relationships and friendships in adolescence, the following study sought to examine whether peers influence adolescent body image differently than friends.

### **1.6 The link between Adolescence, Body Image and the Peer Context**

A series of hallmarks associated with adolescence, such as pubertal maturation, the development of social comparison processes, and the onset of dating, make this life stage an important and vulnerable period for the development of body image concerns (Ferreiro, Seoane & Senra, 2014; Wertheim & Paxton, 2011). In particular, research has demonstrated that body image concerns peak during adolescence (Ferreiro, Seoane & Senra, 2012). The emergence of strong peer relationships represents another key developmental change of adolescence (Viner, Ozer, Denny, Marmot, Resnick, Fatusi & Currie, 2012). As children approach the adolescent life stage, the peer environment changes qualitatively, to one that is more intimate and communicative compared to childhood, and changes quantitatively, to one where the majority of an individual’s leisure time is spent with their peers (Steinberg & Morris, 2001). As such, the value given to and influence of peers increases significantly for many (Brown, 2004), which in turn, has the potential to contribute to and shape adolescents’ appearance-related thoughts, attitudes and/or behaviours. There are many ways, both implicit and explicit, through which the peer context influences body image among adolescents.

Firstly, the peer context can provide adolescents with a forum for learning about their own and others’ appeal through peer observations and comparisons (Carey, Donaghue & Broderick, 2014). It also provides them with an opportunity to experience mutual or unrequited attraction with same- or opposite-sex peers, and to

seek out which individuals are romantically successful with their same/opposite-sex peers (Gondoli et al., 2011). Secondly, the peer context can provide adolescents with a forum to discuss and reinforce appearance-related issues (Lawler & Nixon, 2011), to share appearance-related behaviours (Mooney et al., 2009) and to single out and/or criticise those who do not conform to specific appearance ideals (Puhl, Luedicke & Heuer, 2011). Thirdly, the appearance beliefs and behaviours of one's peers can be observed via social networking sites, such as Facebook and Instagram. These virtual forums create an additional opportunity for adolescents to be exposed to idealised images of their peers, as well as the endorsement of specific appearance-related attitudes and behaviours of popular peers (Tiggemann & Slater, 2013). Social networking websites can also create opportunities for adolescents to cyberbully others/their peers based on their appearance; an incident that may be openly viewed by the presence of other online peers (Berne, Frisén & Kling, 2014). Fourthly, the peer context can provide a forum of positive support to those who are preoccupied with their changing physique and/or can teach adolescents how to avoid body image evaluations or criticisms from their peers. High quality friendships, with strong friendship dynamics have the potential to serve as a protective factor against the negative aspects of adolescents' peer relations and buffer the effects of potential appearance-related pressures associated with the peer context.

Whether positive or negative, the peer environment represents an important context for the development of body image, among adolescents. Comparing oneself to, and observing and/or modelling the appearance of one's peers represent important mechanisms through which peers may indirectly influence adolescent body image. Peer pressure to conform to specific ideals, conversations pertaining to appearance-related values and norms, as well as peer support represent additional mechanisms through which peer influence, is directly exerted, among adolescents. This study thus sought to explore how and to what extent do peers influence adolescent body image in Ireland?

## **1.7 The link between the Peer Context, Adolescent Body Image and Health Promotion**

The World Health Organisation (WHO, 1986) defines health promotion as a process that enables individuals to take control over and improve their own health. Health, which was traditionally viewed as the mere absence of disease or infirmity, was recognised as “a state of complete physical, mental and social wellbeing” by the WHO in 1984. At the first international conference on Health Promotion in Ottawa (1986), it was argued that health promotion should focus on promoting and protecting the positive health and wellbeing of an individual or the whole community, rather than solely focusing on physical health. Specifically, the Ottawa Charter (1986) created five key action areas: (i) build healthy public policy; (ii) create supportive environments for health; (iii) strengthen community action for health; (iv) develop personal skills; (v) re-orient health services, to promote individual and community health.

The Ottawa Charter for Health Promotion (1986) also acknowledged the influence that the environment can have on an individual’s health. In particular, the social determinants of health, which have been defined as “the conditions in which people are born, grow, live, work and age” (WHO Commission on the Social Determinants of Health, 2008) have been recognised as playing a key role in determining an individual’s physical, social, emotional and spiritual well-being. The operational manner through which the social determinants influence health, have been well captured in Bronfenbrenner’s (1998) bioecological model of human development (Figure 2). Specifically, Bronfenbrenner’s (1998) bioecological model highlights that human development is situated within, and shaped by, the interactions that occur between an individual and four systems: microsystem (immediate environment), mesosystem (connections between immediate environments), exosystem (indirect external environmental settings) and macrosystem (larger cultural context). Each system within the model is represented by overlapping rings, which illustrate how factors at one layer, influence factors at another layer. Further, within and between each system are bi-directional influences, which imply that relationships have an impact on human development in two directions; both away from and towards the individual.

The emergence of new peer relationships represents one of the key social determinants of health in early adolescence, as young people experience school transitions and parental influence begins to decline (Brown, 2004). Peers, in turn, can have a positive and/or a negative influence on young people's health. With respect to body image in particular, sociocultural models have identified the peer context as a key social determinant in the development of adolescent body image concerns (Thompson & Heinberg, 1999). Both longitudinal and cross-sectional research have confirmed that peers play a crucial (predominantly negative) role on body image, via appearance-related conversations, pressure, teasing and/or exclusion (Helfert & Warschburger, 2013; Helfert & Warschburger, 2011; Lawler & Nixon, 2011; McCabe, Ricciardelli & Holt, 2010; Jones & Crawford, 2006) among adolescents.

Given this, it is necessary to examine the peer context from a health promotion perspective, in order to determine how supportive peer environments can be created, promoted and fostered for young people going forward. Supportive peer contexts are crucial to helping young people develop to their full potential and attain the best health in their transition to adulthood. Improving adolescent health requires improving young people's daily life with their peers, and addressing the risk and protective factors associated with this social context. Given the negative influence that peers can have on body image among adolescents, the development of supportive peer environments that offer protection from threats to the perceptual and attitudinal dimensions of body image, and thus health, are required. In addition, as young people spend a majority of their day in the school environment, this also means addressing the risk and protective (peer and general) factors in the school setting so that positive body image and health can be promoted.

In order to establish how a supportive peer environment can be established for young people with respect to body image, an examination of how and to what extent do peers influence adolescent body image development (relative to other factors) is firstly necessary. Such an exploration will help to provide an insight into how positive body image development, and thus positive health, can be promoted and sustained among youth in Ireland.

## **1.8 The gap in research**

The transition to adolescence is accompanied by rapid and new experiences in social, physical, cognitive and psychological domains. These developmental changes present opportunities for growth and development; however, they may also act as antecedents to body image concerns. Prior research has shown that dysfunctional evaluations of the body peak during adolescence (Littleton & Ollendick, 2003), thus an understanding of the key factors at play for adolescents and the manner in which they influence body image development is crucial, in order to prevent the onset, if possible, of body image concern.

As mentioned in the previous section above, sociocultural models have identified peers, parents and the media as playing a key role in the body image experiences of adolescents (Thompson & Heinberg, 1999), however, less research attention has been given to the role of peers, relative to the other two factors. This study therefore focused on the peer context with respect to adolescent body image in Ireland. It was envisaged that an in-depth focus of the peer context would enhance our understanding of the key peer influences (both implicit/explicit and positive/negative) at play for adolescent body image, as well as their overall contribution to body image relative to other key factors.

In order to gain a thorough understanding and to create a comprehensive picture of adolescents' body image experiences with respect to the peer context, both qualitative and quantitative approaches were adopted in this study. Specifically, a qualitative approach was used to explore in-depth the mechanisms through which peers influence adolescent body image, given that, to our knowledge, no published study has undertaken such an investigation, in Ireland or elsewhere. The qualitative phase of this study aimed to examine the contribution of peers to body image across adolescence (13-17 years), given that body dissatisfaction increases with age during this life stage (Olive, Byrne, Cunningham & Telford, 2012; Bearman, Presnell, Martinez & Stice, 2006). Furthermore, no study has examined whether peers influence adolescent body image differently to friends; the mechanisms through which body image could be improved for youth in Ireland; and how Irish youth conceptualise body image. The qualitative phase of this study additionally sought to examine such gaps in knowledge.

The second phase of this study aimed to qualitatively examine how adolescents conceptualise the terms, “body image” and “body shape” in order to seek out whether two newly developed survey items were suitable for use in a cross-sectional health behaviour survey (2013/14 Health Behaviours in School Aged Children (HBSC) survey). Using the 2013/14 HBSC survey, a quantitative examination into what other factors, relative to peers, influence adolescent body image in Ireland. To date, no study has examined how peers compare to other body image influences; a gap in knowledge this study also aimed to fill.

Lastly, this study aimed to quantitatively investigate the role of cyberbullying and friendship dynamics on adolescent body image, given that these two forms of peer influence have received very little research attention to date. In the few studies conducted thus far (Frisén, Berne & Lunde, 2014; Mishna, Cook, Gadalla, Daciuk & Solomon, 2010; Cassidy, Jackson & Brown, 2009), an association between cyberbullying and adolescent body image has been reported, yet limited, if no data, is currently available on the relationship between cyberbullying and body image among Irish adolescents. Similarly, research investigating the role of friendship dynamics (strong/weak) on adolescent body image is sparse. The few studies conducted to date, have showed that social engagement with peers has a positive impact on body image among overweight/obese adolescent girls (Caccavale, Farhat & Iannotti, 2012), while low friendship quality has a negative impact of body satisfaction among adolescent girls (Schutz & Paxton, 2007; Gerner & Wilson, 2005). Both studies however, failed to include an adolescent male cohort, and were not conducted with Irish adolescents, two research gaps this study aimed to fill.

## **1.9 The current study**

In light of the research gaps outlined above, the overall aim of this study was to examine peer influences on adolescent body image in Ireland. In meeting this aim, this study sets out seven objectives, which were used to frame the research questions (RQ). The objectives were to:

**Objective 1:** To explore how adolescents conceptualise the terms body image and body shape

**RQ1:** What do the terms body image and body shape mean to adolescents?

**Objective 2:** To examine how peers influence adolescent body image

**RQ2:** What mechanisms are used by adolescents to influence body image?

**Objective 3:** To investigate positive and negative peer influences on body image

**RQ3:** How do peers positively and/or negatively influence adolescent body image?

**Objective 4:** To explore whether peers influence body image differently to friends

**RQ4:** How do peers influence adolescent body image in comparison to friends?

**Objective 5:** To examine the influence of peers on adolescent body image, relative to other influencing factors

**RQ5:** What other factors influence adolescent body image, relative to peers?

**Objective 6:** To explore the relationship between cyberbullying and friendship dynamics on adolescent body image

**RQ6:** To what extent does cyberbullying and/or friendship dynamics play a role in adolescent body image?

**Objective 7:** To investigate how body image can be improved for young people in Ireland

**RQ7:** How can body image be improved for young people in Ireland?

## **Outline of thesis structure**

The overall structure of this thesis will use the following chapters to address the research questions:

**Chapter 2** reviews related literature with respect to the aims of this study and concludes with the study aim, objectives and reiteration of the research questions.

**Chapter 3** outlines the methodological basis of the study, highlighting the chosen research design and its rationale in relation to the study research questions. The chapter explains how each of the three studies included in the overall study were designed, implemented, and analysed.

**Chapter 4** provides a summary of the key findings as reported in three peer-reviewed published journal articles. Additionally, it presents additional results not covered by these articles.

**Chapter 5** discusses the findings of the study in the context of existing literature and describes the implications of this research to policy and practise. The chapter ends with recommendations for further research and outlines the limitations/strengths of the research. This chapter ends with a general conclusion.

## **CHAPTER 2: LITERATURE REVIEW**

### **2.1 Introduction**

This chapter will firstly outline the most common measures used in the literature to assess body image among adolescents. It will then examine the socio-cultural influences associated with body image, which have been conceptually framed in accordance with Bronfenbrenner's (1998) Bioecological Theory of Human Development and the Tripartite Model of Body image and Eating Disturbance (Thompson & Heinberg, 1999), within this thesis. A more in-depth focus on the mechanisms through which and the impact of peers on adolescent body image will constitute the remainder of this chapter. The final element of this chapter will conclude with an overall summary.

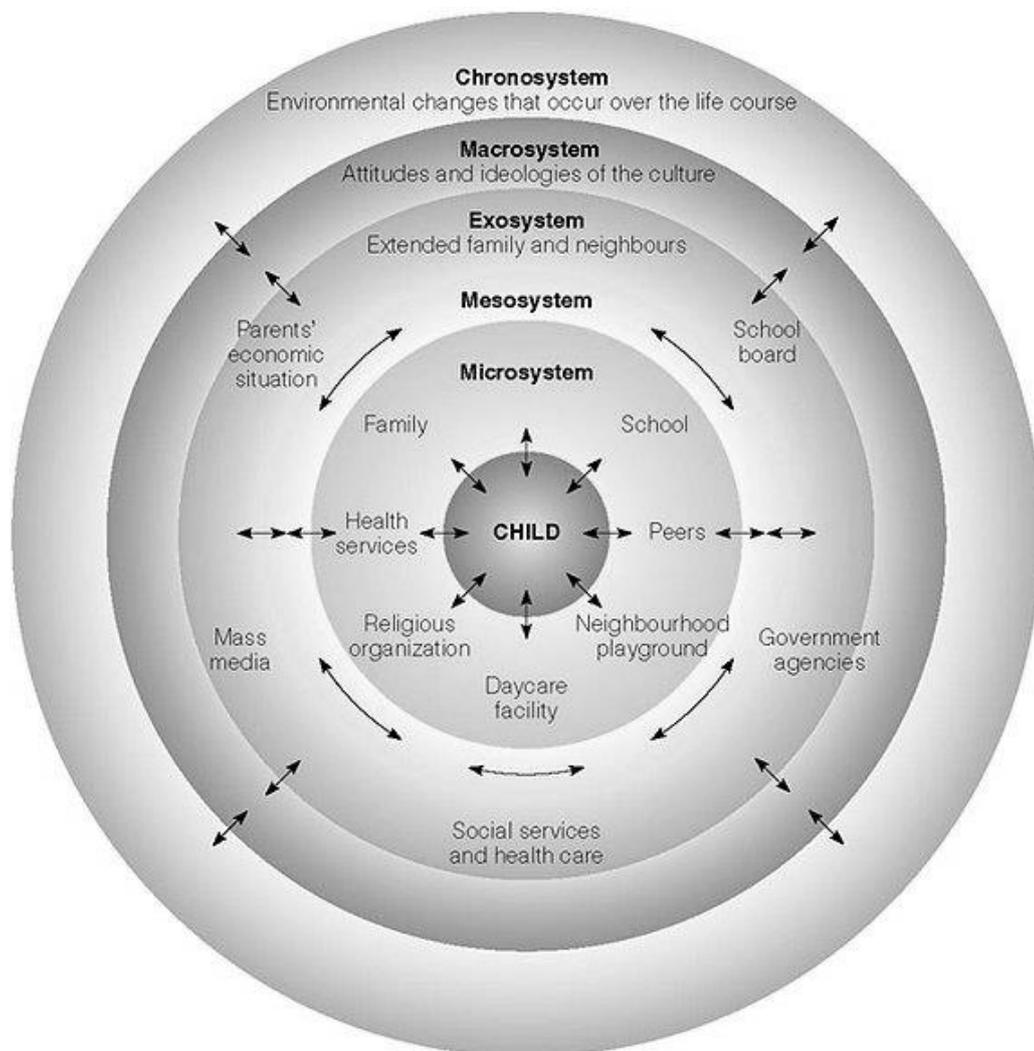
### **2.2 Measures used to assess Adolescent Body image**

A plethora of measures have been used in the literature to assess adolescent body image. The most widely used scales include: The Body Investment Scale (Orbach & Mikulincer, 1998), The Feelings and Attitudes towards the Body Scale (Mintz & Betz, 1986), The Body Esteem for Adolescents and Adults Scale (Mendelson, Mendelson & White, 2001), The Figure Rating Scale (Collins, 1991) and The Body Shape Satisfaction Scale (Slade, Dewey, Newton, Brodie & Kiemle, 1990; see Appendix 17 for more details). Whilst the aforementioned scales are used to examine adolescent body image, they are used to examine very specific dimensions of the construct. The first three scales above tap into the attitudinal (thoughts and feelings) dimension of body image, while the latter two scales examine the perceptual (estimation of size/appearance) dimension of the construct. In addition, they are most often used separately in studies assessing adolescent body image, as studies in this field tend to focus on one aspect of body image in particular (satisfaction with or investment in appearance).

### 2.3 Factors associated with Adolescent Body Image: A Conceptual Framework

The Bioecological Theory of Human Development (Bronfenbrenner, 1998; see Figure 2) was applied in this study to explain the broad spectrum of factors at play for adolescent body image, and is described in detail below.

Figure 2. The layers of systems in the bioecological theory of human development (Bronfenbrenner, 1998).



### *2.3.1 The Individual (Biological & Psychological Factors)*

At the centre of the model is the individual, which takes into account the individuals biological and psychological characteristics. In relation to biological characteristics, factors such as body composition, pubertal timing, age and gender have been shown to impact adolescent body image. Moreover, psychological factors such as social comparison and appearance-ideal internalisation processes have also been found to play a role.

#### *2.3.1.1 Biological factors*

The timing of and changes associated with puberty can influence adolescent body image. In terms of pubertal timing, longitudinal research demonstrates that both late and early pubertal development have an impact on adolescent body image. De Guzman & Nishina (2014) found that perceived and actual (specific to boys) late pubertal development predict body dissatisfaction among both boys and girls, over a 7-year period; while, McCabe & Riccardelli (2009) revealed that early pubertal development predicts engagement in bulimic behaviours among normal weight boys and girls, over a 16-month period. In addition, McCabe & Riccardelli (2009) reported that early pubertal development predicts negative affect and body dissatisfaction among normal weight girls, in comparison to their overweight peers. Clearly, both late and early pubertal development are implicated in negative body image experiences among adolescents; perhaps suggesting that a lack of resemblance with one's peers during this developmental period serves to accentuate feelings of body dissatisfaction.

In addition to pubertal timing, increased body mass index (BMI), a body compositional change associated with puberty, has been found to negatively influence body satisfaction among adolescent girls (Paxton, Eisenberg & Neumark-Sztainer, 2006; Barker & Galambos, 2003); a relationship that seems to be reversed for boys (McCabe & Riccardelli, 2004). Increases in BMI is accompanied by increases in adipose tissue; a pubertal change that moves girls away from and boys toward sociocultural physical ideals (which includes a thin appearance for Westernised girls and a mesomorphic build for boys; Bearman, Martinez, Stice & Presnell, 2006). This change, although generally welcomed by boys, may lead to an increased awareness of and preoccupation with the body and engagement in

maladaptive health behaviours, in order to attain/maintain socially endorsed physical ideals.

#### *2.3.1.1.1 Age*

Age appears to play a significant role in the body image trajectories of adolescent boys and girls. Findings from a ten-year longitudinal study revealed that both boys' and girls' level of body dissatisfaction increased between middle and high school; further increased during the transition to young adulthood; which was, in turn, associated with an increase in BMI over time (Bucchianeri, Arikian, Hannan, Eisenberg & Neumark-Sztainer, 2013). Specific to girls, additional evidence has largely supported the notion that girls' level of body dissatisfaction increases through middle adolescence (Meland, Haugland & Breidablik, 2007; Bearman, Presnell, Martinez & Stice, 2006; Eisenberg, Neumark-Sztainer & Paxton, 2006; Tiggemann, 2005), with notable exceptions citing either no change (von Soest & Wichstrom, 2009) or decreases (Ohring, Graber & Brooks-Gunn, 2002) over time. Among boys however, some studies indicate a pattern of decreased body dissatisfaction over time (Holsen, Kraft & Roysamb, 2001), others suggest no significant change (Bearman et al., 2006; von Soest & Wichstrom, 2009), while others point to increases in dissatisfaction from early to middle adolescence (Eisenberg et al., 2006). Nonetheless, it is clear from the above studies that age is implicated in body image experiences during adolescence.

#### *2.3.1.1.2 Gender*

Research has also indicated that body image perceptions and experiences differ for both boys and girls during adolescence. Girls appear to experience greater body dissatisfaction than males during this period, both in cross sectional (Kantanista, Osinski, Borowiec, Tomczak, Król-Zielinska, 2015; Lawler & Nixon, 2011; Xu, Mellor, Kiehne, Ricciardelli, McCabe & Xu, 2010; Meland et al., 2007) and longitudinal studies (Eisenberg et al. 2006); are more likely than boys to engage in general appearance conversations (Lawler & Nixon, 2011; Jones, Vigfusdottir & Lee, 2004); report greater internalisation of appearance ideals than boys (Lawler & Nixon, 2011) and primarily value a thin and fit ideal, in comparison to the muscular and lean ideal valued amongst boys (Tatangelo & Ricciardelli, 2013; Clark & Tiggemann, 2006).

### 2.3.1.2 *Psychological factors*

Body-ideal internalisation refers to the extent to which an individual accepts and attempts to attain socially defined ideals of physical attractiveness (Lawler & Nixon, 2011). For girls, body-ideal internalisation involves the integration of the thin ideal and for boys the integration of a muscular and lean ideal, into their identity (Lawler & Nixon, 2011; Edwards, Tod, Molnar & Markland, 2016). Numerous studies have revealed a positive link between body-ideal internalisation and body image concerns among adolescents. Lawler & Nixon (2011) reported that appearance-ideal internalisation predicts body dissatisfaction among both boys and girls; Knauss, Paxton & Alsaker (2007) revealed that appearance internalisation, pressure and BMI predict body dissatisfaction in both boys and in girls; and Stice & Whitenton (2002) reported that thin-ideal internalisation, increased adiposity, and perceived pressure to be thin predicts an increase in body dissatisfaction among girls. Further, among African American and Hispanic adolescent girls, Snapp (2009) found that those with high levels of thin-ideal internalisation had a more negative view of their body weight and felt worse about their athletic ability compared to girls with lower rates of thin-ideal internalisation. These studies thus suggest, that the more adolescents internalise socially defined beauty ideals, the more likely they are to be dissatisfied with their appearance, irrespective of ethnic origin.

Social comparison refers to the cognitive judgments that individuals make about their own attributes compared to others (Jones, 2001). Social comparisons are usually in the upward direction (that is, an individual compares him/herself to someone whom he/she perceives to be “better off” in some way). During adolescence, social comparison becomes a relevant mechanism for learning about the appearance-related expectations within one’s peer environment and for evaluating the self in terms of those standards. Facial features, skin, hair and weight are important aspects of attractiveness for adolescents and can be a basis for social comparison; although girls engage in this process more than boys (Jones, 2001). Several targets can be used to self-compare one’s appearance with that of others, including peers, models (Carey, Donaghue, & Broderick, 2014); celebrities, and athletes (Jones, 2001). If the comparison is positive, it may stimulate feelings of pride or joy and reinforce the positive rewards of fitting in (Mueller, 2015); alternately, a negative comparison may cause feelings of shame or distress that may

encourage engaging in behaviours that conform to specific ideals (Carey et al., 2014; Mueller, Pearson, Muller, Frank & Turner, 2010; Jones, 2001).

Given the aforementioned research, it is clear that individual psychological processes such as appearance-ideal internalisation and comparisons are linked to adolescent body image development and concern.

### *2.3.2 The Microsystem*

The microsystem is defined as the proximal and major setting in which youth development takes place (Bronfenrenner, 1979). This system represents the layer nearest the individual, and includes contexts such as the peer, family and school context. In terms of adolescent body image, sociocultural models have identified the family and peer contexts as the main sources of socio-cultural influence on adolescent body image development and eating disturbance (Keery, Van den Berg & Thompson, 2004). Additionally, the importance of the school setting for the development of adolescent body image concerns has also been acknowledged (Mueller et al., 2010; Jones, 2004; 2001). Each of these contexts and their relevance to body image will be described in more detail below.

#### *2.3.2.1 Peers*

Peers are a vital part of the lives of adolescents and play an increasingly prominent role in defining social expectations, establishing identity, and evaluating self (Brown, 2004). With respect to body image, peer experiences provide an important social context, in which appearance norms and ideals are communicated, negotiated, modelled and reinforced, and, subsequently become valued. Their influence on adolescent body image however, will be described in detail in a later section within this chapter, given that the peer context represents the focal point of this research study.

#### *2.3.2.2 Family*

Another important factor within the microsystem that influences adolescent body image is family. As well as peers, the family represents an important social context through which values, behaviours and attitudes are transmitted over time. In

addition, research suggests that those closest to an individual may have a particularly powerful influence on what the individual perceives as normative (Killeya-Jones, Costanzo, Malone, Quinlan, & Miller-Johnson, 2007), thus making the behaviors of family members particularly important in adolescent body image development. Various mechanisms through which family experiences might place some adolescents at risk for body image concerns have been established in the research literature.

Studies have shown that parental encouragement to control body weight and shape is a strong predictor of body dissatisfaction among girls (Kluck, 2010) and weight concerns among both boys and girls (Helfert & Warschburger, 2011). Moreover, negative comments about appearance and appearance-related teasing by both parents and siblings have been found to be related to weight reducing practices, body dissatisfaction, depression and disordered eating among adolescent girls (Kluck, 2010; Keery, Boutelle, van den Berg & Thompson, 2005); while paternal comments in particular, have been identified as the most significant predictor of body dissatisfaction among boys (Rodgers, Faure & Chabrol, 2009). Further, both boys and girls whose mothers engage in dieting are more likely to want to become thinner and to attempt to lose weight (Keery, Eisenberg, Boutelle, Neumark-Sztainer, & Story, 2005); whilst mothers who discuss weight-related issues are more likely to have daughters with disordered eating behaviours (Neumark-Sztainer, Bauer, Friend, Hannan, Story & Berge, 2010; Keery et al., 2005).

It is thus evident that family members can act as sources of appearance-related information during adolescence. As such, parents in particular, have the potential to actively modify the messages they send to their offspring, concerning body shape, weight and eating behaviours and attitudes.

### *2.3.2.3 School*

The school context represents a prominent socialising setting for many adolescents; whereby appearance norms and values encountered through schoolmates can shape a variety of body image beliefs, values and behaviours that may ultimately form, what has been referred to as an appearance culture (Mueller et al., 2010; Jones, 2004). Prior research has indicated the important role of classmates and the wider school environment, in particular, on body image during adolescence. Mueller and

colleagues (2010) revealed that girls' weight-loss behaviours are associated with the weight-loss behaviours of their schoolmates, particularly schoolmates who are similar to themselves.

As schools draw together developmentally similar adolescents for long periods of time, the school environment can clearly condition how exposure to certain appearance behaviours and/or values affects adolescent body image. Not only can the school context facilitate adolescents' observations of the type of food classmates eat, the size of their bodies and the appearance values and behaviours they verbally or visibly endorse, it can also provide a social context that is ripe for appearance teasing, criticism and social comparison.

### *2.3.3 The Mesosystem*

The mesosystem comprises the interrelations among two or more settings in which the developing person actively participates (Bronfenbrenner, 1979). For example, simultaneous appearance-related messages and pressure from peers, the family and the school environment, at the micro-level, may shape how adolescents perceive, feel about and act towards their body image, at the individual psychological level.

### *2.3.4 The Exosystem*

The exosystem represents distal social environments, in which the individual does not directly function, but that still influences their development (e.g., the media) (Bronfenbrenner, 1979). In terms of body image development, the conveyance of appearance ideals via the media has been found to impact adolescents, in numerous ways.

#### *2.3.4.1 The Media*

From a young age, youth are bombarded with media messages concerning specific appearance ideals that are considered attractive. Across both traditional media (such as television and magazines) and social media (such as Facebook and Instagram), the most prominent ideal promoted in the media for girls is thinness; while slenderness and muscularity ideals are most often promoted for boys (Warren, Schoen & Schafer, 2010). Exposure to and internalisation of such ideals are important

contributors to adolescent body dissatisfaction. It should be noted however, that the mechanism through which social media influences adolescent body image, differs from that of traditional media forms. Unlike traditional media, social media platforms (online communities and social networks) allow individuals to interact with one another and create, share, and exchange information and ideas (Kietzmann, Hermkens, McCarthy, & Silvestre, 2011). Moreover, traditional media, which predominantly features pictures of and stories about models and celebrities, differs from social media platforms, which additionally feature known others, who vary in relational closeness to the user, including close friends and distant peers (Fardouly, Pinkus & Vartanian, 2015). As such, social media comparisons may be particularly influential on adolescent body image, as peers on social media may be seen as more relevant comparison targets than models or celebrities in traditional media, whose appearance is often less attainable than is the appearance of peers.

Moreover, it is important to note that a variety of different social media platforms through which adolescents can make appearance comparisons exist (e.g., Facebook, Instagram, Twitter, Snapchat); each of which may contain different features that could influence the impact of such comparisons. For example, Instagram enables users to create and share “filtered” pictures with their followers, which may influence the extent to which adolescents internalise such idealised images of their peers (Fardouly et al., 2015). More specifically, the number of “likes” or positive comments on an uploaded image that an individual obtains from their peers, may reinforce that his/her image is deemed the most attractive within the wider peer environment. If an individual feels that, his/her appearance does not meet specific peer ideals, they may engage in appearance related behaviours that compromise health, in order to fulfill the most widely appraised peer ideal.

Clearly, the access and exposure to multiple peer images afforded by social networking sites constitutes a significant shift in the media landscape. Unlike traditional media, the combination of celebrity images with peer images, presented equally on social media platforms, may result in an increased pressure to conform to *both* peer and celebrity ideals, which may subsequently enhance feelings of current or developing body image concerns among adolescents.

With respect to traditional media, McLean, Paxton & Wertheim (2013) reported that body dissatisfaction is directly influenced by appearance internalisation, appearance comparisons and BMI, and indirectly by media literacy and exposure. Further, Jones (2004) revealed that appearance-ideal internalisation mediates the relationship between appearance conversations with friends and body dissatisfaction for both boys and girls; and further, that internalisation, peer appearance criticism, and BMI directly contribute to adolescent body dissatisfaction. Traditional media has also been found to impact non-Westernised adolescents. Rivadeneyra, Ward & Gordon (2007) found that more frequent and more active TV viewing was associated with lower social- and appearance-esteem among Latino adolescents; while Schooler (2008) revealed that Latino adolescents, who watch more mainstream 'White' television in particular, feel worse about their bodies than Latinos who watch less mainstream television.

Concerning social media, Tiggemann & Slater (2013, 14) found that preadolescent and adolescent female Facebook users reported greater appearance concerns and dieting behavior than did non-users. Similarly, Meier & Gray (2014) found that adolescent female Facebook users had higher levels of self-objectification and made more appearance comparisons than did non-users. The time one spends on Facebook has also been found to impact adolescent body dissatisfaction. Tiggemann & Miller (2010) and Tiggemann & Slater (2013, 2014) reported that adolescents who spend more time on Facebook are more dissatisfied with their appearance, internalise the thin-ideal to a greater extent, and have greater drive for thinness than users who spend less time on Facebook (Tiggemann & Miller, 2010; Tiggemann & Slater, 2013, 2014). However, Meier & Gray (2014) reported that it is greater photograph exposure on Facebook, rather than overall Facebook usage that is associated with greater body dissatisfaction in adolescent girls.

Although media use is an integral facet of the adolescent experience, it is evident that both traditional forms of media (such as television and magazines), and social media (such as Facebook) influence adolescent body image.

### 2.3.5 *The Macrosystem*

The macrosystem is the outermost layer of Bronfenbrenner's model (1979) and is generally considered to exert a unidirectional influence not only upon the individual person, but on the micro-, meso- and exosystems as well. Aspects of the macrosystem involve the attitudes and ideologies of the culture in which the individual is a member. Macro-structural factors relevant to adolescent body image includes the gendered appearance ideals valued within one's cultural context.

#### 2.3.5.1 *Cross-Cultural Gendered Appearance Ideals*

It is now well established that adolescents are vulnerable to societal messages regarding the highly gendered appearance ideals, endorsed in their respective cultures. In Western cultures, both preadolescent and adolescent boys tend to value and strive towards attaining slender, muscular and fit body ideals (Tatangelo & Ricciardelli, 2013; Grogan & Richards, 2002) while boys as young as 8 years have been found to reject attributes such as fatness, laziness and athletic incapability (Tatangelo & Ricciardelli, 2013). Modern ideals for preadolescent and adolescent girls also include a fit and lean appearance, however unlike boys, they strongly value the thin-ideal (Tatangelo & Ricciardelli, 2013; Homan, McHugh, Wells, Watson & King, 2011).

In terms of non-Westernised cultures, some studies have found that the thin-ideal is equally prevalent, for example, among African American and Hispanic adolescent girls (Snapp, 2009; Hermes & Keel, 2003); however, others have documented that non-Westernised adolescent girls place importance on a larger body ideal that has more "feminine curves" than the dominant white ideal (Lynch, Heil, Wagner & Havens, 2007; de Casanova, 2004). Relative to non-Westernised boys, height has been identified as a salient body image concern among Korean and Asian males, taking precedent over body shape and weight concerns. Park, Kang & Kim (2003) reported that 41.7% of Korean boys (n = 1724) were dissatisfied with their current height and desired an adult stature 8.2 cm taller than the average for Korean men. Further, Chen, Jackson & Huang (2006) found that dissatisfaction with physical stature was more common than concerns with overweight or facial attractiveness among Chinese adolescents and emerging adults; while, Watt & Ricciardelli (2012)

identified shortness in height as one of the most common appearance concerns of young Australian men of Chinese ancestry in a qualitative study.

Although the type of appearance ideal valued by adolescents is affected by the cultural contexts in which they live; prior research has shown that body dissatisfaction is prevalent amongst adolescents from different cultures (Tatangelo & Ricciardelli, 2013; Homan et al., 2011; McCabe, Ricciardelli & Waqa, 2009; Xu, Mellor & Kiehne, 2010; Holmqvist, Lunde & Frisén, 2007); which perhaps suggests that, adolescence in itself, represents a vulnerable period for body image concerns, irrespective of the body ideals valued and approved of in one's cultural context.

Within the bioecological model, such ideals can be transmitted to the individual level through the various systems, including for example, the media at the exosystem level, and through the interacting relationships between or the individual influences of the school, peer and family contexts at the meso and micro levels. Such sociocultural ideals and values may in turn give rise to a range of body image disturbances, thereby having an impact on body image development among adolescents.

To conclude this section from a bioecological perspective, it is clear that adolescent development takes place within the immediate social contexts of their everyday lives: the family, the peer group and the school setting. The roles and relationships within these microsystems, which form the basis of daily interactions between the adolescent and the social environment, can serve to shape individual body image development, over time. As previously mentioned, the specific relevance of the peer context in relation to adolescent body image will be discussed later on in this chapter. Next, an additional theoretical framework used to underpin this study, in addition to the one previously described above, is outlined below.

## **2.4 Theoretical Underpinning**

Whilst Bronfenbrenner's Bioecological Model of Human development was used as an overarching theoretical framework to guide understanding of how adolescent body image may develop, the study was also theoretically informed by the Tripartite

Influence Model of Body Image and Eating Disturbance (Thompson & Heinberg, 1999).

The Tripartite model posits that peers, parents and the media influence body dissatisfaction via internalisation of body ideals and appearance comparison. The model has been empirically supported in a range of studies amongst both adolescent and girls. Specifically, Papp, Urbán, Czeglédi, Babusaa & Túrya (2013) found that thin-ideal internalisation fully mediated the relationship between sociocultural influences and body dissatisfaction for girls; whilst Shroff & Thompson (2006) reported partial mediation effects. In a modified version (using muscle building techniques as the dependent variable), sociocultural influences were found to be independently related to the use of muscle building techniques, with each influence partially mediated by social comparison tendencies for boys (Smolak, Murnen and Thompson, 2005). Clearly, parents, peers and the media have the potential to influence adolescent body image; however, the mechanisms through which peers exert their influence on adolescent body image will be discussed further, given that the peer context represents the focal point of this research study.

## **2.5 Peer Influences on Adolescent Body Image**

### *2.5.1 Peer Acceptance and Rejection*

The extent to which individuals are actively liked, accepted, or preferred by their peers has been identified as an important contributing factor to adolescent development. Individuals who are well-liked by friends and peers are more cooperative, are more socially competent with and sensitive towards others and can regulate their emotions more effectively in comparison to individuals who are not well-liked and accepted by their peers (Bagwell & Schmidt, 2011). Peer acceptance has also been linked to increased feelings of school belongingness and school liking, increased academic success (Boulton, Don & Boulton, 2011; Newman Kingery, Erdley, & Marshall 2011); and has been found to motivate adolescents to get involved in extracurricular school activities (Véronneau, Vitaro, Brendgen, Dishion, & Tremblay, 2010).

Being well-liked and accepted by peers is also implicated in adolescents' body image experiences and concerns. In cross-sectional research, Oliver & Thelen (1997) found that appearance-based peer acceptance was a major predictor of body image concerns in both girls and boys; however, Jones (2004) could only verify this impact on girls. Moreover, Lyu & Gill (2012) found that perceived physical competence was associated with perceived peer acceptance among both adolescent girls and boys; and emerged as a positive predictor of same-sex and opposite-sex peer acceptance.

A desire to be accepted by opposite-sex peers also appears to play a role in adolescents' body image experiences. Qualitative studies have revealed that adolescent girls endorse the belief that a thin and attractive appearance plays a large role in determining how accepted they are by and how successful they are in developing a relationship with their opposite-sex peers; while boys endorse the belief that a fit, athletic and muscular appearance enhances their acceptance amongst and dating prospects with female peers (Kierans & Swords, 2016; Mooney et al., 2009).

In contrast to peer acceptance, peer rejection and exclusion, which typically occur when youth are noticeably different from others (e.g. obese, acne and facial disfigurements), are also related to adolescent body image concerns. Helfert & Warschburger (2013) reported that both boys and girls with higher BMI are particularly affected by peer exclusion; while Helfert & Warschburger (2011) found that appearance-related peer rejection was predictive of weight concerns in adolescent boys, but not in girls.

Appearance-based rejection sensitivity, which is the tendency to anxiously expect, readily perceive and overreact to signs of rejection based on personal appearance (Park, 2007) has also been found to impact adolescent body image. Bowker, Thomas, Spencer & Park (2013) found that peer relationships moderated associations between appearance-rejection sensitivity and psychological maladjustment in early adolescence. Specifically, peer-rated acceptance by opposite-sex classmates was a risk factor for associations between appearance-rejection sensitivity and psychological maladjustment. More recently, Webb, Zimmer-Gembeck & Donovan (2014) revealed that the appearance-focused characteristics of the friendship context were associated with heightened appearance-rejection sensitivity, via internalisation

of appearance ideals, social comparison and body dissatisfaction. The appearance-focused friend characteristics that were associated with appearance-rejection sensitivity included exposure to friends' appearance conversations, appearance teasing and perceived pressure to be attractive.

### *2.5.2 Peer Victimization*

Peer victimisation occurs when an individual is the target of intentional harmful behaviour, which is repeated over time and is characterised by an imbalance of power, such that the victim does not feel he or she can stop the interaction (Salmivalli, 2010). This type of behaviour usually occurs in the presence of other peers; whom may act as passive bystanders and do nothing when one is being victimised, or as defenders that enact behaviour aimed at stopping the victimisation experience (Salmivalli, 2010).

Victimisation can include verbal (teasing, name-calling), relational (excluding or ostracising from social situations) or physical victimisation (hitting, kicking, chasing) and can occur in a range of contexts including schools, neighbourhoods and through electronic means (Arango, Kiel, Opperman, Polly, Gipson, Cheryl & King, 2016). Among adolescents, both boys and girls report that relational victimisation is more common than overt victimization, however, girls report being a witness to and experiencing relational victimisation to a greater extent than boys (Goldstein, Young & Boyd, 2008); while boys report being engaged in physical and verbal victimisation more frequently than girls (Wang, Iannotti, Luk & Nansel, 2010).

Many research studies have indicated that one's appearance is often targeted in the bullying/teasing episode. In a study by Frisé, Holmqvist and Oscarsson (2008), for example, almost 40% of 13-year-olds stated that physical appearance may explain why someone gets bullied. More specifically, researchers have demonstrated that weight is commonly targeted in the teasing experience, especially amongst those who are over- or under-weight (Hayden-Wade, Stein, Ghaderi, Saelens, Zabinski & Wilfley, 2005); and may have consequences that can last for years (Eisenberg, Neumark-Sztainer, Haines & Wall, 2006).

Cross-sectional research has also positively associated appearance-related criticism from peers with body dissatisfaction, among both adolescent boys and girls (Lawler

& Nixon, 2011; Jones et al., 2004). Specifically, Jones and colleagues (2004) found that appearance-related criticism from peers was the strongest direct predictor of body image dissatisfaction among boys. Furthermore, Lunde, Frisen & Hwang (2007) revealed that frequent exposure to appearance-related criticism among boys is linked to worries about how others perceive their physical persona.

Electronic victimisation also represents another avenue through which adolescents may experience teasing from their peers. Electronic victimisation, commonly referred to as cyberbullying, occurs through electronic means, such as texting, online chats or social media websites. In comparison to traditional bullying, cyberbullying consists of its own specific features, such as a wide audience, anonymity, rapid and distant communication (Patchin & Hinduja, 2010; Tokunga, 2010) and the ability to bully large numbers of people effortlessly, irrespective of the time of day or geographic location (Kowalski, Giumetti, Schroeder & Lattanner, 2014). Moreover, turning off an electronic device does not prevent the cyber-attack from being seen by peers and affecting adolescents' social lives (Slonje, Smith & Frisén, 2013).

Studies have shown that cybervictimization is associated with a variety of negative outcomes, including low self-esteem, symptoms of anxiety and depression and suicidal ideation (Sinclair, Bauman, Poteat, Koenig, & Russell, 2012; Slonje et al., 2013; Wang et al., 2011; Kowalski et al., 2014). In addition to these studies, cyberbullying has also been expounded for its role in adolescents' body image experiences.

Prior research has revealed that appearance is the most commonly reported reason for being cyberbullied among adolescents (Mishna et al., 2010; Cassidy et al., 2009); and that appearance-related cyber-victimisation is associated with lower body-esteem, feelings of depression (Frisén et al., 2014) and suicidal ideation (DeSmet, Deforche, Hublet, Tanghe, Stremersch & De Bourdeaudhuij, 2014). Furthermore, results from a qualitative study conducted with adolescents, reported that appearance-related cyberbullying is more common among girls, is used as a means of attaining higher social status in the peer group setting and has a negative impact on adolescent mental health (Berne et al. 2014).

Clearly, both face-to-face and virtual peer victimisation are salient issues in adolescence; both of which negatively influence adolescents' perceptions of and feelings towards their body image.

### *2.5.3 Peer Pressure*

Adolescence marks a time in which peer groups can become powerful socialisation agents of appearance-related behaviors. One chief contributor to adolescents' engagement in appearance-related behaviors is peer pressure (both explicit and perceived). Peer pressure refers to the feelings of pressure that adolescents experience when they are encouraged or coerced by others to think or behave in a specific way (Kiuru, Burk, Laursen, Salmela-Aro & Nurmi, 2010). During adolescence, as individuals begin to sort themselves into peer groups, both perceived and actual pressure to adopt the appearance styles, values, and interests of one's friends and peers may intensify. An attempt to conform to and adopt peer behaviours and attitudes may be perceived as a way of fostering solidarity and uniformity within one's peer group and/or a way of developing and maintaining a group identity that distinguishes one from other peer groups.

The ability to resist peer pressure however does not fully develop until 18 years of age (Steinberg & Monahan, 2007); although individual variations have been observed. Sumter, Bokhorst, Steinberg, & Westenberg (2009) reported that not all adolescents are susceptible to peer pressure, particularly as they age; and that girls are less susceptible to peer pressure in mid adolescence than are boys.

Nonetheless, peer pressure has been expounded for its role in the development of adolescent body image concerns. In longitudinal studies, appearance-related peer pressure was found to predict weight concerns in adolescent girls and muscle concerns in boys, over a 1-year period (Helfert & Warschburger, 2011); whilst heterosocial involvement was associated with greater peer pressure for thinness amongst adolescent girls, which in turn predicted greater body dissatisfaction over a 3- year period (Gondoli et al., 2011). Cross-sectional studies have also revealed a positive association between perceived peer pressure for thinness and body dissatisfaction among adolescent girls (Kichler & Crowther, 2009; Jones & Crawford, 2006).

Peer conversations concerning appearance, also represent another form of social pressure within the peer context. Frequent engagement in conversations with friends about appearance has shown consistent concurrent and longitudinal associations with boys' and girls' heightened body dissatisfaction (Lawler & Nixon, 2011; Jones, 2004; Jones et al., 2004; Shroff & Thompson, 2006). Gender differences have been evidenced regarding the frequency with which males and females engage in peer appearance conversations, with adolescent girls being more inclined than boys to discuss appearance and weight loss concerns with peers (Jones et al., 2004). However, Jones and Crawford (2006) reported that boys talk more frequently to peers about muscular enhancement than girls talk to friends about dieting.

Clearly peer conversations concerning appearance impact adolescent body image. Appearance conversations with friends may direct attention to and guide the interpretation of appearance-based information, shape appearance norms and ideals and encourage adolescents to evaluate themselves according to strict appearance standards.

All in all, adolescents appear to succumb to appearance-related pressure from peers, which is exerted via appearance conversations, opposite sex-interactions and/or pressure to look a certain way. Such pressure is perhaps driven by their motivation to acquire social status in a specific peer group or to preserve their social status within the peer group they are part of.

#### *2.5.4 Peer Similarity, Modelling and Comparison*

Peer modelling and comparison represent additional means through which peers influence adolescent body image. Social identity theory suggests that identification with a friendship group that values attractiveness and investment in appearance will result in exposure to and pressure to adopt, attitudes and values congruent with those group norms (Tajfel, 1979). In addition to selecting and adopting the behaviours and attitudes of specific peers, adolescents may engage in social comparison processes with their peers. Social Comparison Theory (Festinger, 1954) states that individuals compare themselves to others in order to evaluate themselves. Social comparisons may be upward, whereby comparisons are made with those seen as superior and often harm an individual's overall self-concept; or downward, in which comparisons

are made with inferior subjects to boost or build up one's sense of self. Social comparison generally leads individuals to feel pressured to conform to those with whom they compare themselves (Festinger 1954). In the adolescent context, both processes (selection/comparison) identified in the aforementioned theories, appear to play an important role in adolescents' body image experiences.

In two meta-analytic reviews, Webb & Zimmer-Gembeck (2014) and Badaly (2013) found that adolescents tend to show similarity to their peers in appearance concerns and related behaviours. Specifically, friends' endorsement of and/or preoccupation with appearance were found to be consistently associated with higher body dissatisfaction in adolescent girls (Webb & Zimmer-Gembeck, 2014). Moreover, prospective studies have confirmed that reciprocal friends are similar with respect to body image perceptions and dieting behaviours (Woelders, Larsen, Scholte, Cillessen & Engels, 2010); which may lead to increased body dissatisfaction up to 5 years later (Paxton et al., 2006).

In addition, longitudinal research has revealed that peers, (mothers and fathers) play an important role in the development of girls' bulimic symptoms over a four-year period; with peers exerting the strongest influence of all three (Blodgett Salafia & Gondoli, 2011). Furthermore, Mueller and colleagues (2010) revealed that similar others (peers in general) are the most influential group within the school context, with respect to weight loss behaviours, among over and underweight girls. More recently, Rayner, Schniering, Rapee, Taylor & Hutchinson (2013) reported that selection rather than socialisation effects contributed to body image concern and behavioural similarity within adolescent girls' friendship groups, when both processes were examined simultaneously. Specifically, girls tended to select friends who were similar to themselves in terms of body dissatisfaction and bulimic behaviors. In terms of socialisation, the adolescents did not become more similar to their friends in their levels of body dissatisfaction, dieting, or bulimic tendencies over time. Rather, changes in the dependent variables were predicted by several individual attributes. Specifically, having a greater BMI predicted increases in body dissatisfaction, having higher body dissatisfaction predicted increases in dieting, and being older and having higher body dissatisfaction and negative affect predicted increases in bulimic behaviors. In addition to the aforementioned longitudinal

studies, cross-sectional research has also revealed that adolescent girls tend to resemble their friends on dimensions of body dissatisfaction and disordered eating behaviors (Hutchinson & Rapee, 2007; Eisenberg, Neumark-Sztainer, Story & Perry, 2005; Paxton, Schutz, Wertheim & Muir, 1999).

More recently, studies have pointed to the contribution of one's school composition in predicting body image concerns. Carey, Donaghue & Broderick (2013) found that friendship cliques in all-girls schools exhibited similar levels of body image concern and dieting behaviours; whereas friendship cliques in mixed-sex schools were not found to be similar with regard to body image concern or disordered eating. Similarly, Davey, Jones & Harris (2011) revealed that girls in single-sex schools desire a significantly thinner figure than girls in mixed-sex schools; whilst Drury, Bukowski, Velasquez & Stella-Lopez (2012) found that adolescent girls in single-sex schools reported greater pressure to conform to traditional gender norms than did girls in mixed-sex schools.

Although the mechanisms responsible for the above influence processes remain unknown, theoretically, social learning theory (Bandura, 1977) may explain why adolescents are similar in body image concerns and dieting behaviours. Social learning theory specifies that peers may influence each other by observing, modelling and imitating the behavior of important individuals in their environment (such as peers; Bandura, 1977). As such, adolescents may use the peer context as a modelling source, to seek out what appearance is accepted, valued and/or rejected; or to ensure that they are fulfilling appearance-related standards endorsed by their peers. Further, in a bid to impress peers, they may engage in similar appearance-related behaviours and/or adopt similar attitudes; a combination that may result in the development of similar body image concerns, behaviours, beliefs and values.

In addition to peer similarity and modelling, during adolescence, when one's physical appearance is beginning to change, adolescents may also draw upon appearance comparisons to evaluate whether their appearance resembles that of their peers. Although appearance comparisons may help adolescents to detect what is perceived as normal or valued amongst peers, they have been associated with body dissatisfaction among girls and a drive for muscularity among boys in a number of studies (Galioto, Karazsia & Crowther, 2012; Mueller et al., 2010; Karazsia &

Crowther, 2009; Shroff & Thompson, 2006). Furthermore, research has highlighted that peer comparisons mediate the relationship between the endorsement of thinness norms and body image concerns, to a greater extent than comparisons with models, among adolescent girls (Carey et al., 2013).

### *2.5.5 Peer Support*

Peer support has been described as “social support by individuals who are similar in age and/or social conditions to the person receiving the support” (Toda, 2005). During adolescence, young people appear to foster peer support to a greater extent than parental and teacher support (Nilsen, Karevold, Roysamb, Gustavson & Mathiesen, 2013); which in turn protects against depression (Nilsen et al., 2013), social integration problems and peer victimisation (Kerr, Preuss, & King, 2006) and contributes to increased engagement in physical activity (Fitzgerald, Fitzgerald & Ahern, 2012; Beets, Cardinal, & Alderman, 2010) and healthy eating habits (Kubik, Lytle, & Fulkerson, 2005). In addition, a recent study demonstrated that prosocial feedback from peers is associated with increased prosocial behaviour compared to either no feedback, or antisocial feedback, which is associated with decreased prosocial behaviour (Hoorn, Dijk, Meuwese, Rieffe & Crone, 2016).

Peer support has also been found to impact adolescent body image, among both boys and girls. Recently, Kirsch, Shapiro, Conley & Heinrichs (2016) revealed that lower levels of peer support prospectively predicted greater body dissatisfaction, but not greater disordered eating, among older adolescent boys and girls. Although the relation between peer support and disordered eating emerged as non-significant, the study revealed that the effect of peer support on disordered eating was significantly stronger for boys than girls, and second, that body dissatisfaction mediated the relation between peer support and disordered eating. Moreover, cross-sectional research has also revealed that adolescents who report low peer support are more likely to experience body dissatisfaction (Ata, Ludden, & Lally, 2007). Additional cross-sectional studies have revealed that poor classmate relationships are associated with increased use of unhealthy weight control behaviors; fewer friendships are associated with decreased use of such behaviours (Vander Wal, 2012); and that greater social engagement with peers is associated with greater body satisfaction among overweight/obese adolescent girls, compared to overweight/obese girls with

less social engagement (Caccavale et al., 2012). Lastly, in a 2-year longitudinal study, Stice, Presnell & Spangler (2002) showed that low perceived social support from peers, but not family, was associated with dieting at baseline and served as a risk factor for the onset of binge eating among adolescent girls.

These studies thus suggest highlight the important role peer support plays in adolescents' body image experiences. Specifically, it seems that low peer support may be a risk factor for adolescent body dissatisfaction and engagement in unhealthy weight control behaviours. Given these findings, encouraging and encouraging adolescents to develop healthy and supportive relationships with each other may perhaps prevent them from developing negative body perceptions and related health behaviours.

## **2.6 Study Research Questions**

The aim or the purpose of a research study is connected to the research questions and methods. When conducting research, research questions are useful for creating explicit directions and boundaries for a study (Punch, 2014; Teddlie & Tashakorri, 2009) and help to reduce an overall study into specific research questions (Creswell & Plano Clark, 2007). The overarching research question for this study included: how and to what extent do peers influence adolescent body image in Ireland. This research question was identified and generated based on a review of the literature relating to the factors that influence adolescent body image, and more specifically, the mechanisms through which peers, as an understudied context, influence how adolescents perceive, behave towards and feel about their body image. This approach has been suggested as the most conventional method to develop research questions (Plano Clark & Badiee, 2010). The research question developed for this study was constructed in response to knowledge gaps in the literature relating to the role of the peer context on adolescent body image. This study sought to add to the knowledge gaps identified by providing appropriate answers to the research question posed.

The general research aim and associated objectives for the study are reiterated below:

## **Aim**

The overall aim of this study was to examine peer influences on adolescent body image in Ireland. Seven objectives were devised in order to fulfil the study aim, which include:

**Objective 1:** To explore how adolescents conceptualise the terms body image and body shape

**Objective 2:** To examine how peers influence adolescent body image

**Objective 3:** To investigate positive and negative peer influences on body image

**Objective 4:** To explore whether peers influence body image differently to friends

**Objective 5:** To examine the influence of peers on adolescent body image, relative to other influencing factors

**Objective 6:** To explore the relationship between cyberbullying and friendship dynamics on adolescent body image

**Objective 7:** To investigate how body image can be improved for young people in Ireland

## **2.7 Summary**

Clearly, the literature review demonstrates that peers play a role in adolescents' body image experiences. However, much of the research has been conducted using quantitative designs. A deeper understanding of the peer influence process is required, particularly from adolescents' perspectives. It was envisaged that seeking young peoples' perspectives on the issue, within the current study, would provide us with a more comprehensive insight into the nature of the peer influence process, with respect to adolescent body image. Furthermore, the extent to which evolving forms of peer influence, such as cyberbullying, play a role in adolescents' body image experience requires further exploration. Only a few studies in the current body image literature have addressed this mode of influence to date. Lastly, the Tripartite theoretical model of Body Image and Eating Disturbances has established that peers, parents and the media largely contribute to adolescent body image development and eating concern (Thompson & Heinberg, 1999); however, no prior research has exclusively examined the influence of peers relative to both parents and the media, and/or to other factors excluded from this model. In order to provide answers to the research questions and address knowledge gaps in the literature, a multi-method research design was considered the most for this study. Centred on the preceding literature review, the next chapter will describe the multi-method approach used to achieve the objectives of this research study and to answer the study questions.

## **Chapter 3: METHODS**

Methodology refers to “*the way in which we approach problems and seek answers*” (Taylor, Bogdan & De Vault, 2015).

### **3.1 Introduction**

This chapter outlines how the objectives of the study were fulfilled. It states the research design employed, the theoretical basis and the rationale for its application. Specifically, this chapter illustrates how quantitative and qualitative approaches were implemented in the study and explains the data collection and analysis procedures used for each phase. Reliability and validity issues related to the study as well as ethical considerations are presented in the final section of this chapter.

### **3.2 Research Design and Philosophical Approach**

A philosophical approach or worldview is the lens through which one views the world. Creswell & Plano Clark (2011) advocate that a single world view may be selected to underpin an entire study. The philosophical worldview that was used to guide the research design used in this study was pragmatism. Pragmatism is not committed to any one system of philosophy and reality; instead, it involves the researcher using ‘what works’ to seek answers to the research question (Creswell & Plano Clark 2011). Pragmatism views the research problem as the most important issue, valuing both subjective and objective observations to reveal the answers to the research questions (Feilzer 2010, Creswell & Plano Clark 2011). Morgan argues that pragmatism can serve as a philosophical paradigm for social research, regardless of whether that research uses qualitative, quantitative or mixed methods.

With that in mind, a sequential multi-method design was used in the current study. Multi-method research is defined as “research in which more than one method (typically qualitative and quantitative) or more than one worldview is used” (Tashakkori & Teddlie, 2010). It differs from a mixed-methodology in that the quantitative and qualitative elements of a study do not have to be combined; rather, each element represents a study in its own right (Morse, 2003). A mixed methodology, however, involves a logical integration of both qualitative and

quantitative strategies within a single project, and it is this integration that is perceived to provide a better understanding of the research problem, than either strategy alone. Moreover, a mixed methodology is often used when one method is needed to inform another; to validate results obtained from one method used, with another (i.e. to explain or confirm quantitative results with qualitative experiences); or to generalise findings from the qualitative element of a project (Creswell & Plano Clark, 2011). A multi-method approach however, involves qualitative and quantitative projects within the same project, that are relatively complete on their own. This was deemed particularly important in the current study, as the peer context has not yet been examined using a qualitative investigation with respect to adolescent body image, nor has the relationship between cyberbullying/friendship dynamics and body image been examined using a quantitative research design. As such, a qualitative and quantitative study, in their own right, was essential in the current study; in order to unravel how exactly the peer influence process unfolds and influences adolescent body image.

The benefits of using a multi-method approach have been noted in the literature. Georgsson & Staggers (2016) stated that multiple methods in data collection can increase the depth of inquiry while improving the reliability and validity of the research findings. On a more philosophical level, Mingers (2003) claimed that using different research methods, from different philosophical paradigms, allows one to focus on different aspects of reality, which in turn can provide a richer understanding of the research topic, than either research approach alone. Further, Seawright (2013) advocated that methodological variety is particularly important when a complex issue is under investigation, as it provides a greater insight into the overlapping and/or different facets of the phenomenon. This was deemed especially relevant to the current study, as body image is a complex construct that can manifest at a behavioural, perceptual and/or at an attitudinal level. Using a multi-method design is not without challenges; the approach requires the researcher to become familiar with both qualitative and quantitative research methodologies and the collection and analysis of both text and numeric data can be time-intensive (Creswell & Plano Clark, 2007). However, a combination of both quantitative and qualitative methods was required to answer the overarching research question, than either approach alone.

The brief study summaries below demonstrate the range of methodological approaches used in the current research project. A rationale for why specific approaches were used within each respective phase will be highlighted later in this chapter.

### *Phase 1*

In the first phase of this study, a qualitative approach was adopted. Focus groups were conducted with post-primary school pupils to explore the mechanisms through which peers influence adolescent body image; and to determine whether their influence is positive and/or negative. Results from this stage of the study lead to the development of a conceptual model, which specifically illustrated the mechanisms through which peers negatively influence body image (The Body Image Peer Influence Model, Figure 3).

### *Phase 2*

In the second phase of this overall study, a survey question exploring body image influences among adolescents was developed with youth for inclusion in the 2013/14 Health Behaviour in School Aged Children study (HBSC study). The aim of this phase was (i) to explore factors that influence adolescent body image; and (ii) to investigate the impact of peers relative to other factors. Both qualitative and quantitative approaches were employed to meet the objectives of this phase. First, a youth participatory approach was utilised to seek out young peoples' perspectives on the developing survey item. Second, the newly developed item was subsequently incorporated into a quantitative research design, namely, the 2013/14 Health Behaviour in School-aged Children (HBSC) survey.

### *Phase 3*

In the third phase of the study, a quantitative approach was adopted. Secondary data from the (2013/14) nationally representative health behaviour (HBSC) study was used to explore the relationship between (i) friendship dynamics and (ii) cyberbullying on adolescent body dissatisfaction. In addition, this phase of the study

explored whether friendship dynamics mediated the relationship between cyberbullying and body dissatisfaction.

### **3.3 Methodological Approach of each study**

#### *3.3.1 Phase 1*

##### *3.3.1.1 Overall aim*

To explore adolescents' conceptualisations of the term body image, as well as their perceptions on the mechanisms through which peers influence body image, and how body image can be improved for youth in Ireland.

The research questions that apply to phase 1 of the overall study include:

**RQ1:** What does the term body image mean to adolescents?

**RQ2:** What mechanisms are used by adolescents to influence body image?

**RQ3:** How do peers positively and/or negatively influence adolescent body image?

**RQ4:** How do peers influence adolescent body image in comparison to friends?

**RQ7:** How can body image be improved for young people in Ireland?

##### *3.3.1.2 Research Design*

A qualitative research design was used for this study. Qualitative research is a multifaceted approach that investigates culture, society and behaviour through an analysis and synthesis of people's words and actions (Hogan, Dolan & Donnelly, 2009). Denzin & Lincoln (2011) additionally argued that the term 'qualitative' suggests qualities, processes and meanings that are not examined through experimentation or measured in terms of quantity.

Focus groups were used as the qualitative research design for phase 1 of this study. A focus group is commonly defined as a method of collecting research data through moderated group discussion based on the participants' experiences and perceptions of a topic decided by the researcher (Carlsen & Glenton, 2011). They also aim to understand social dynamics and interactions between participants through the collection of verbal and observational data (Doody, Slevin & Taggart, 2012).

Focus groups have been identified as being particularly useful where little is known about the topic under investigation (Barbour & Kitzinger, 1999) as they serve to examine what people think, how they think and why they think that way. In addition, they are very useful for highlighting participants' similarities and differences regarding, as well as their experiences with, the issue under investigation. Moreover, this method allows researchers to probe participants about their reasons for holding a certain view, which in turn enables them to pursue a concept in more detail, if desired.

Focus groups also provide researchers with an opportunity to study the ways in which group members individually express their views on and collectively make sense of an issue and construct meanings around it (Bryman, 2004), as well as providing them with an insight into when and why participants modify their answers, after listening to or arguing with other group members. In addition, focus groups can tap into the different forms of communication individuals use in their daily interactions, including anecdotes, teasing, joking and arguing. Gaining access to these forms of communication is beneficial as individuals' attitudes and knowledge are not fully evident or may not be entirely articulated in responses to direct questions (Doody, Slevin & Taggart, 2013).

In phase 1, focus groups were selected as most appropriate for measuring the peer context for a number of reasons. Firstly, the focus group setting facilitates naturalistic discussion among participants in a non-threatening environment; a characteristic that was deemed appropriate for the discussion of a sensitive issue such as body image, with a group of adolescents. Second, it was anticipated that the use of a focus groups approach would provide a more thorough insight into the ways through which peers influence body image, than a one-to-one interview, given that the technique encourages participants to ask questions, exchange anecdotes, and comment on each other's experiences and points of view (Acocella, 2012). Additionally, it has been noted that focus groups empower participants to drive the discussion, as opposed to the researcher, which often takes the research in new and unexpected directions (Tiggemann, Gardiner & Slater, 2000); a characteristic that was especially suitable to the current study, given that few studies have used a qualitative approach to examine peer influences on adolescent body image to date.

However, there are also limitations associated with the focus group technique. At times, the speed of interaction that develops amongst participants during a focus group discussion, may not always allow them to go through every topic in detail. Topics that briefly emerge can be quickly abandoned by participants, while others can be dwelled upon in detail, even if they are not strictly relevant to the purpose of the research study (Acocella, 2012). In addition, the mere presence of other people and/or the presence of a more dominant character in a group setting can inhibit an individual from contributing and may influence the way a judgment is formulated or an answer is given (Acocella, 2012).

### *3.3.1.3 Participants*

Overall, 111 post-primary school students (59 females and 52 males) from second, third, fourth and fifth year participated in the study. In Ireland, students in second and third year are generally aged between 13 and 15 years, while students in fourth and fifth year are generally aged between 15 and 17 years. This age group was recruited in order to explore the impact of peer influences on body image during early-, mid- and late adolescence. In total, 6 schools from one large city in the Republic of Ireland took part. Participants were predominantly White; only 2 adolescents were Black. Socioeconomic status was not collected; however, two of the six schools were designated as disadvantaged.

### *3.3.1.4 Sampling and Recruitment*

A purposive sampling design was used for phase 1; which involves the deliberate selection of individuals or groups of individuals who can and are willing to provide information on an issue by virtue of knowledge or experience (Etikan, Musa, & Alkassim, 2016). It is a non-random technique that does not rely on underlying theories or a set number of participants. This sampling method was used for practical and financial reasons. Schools that were in the researcher's locality (Limerick city) were recruited, as they were easily accessible, convenient to get to, and thus did not cause the researcher to incur any significant travelling expense. In particular, a homogenous sample, whereby participants are similar in terms of age, gender and experiences was considered appropriate, in order to examine how similarities and commonalities between both boys and girls, from different age groups differed with

respect to the topic being researched (Etikan, Musa, & Alkassim, 2016; Palinkas, Horwitz, Green, Wisdom, Duan & Hoagwood 2015).

Schools were recruited from the Irish Department of Education and Science published list of schools to take part. School Principals were contacted and invited to participate in the study. The initial communication was followed-up with school visits and phone calls to discuss with each school Principal the nature of the research in greater detail. Upon approval from the respective school Principal a choice of active or passive consent was given. Letters, consent forms and information sheets for both participants and parents were delivered to each school by the researcher. See Appendices 3, 4, 5, 6 and 7 for a copy of these forms. Only adolescents who returned a completed parental consent form and who volunteered to take part were randomly selected to participate in the focus group discussion. The randomisation method involved the researcher choosing every third consent form that she obtained from the respective school Principal or alternative point of contact. At the point of randomisation, the researcher was not introduced to any of the research participants. This was considered particularly crucial to this study, in order to ensure that the researcher did not intentionally select a group of adolescents whom she felt would be most comfortable with discussing body image issues (i.e. attempting to intentionally exclude those who were over or underweight). As such, the randomisation technique used, in the absence of the study participants, was deemed most appropriate to minimise researcher bias. Adolescents were informed that they could withdraw at any time if they wish. There was no incentive for participation for the schools or students.

#### *3.3.1.5 Inclusion/Exclusion Criteria*

In each of the six schools, participants from second to fifth year, who consented to participate by signing a consent form and who were given parental consent were included in the study. Pupils who were not in second, third, fourth or fifth year and those who were eligible but did not sign a consent form or verbally expressed that they did not wish to participate in the focus group were excluded.

### *3.3.1.6 Data Collection Procedure*

Each school (with one exception) facilitated 3 focus groups each, thus a total of 17 single-sex focus groups were conducted in phase 1 of this overall study. Separating adolescents on the basis of gender was considered most appropriate in order to minimise adolescents' discomfort in discussing a sensitive issue such as body image, in the presence of their opposite-sex peers. The focus groups were conducted on separate days, allowing the researcher time to reflect and discuss field notes with supervisors.

All focus groups were conducted in an empty school classroom provided by the school Principal. The researcher met with each school Principal approximately thirty minutes before each group was due to begin. The room was set up during this time, which included outlining the ground rules on a flip-chart, placing an empty name badge and pen at each seat for participants to fill in, as well as setting up the table so that participants were seated in a circle.

Krueger & Casey (2009) state that the optimal number of participants for a focus group is between 5 and 10, thus we aimed to include more than five and less than 10 participants in each group. In addition, Doody and colleagues (2013) reported that smaller focus groups are more appropriate and effective when sensitive topics, such as body image, are being discussed. On average, the focus groups lasted approximately 45 minutes and included between 6 and 8 participants who were in the same year group at school. It was envisaged that conducting focus groups with adolescents from the same year would serve to enhance the cohesion of the focus group and facilitate more comfortable discussion among group members. The group discussions were recorded using two audio recorders, placed at both ends of the table. The use of two audio recording devices eliminated the risk of any technical failure taking place during the recording of the focus group discussion. An assistant moderator, (a member of the Health Promotion Research team, with experience in adolescent health studies) accompanied the researcher to each school for note-taking purposes and general assistance.

Each focus group commenced with a short introduction by the researcher and agreement of ground rules. The researcher also explained the terms "body image"

and “peers” to the participants to ensure that they were clear about what was being asked of them in advance of the focus group discussion. In line with Krueger and Casey’s (2009) recommendations, ice breakers were used to allow the participants to become as comfortable with the question process as possible. This involved first asking participants to fill in their name badges and attach them to their school uniform, and second, asking them to introduce the person beside them and recount one thing about them. This encouraged each participant to speak from the very beginning, thus lessening potential anxieties within the group and gave the researcher a point of reference when attributing statements during the transcription process, minimising confusion and difficulty in recall during data analysis.

Focus group questions were developed by the researcher and her primary supervisor who had previous experience in constructing and conducting focus groups with adolescents. In addition, an independent expert in body image and qualitative methodology was consulted to review the questions developed. In total, a structured interview guide including six questions, which reflected an introductory, three key and two closing questions, was developed. The question design drew upon the guidelines outlined by Krueger and Casey (2009). See appendix 2 for full focus group schedule.

#### *3.3.1.7 Focus Group Pilot*

The first school who agreed to participate was used as a pilot study. For the pilot, three focus groups were conducted with a total of 19 students, aged 13-17 years from one of the participating schools. The aim of the pilot was to discern the appropriateness and sequencing of the questions; to establish if any key issues were omitted and to ascertain the length of the focus group sessions. No changes were made to the question sequence and content after the pilot thus the data were used for the main study.

#### *3.3.1.8 Data Analysis*

The 17 focus groups were transcribed verbatim into Microsoft Word documents (MS Word). Once in MS Word, the focus groups were then imported into the QSR NVIVO 10 package. NVIVO 10 was used to manage the data and code the transcripts.

An inductive thematic approach was used to analyse the data, as it allows one to rigorously explore the nature of the data collected and to descriptively explain the patterns, or key themes that emerge (Braun & Clark, 2006). Specifically, an inductive thematic approach aims to understand and describe how individuals feel, think and behave within a particular context, relative to the research question. Furthermore, the approach provides a descriptive insight into the similarities and differences that emerge across the dataset, as well as the unanticipated responses that arise (Braun & Clarke, 2006). A rich and detailed account of the mechanisms through which peers influence adolescent body image, generated via an inductive thematic approach, was deemed especially important to this study as the issue had not yet been explored in a qualitative manner in the literature to date. Other approaches such as, content and discourse analysis, for example, were not deemed appropriate for investigating the issue at hand, as these approaches largely focus on determining the frequency and co-occurrence of words in the dataset, rather than focusing on the identification and description of both implicit and explicit patterns or themes within the data collected (Guest, MacQueen & Namey, 2011). In addition, a framework analysis, which uses a theme-based or a case-based (or a combination) analysis, is most often used in applied policy or health care research to investigate varying opinions among professionals within these settings, and thus was not deemed suitable for examining a cohort of adolescents (Ward, Furber, Tierney & Swallow, 2013).

Using Braun and Clark's (2006) six phases of thematic analysis, the researcher repeatedly read the interview transcripts in order to get familiar with the content's depth and breadth. The process continued by examining the transcripts, paragraph by paragraph, and developing initial codes (as closely related to the raw data as possible) for interesting features identified. The codes were then organised into clusters of similar ideas. These clusters were eventually formed into seven main themes, which were then reviewed to ensure that they corresponded to the coded extracts (level 1) and entire dataset (level 2). Meetings were held between the researcher and primary supervisor to discuss the transcripts, coding and preliminary findings and to reach a consensus on the final themes. The final step involved

selecting compelling extract examples, which were believed to clearly illuminate the main patterns and key findings of the data.

### *3.3.2 Phase 2*

#### *3.3.2.1 Overall aim*

To explore young peoples' perspectives on the development of a survey item on factors that influence body image and to assess other factors that influence body image.

The research questions that apply to phase 2 of the overall study include:

**RQ1:** What do the terms body image and body shape mean to adolescents?

**RQ5:** What other factors influence adolescent body image, relative to peers?

#### *3.3.2.2 Research Design*

Phase 2 of this study involved a literature review, a youth participative and a quantitative approach. A literature review, which has been defined as “a systematic, explicit and reproducible design for identifying, evaluating and interpreting an existing body of recorded documents” (Fink, 1998), was conducted in the initial stages of phase 2, in order to seek out whether other cross-sectional surveys had included an item on body image influences in their respective surveys that could be incorporated into the quantitative survey of phase 2. The literature review was particularly advantageous in the initial stages of phase 2, as it served to reveal that a single survey item pertaining to adolescent body image influences did not exist in the literature; a result which led to the development of two open-ended survey items.

Up until relatively recently young people have provided answers to research questions, rather than contributed to developing questions for use in research. It is enshrined in law to involve young people in decisions that affect their lives (LeBlanc, 1995). Particularly, in research, a youth participative approach empowers and engages young people to make decisions regarding issues that are relevant to them, allows them to be treated as active, rather than passive, members of a research process, enhances a sense of belonging and feelings of being valued within youth,

and enhances their ability to critically think about and apply their skills to a research project (Checkoway, 2011). Youth participation is also beneficial to researchers, as young people can draw on their own personal experiences to make valuable contributions to the research project, can provide researchers with an insight into whether newly developed items are accessible to young people, and can facilitate researchers' decisions regarding the progressive steps of a research project (Coates & Howe, 2014); all of which were deemed especially important to the nature of phase 2. The aim of such an approach was to explore young peoples' perspectives on the developed survey items.

The participative approach used in phase 2 adhered to Lundy's (2007) model of child participation; which includes providing participants with an open space to freely express their views and perceptions on the topic at hand; views of which are subsequently listened to, valued and acted upon. The survey item that adolescents expressed a preference for in the qualitative element of phase 2 was included in the quantitative survey in the final stage of phase 2.

The 2013/14 Health Behaviour in School Aged Children survey (HBSC study) represented the quantitative survey used in the final stage of phase 2. The HBSC survey is a cross-sectional WHO-collaborative study that runs on a four-year cycle, with an aim of gaining insight into young peoples' health, their health behaviours and social contexts. As such, the HBSC survey was considered an appropriate measure to explore body image influences among adolescents in the final stage of phase 2. Furthermore, the HBSC study was considered a convenient and reliable method for collecting data relating to the factors that influence adolescent body image, given that the survey captures a nationally representative sample of school aged children in each of its survey cycles; follows a systematic methodological approach; has been successfully administered in a time- and resource-efficient manner to young people, four times, prior to the 2013/2014 survey; and ensures that each participant is given an opportunity to document their responses anonymously.

### *3.3.2.3 Participants*

Two schools, including one mixed-sex and one single-sex school, located in Dublin and Limerick respectively, took part in the participative workshops. Between both

schools, a total of 74 adolescents, including 49 boys and 25 girls participated. The participants were aged between 13-17 years and included those from second, third, fourth and fifth year. For the quantitative aspect of study 2, which pertains to the HBSC study, a total of 95 post-primary schools, located across the Republic of Ireland took part. The study sample comprised of 7,565 adolescents, aged 13-17, from second to fifth year.

#### *3.3.2.4 Sampling and Recruitment*

A convenience sample (as described in phase 1 above) of adolescents were recruited for the participative workshops. Adolescents attending schools within geographic locations convenient to the researcher were invited to partake. Participation was voluntary and consent was sought from school Principals, parents and children. Only adolescents who returned a completed parental consent form and who volunteered to take part were selected to participate in the consultative workshop. There was no incentive for participation for the schools or students.

For the HBSC study, data from the 2011 census were employed, to provide the population distribution for 8 geographical regions within the Republic of Ireland. The sampling frame consisted of primary and post-primary schools; however, phase 2 concerned those attending post-primary schools only; lists of which were sourced from the Department of Education and Skills. A two-stage process identified study participants. Individual schools within regions were first randomly selected and subsequently, class groups within schools were randomly selected for participation. All classes within post-primary schools, with the exception of Leaving Certificate groups (i.e. final year examination classes) were sampled. Schools were recruited between April and October 2014 and response rates at school and student levels were 59% and 84% respectively. Only adolescents who returned a completed parental consent form and who volunteered to take part were selected to participate (See appendices 8 -16 for HBSC Pilot and main study documents).

#### *3.3.2.5 Inclusion/Exclusion Criteria*

Only those aged 13-17 years from second, third, fourth and fifth year were included in this study. Pupils who were not in 2<sup>nd</sup>, 3<sup>rd</sup>, 4<sup>th</sup> or 5<sup>th</sup> year or who did not return a consent form were excluded.

### *3.3.2.6 Data Collection Procedure*

The researcher and supervisors developed two open-ended question(s): “What influences how you feel about your body image?” and “What influences how you feel about your body shape?”

The newly developed items were first tested with adolescents using a youth participative approach. In total, five participative workshops were conducted. Three workshops were conducted with adolescent boys (n = 18; n = 6 per workshop) from the first school and two workshops were conducted with larger mixed gendered groups from the second school (n= 26 in the first workshop; of which 16 were boys and 10 were girls; and n = 30 in the second workshop; of which 15 were boys and 15 were girls). The aim of the workshops was to engage young people in the question development process; by determining whether the proposed survey questions were suitable (how the question(s) were interpreted and answered) for inclusion in the 2013/14 HBSC survey and which question was preferred. The purpose of the workshop was explained at the beginning of each session. Adolescents were also informed that there were no right or wrong answers to the questions asked. Each workshop was facilitated by two researchers and conducted in an empty classroom within each school. During the workshops, adolescents were first asked to express their views on the proposed survey questions in an oral manner during an open group discussion. Following the open group discussion, a reflective writing activity was used, whereby adolescents were asked to individually reflect on the open group discussion and document, on paper, additional or more detailed responses to the questions asked. The responses were collated thematically.

For the quantitative aspect of phase 2, school Principals were first approached by post, followed by phone calls and emails where necessary. When positive responses were received, HBSC questionnaires in Irish or English were offered, along with blank envelopes to facilitate anonymity, parental consent forms, information sheets for teachers and classroom feedback forms. The self-completion questionnaires were administered by teachers, in the classroom. Student participation was anonymous and voluntary. All questionnaire returns were facilitated through the provision of FREEPOST envelopes.

### 3.3.2.7 *Data Analysis*

The reflective written and transcribed verbal responses obtained during the participative workshops in phase 2, were transcribed into Microsoft Word and thematically analysed. Factors that reflected similar ideas were collated into key themes. Furthermore, the face validity of and preference for the proposed survey item(s) was examined by grouping adolescent responses into three groups (i) interpretation; (ii) ease of answering; and (iii) preference.

In terms of the quantitative aspect of phase 2, the open-ended responses from the newly developed question were entered into SPSS (Version 20), and were then transferred to Microsoft Office Excel 2010 for preliminary examination. Subsequently, the data were exported from Microsoft Excel to the qualitative software package, QSR NVIVO 10 package for auto-coding (analysis). The auto-coding process reflected a thematic analytical approach, similar to the process outlined by Braun and Clarke (2006).

Firstly, the open-ended responses were read a number of times in order to become familiar with the data. Following this, each response was given an initial code (e.g. peers) and each of the initial codes were given a description to reflect its content; for example, “peers” included references made by the participants to both “peers/friends”. Once the initial codes were developed and reviewed, they were grouped into key themes based on whether they reflected similar ideas. For example, references made to the peer environment such as “people in my class/other classes”, “how people my age/the students in my school look”, “how I look in comparison to my peers”, “what people in your class/friendship group say about your appearance or the appearance of others” “whether opposite sex peers/romantic partners like how I look” were grouped into an overall theme such as “peer environment”.

The key themes were then scrutinised to determine whether and how they could be broken down into sub-themes. For example, in the case of the peer environment, the overall theme was divided into sub-themes such as, “peers in general”, “peer comparison”, “opposite-sex peers” and “peer comments”. Disagreements in the coding were resolved through discussion with the researchers’ supervisors and/or making minor modifications to the criteria that characterised the theme in question.

Once the key themes and sub-themes were agreed upon, a decision was made to choose the top 6 most commonly referred to themes, to represent the key factors at play for adolescent body image in Ireland (given that an extensive range of influencing factors emerged from the large sample included in the survey; n = 4481), and thus was not possible to outline them all).

Furthermore, one of the aims was to examine peers relative to other influencing factors. Thus, once each key theme was developed and agreed upon, each one was examined to determine how many adolescents had it listed as a key influencing factor. The theme most frequently listed was considered the most salient.

### *3.3.3 Phase 3*

#### *3.3.3.1 Overall aim*

To examine the relationship between cyberbullying and friendship dynamics on adolescent body dissatisfaction.

The research question that applies to phase 3 of the overall study includes:

**RQ6:** To what extent does cyberbullying and/or friendship dynamics play a role in adolescent body image?

#### *3.3.3.2 Participants*

In total, 7,320 adolescents aged between 13 to 17 years partook in phase 3 of this overall study. Of the 7,320 that participated, 40.6 % of the sample were boys and 59.4% were girls.

#### *3.3.3.3 Research Design, Recruitment and Data Collection Procedure*

Data from the 2013/14 Irish Health Behaviour in School-aged Children (HBSC) survey were used for phase 3. The research design, participant recruitment and data collection procedure used for the HBSC study has been outlined in phase 2 above, thus will not be repeated in this section. The information sheets and consent forms used were also the same as those used in the quantitative element of phase 2 above (appendices same as quantitative element of phase 2 above). The inclusion and

exclusion criteria were also the same as phase 2 above. However, the survey measures used in phase 3 are described below.

#### *3.3.3.4 Measures*

##### *3.3.3.4.1 Cyberbullying*

Exposure to cyberbullying was measured by two items: 'How often have you been bullied at school in the past couple of months in the ways listed below: (i) Someone sent mean instant messages, wall postings, emails and text messages, or created a Web site that made fun of me; and (ii) Someone took unflattering or inappropriate pictures of me without permission and posted them online. Response options included 'I have not been bullied in this way in the past couple of months'; 'Only once or twice'; '2 or 3 times a month'; 'About once a week'; and 'Several times a week.' For the purpose of this study, were dichotomised into "yes" and "no" for each item. If the participant selected 'Only once or twice,' '2 or 3 times a month,' 'about once a week,' or 'Several times a week' to either being sent mean messages and/or to having unflattering photos posted of them, they were coded as "yes" for a new variable 'cyberbullying experiences.' Responses were coded as 'no' if the participant selected 'I have not been bullied in this way in the past couple of months' to both cyberbullying items.

##### *3.3.3.4.2 Body Dissatisfaction*

Body (dis)satisfaction was measured using the following item: Do you think your body is...? 'much too thin', 'a bit too thin', 'about the right size', 'a bit too fat', or 'much too fat.' Participants' responses were recoded into 'too thin,' 'the right size', and 'too fat.'

##### *3.3.3.4.3 Friendship Dynamics*

Friendship dynamics was measured using the Multidimensional Scale of Perceived Social support (MSPSS) (Zimet, Dahlem, Zimet & Farley, 1998). Participants were asked to rate the following statements: 'My friends really try to help me'; 'I can count on my friends when things go wrong'; 'I have friends with whom I can share my joys and sorrows'; 'I can talk about my problems with my friends', on a scale from 1 (*very strongly disagree*) to 7 (*very strongly agree*). A variable was computed to calculate a mean friendship dynamics score for all participants who answered the

four items within the above scale. Following this, the friendship dynamics item was dichotomised into weak (1 to 4.49) and strong friendship dynamics (4.50 to 7).

### 3.3.3.5 *Data Analysis*

Firstly, descriptive statistics for the sample were computed by gender. Next, frequencies for cyberbullying and friendship dynamics were also computed for participants by body dissatisfaction, considering their body to be either 'too thin' or 'too fat'. To analyse the association between gender, cyberbullying, and friendship dynamics with body dissatisfaction, logistic regression with the enter method was used. These regression models tested the association between these variables with two dichotomised body dissatisfaction variables (too thin and too fat). Following this, the mediating role of friendship dynamics in the association between cyberbullying experiences and body dissatisfaction (too thin and too fat) was examined. All analyses were stratified by gender, as it is well established that body dissatisfaction and health-related practices differ by gender, amongst adolescents (Lawler & Nixon, 2011; Jones et al., 2004). All analyses were performed with SPSS Version 22. Cases were excluded if they were missing the data required for the specific analysis. Statistical significance was established a priori at  $p < 0.05$ .

## **3.4 Reliability & Validity in Qualitative and Quantitative Research**

Reliability and validity are ways of demonstrating and communicating the rigour of research processes and the trustworthiness of research findings. Reliability focuses on the degree to which the same findings would be found by repeating the research process (Kirk & Miller, 1986), while validity determines whether the research truly measures that which it was intended to measure (i.e. whether the research is true to reality; Kirk & Miller, 1986). Guba (1981) however advocated that different terminology should be employed to demonstrate the trustworthiness of a qualitative research study, as it allows one to distance themselves from a positive paradigm. According to Guba (1981), the four criteria that require consideration in pursuit of a trustworthy qualitative study include:

- Credibility (in preference to internal validity)

- Transferability (in preference to external validity/generalisability)
- Dependability (in preference to reliability)
- Confirmability (in preference to objectivity).

For the qualitative aspect of this study, the above criteria were drawn upon to demonstrate the rigour of the research process and the trustworthiness of the qualitative findings.

### *3.4.1 Qualitative Research – Rigour and Trustworthiness (phase 1 and 2)*

#### *3.4.1.1 Credibility*

Well-established research methods were used to fulfil the qualitative element of the research study. Focus groups were conducted in phase 1, as this method of data collection has been successfully utilised with adolescents in previous studies, pertaining to body image issues (Tatangelo & Ricciardelli, 2013; Diedrichs, Lee & Kelly, 2011; Mooney et al., 2009). Other reasons for using a focus group design have been outlined in more detail in phase 1 above. Furthermore, the questioning procedure used was informed by Kruger & Casey's (2009) guidelines for conducting qualitative research.

Regarding sampling, Bouma & Atkinson (1995) stated that “a random sampling procedure provides the greatest assurance that those selected are representative of the larger group”. Although purposive sampling was used in phase 1, the participants were randomly selected upon arrival to each school. This method of participant selection helped to ensure that the researcher was not biased in the selection of participants. It also served to ensure that multiple voices, exhibiting characteristics of similarity, dissimilarity, redundancy and variety were sought on the research topic.

The qualitative research findings from phase 1 were also triangulated with the research literature. Triangulation of data refers to the process of comparing the findings with one or more existing data sources (Creswell & Miller, 2000). Supporting documents in the literature were drawn upon to provide a background to and help explain the attitudes and behaviours of the target group under study. Furthermore, given that Lincoln & Guba (1985) advocated that member checks (i.e. bringing data and interpretations back to participants so that they can confirm the

credibility of the information and the narrative account) are the “most crucial technique for establishing credibility”, the findings from phase 1 were member checked with a comparable group of youth in another study (O’Shea, 2016). The aim of the member checking was to verify whether the individual viewpoints and experiences collected from those in phase 1 could be corroborated by or were deemed credible to those who participated in O’Shea’s (2016) study. Furthermore, once the researcher had created a preliminary set of themes, at the stage of data analysis, a search of the literature was made to seek out whether prior data was consistent with or disconfirming of the newly developed themes.

Furthermore, measures were used to help ensure honesty in informants when contributing data. For example, each participant was given an opportunity to refuse to take part if they were selected, so that the focus groups involved only those who were genuinely willing to take part and were prepared to offer information freely. In addition, each participant was made aware that there were no right or wrong answers so that he/she would be confident in contributing their ideas without fear of losing credibility in the presence of their peers or the researcher.

Lastly, frequent debriefing sessions between the researcher and primary supervisor were held in order to discuss the focus group questions in advance of data collection and to discuss the findings from each focus group subsequent to data collection sessions. Further, a research log of the researcher’s thoughts, decisions and activities was reviewed by the primary supervisor. The audit trail allowed the researcher to discuss developing ideas and interpretations with the supervisor, who listened, but also voiced her own contributions and perceptions, which in turn helped the researcher to widen her vision and to recognise her own biases and research assumptions. In addition, a third researcher was asked to review the qualitative findings in order to seek out whether an inter-rater agreement existed between the themes developed by both parties. Other validity measures used to enhance the credibility of the study more generally included the presentation of the work to peer-reviewed audiences and to peer-reviewed journals.

#### *3.4.1.2 Transferability and Dependability*

In quantitative research, external validity concerns the extent to which the findings from one study can be applied to other situations. Shenton (2004) however stated

that “since the findings of qualitative research are specific to a small number of environments and individuals, it is impossible to demonstrate that the findings and conclusions are applicable to other situations and populations”. Furthermore, Lincoln & Guba (1985) argued that it is the responsibility of the researcher to ensure that sufficient contextual information about the fieldwork sites is given to enable the reader to make such a transfer. In phase 1 and 2 above, thick and rich descriptions of the methodological procedure were clearly outlined, including the number of schools that agreed to take part, the number of adolescents who participated, those who were excluded from the study, the data collection method employed and the number and length of the data collection sessions. Furthermore, in order to assess the extent to which the findings from phase 1 were applied to adolescents in other schools, a project employing a similar method was conducted (O’Shea, 2016).

In terms of dependability, Lincoln & Guba (1985) stressed that credibility and dependability are somewhat interconnected, arguing that “in practise, a demonstration of the former goes some distance in ensuring the latter”. Thus, in order to address the dependability of a research project, the researcher must provide readers with a thorough in-depth description of the research process employed in order to enable them to repeat the work, if desired. As mentioned in the section above, a detailed account of the research methodology employed for each of the studies included in this research have been documented in this chapter.

#### *3.4.1.3 Confirmability*

In light of recommendations that all qualitative researchers should make any professional or personal details, that may influence the interpretation of the data, known to the reader (Creswell & Miller, 2000; Meyrick, 2006), details about the researcher are provided in this section. Firstly, I am a PhD candidate in Health Promotion with an interest in adolescents’ perceptions of the peer environment with respect to body image perception. I do not strictly conform to either a positivist or constructionist epistemology, but instead recognise the value of associated quantitative and qualitative approaches in enhancing knowledge of the phenomena under study. Specifically, I believe that children are valuable informants on social phenomena, such as peer influences as they are living experts of their social world. Endorsing this belief, I acknowledge that the means by which researchers obtain this

information from adolescents should hinge on the aims and goals of the research question.

I have had no personal experience of body image concerns in adulthood but admit that body image was an issue to me and my peer group during my adolescent years; a concern that thus motivated me to research the phenomena with youth today. The credibility measures noted above (data triangulation and member checking etc.) however, helped to ensure that I bracketed my biases as the study proceeded. I also do not have any children of my own nor any adolescent nieces or nephews. Acknowledgement of this is important, as it is possible that being a parent or relation to an adolescent with body image and/or peer group concerns may influence analysis of the data and interpretation of findings.

### *3.4.2 Quantitative Research - Validity and Reliability (phase 2 and 3)*

#### *3.4.2.1 Robust and Transparent Methodology*

The HBSC study, which was drawn upon in phase 2 and 3, employs a cross-sectional survey design, repeated on a 4-year basis. The methodological procedure employed for the survey is based on an international research protocol, which is collaboratively developed by the HBSC Research Network members for each 4-yearly survey. The research protocol includes detailed information regarding the conceptual framework for the study; scientific rationales for each topic area included in the survey; international standardised questionnaires and instructions for use (i.e. recommended layout, question ordering and translation guidelines); survey methodological guidance (including sampling and data collection procedures); and rules related to use of HBSC data and international publishing. In addition, information on the reliability and validity of existing HBSC items are included, where possible (Roberts, Currie, Samdal, Currie, Smith & Maes, 2007). An abridged version is available to external members of the HBSC network.

In terms of the survey methods, as mentioned in phase 2 and 3 above, HBSC is a school-based survey and data are collected through self-completion questionnaires administered in the classroom. The international standard questionnaire for each survey consists of three levels of questions that are used to create national survey

instruments. These include (i) core questions that each country is required to include for the production of an international common dataset; (ii) optional packages of questions on specific topic areas from which countries can choose; (iii) country-specific questions related to issues of national importance (Roberts et al., 2007). The specific population selected for sampling is young people attending school aged 11, 13 and 15 years. The recommended sample size for each of the three age groups is set at approximately 1,500 students, the calculation assuming a 95 per cent confidence interval of  $\pm 3$  per cent around a proportion of 50 per cent and a design factor of 1.2, based on analyses of existing HBSC data. In terms of sampling, HBSC employs a cluster sampling design; with the school class being the primary sampling unit (Roberts et al. 2007).

Each participating country uses the same sampling methodology, which ensures that national samples are comparable across survey sweeps. With such a robust and transparent methodological procedure in place, valid comparisons across time can be made within regions and valid cross-national comparisons can be made of young people's health and health behaviours.

#### *3.4.2.2 Internal Validity of the survey items*

The survey items used in the quantitative aspect of this project were adopted from the HBSC study. Each of the survey items used in phase 3 of this study, apart from the cyberbullying item, have been validated in prior studies. Specifically, the body dissatisfaction item has been included in the HBSC study since the 1993/94 survey, and was developed by internal HBSC research members. Although developed for HBSC use, the test-retest stability of the item has been found to be excellent among Finnish adolescents (test-retest  $n=252$ ). The Kappa statistic for the item was 0.75; 86% of the respondents selected the same category on both occasions ( $n=194$ ) and the intra-class correlation (ICC) was 0.81 with a confidence interval of (0.76-0.85; Ojala, 2011). Furthermore, the item was tested prior to the 2001/2002 survey in Belgium Flanders (test-retest  $n=560$ ) and the Kappa statistic for the item was .60; 71% of the respondents selected the same category on both occasions and 16% gave an adjacent answer (Roberts, Morgan, Smith, Settertobulte, Samdal, Rasmussen, 2004).

Furthermore, the friends' relations measures within the Multidimensional Scale of Perceived Social Support have been well-used in previous research with youth and have been shown to be both reliable and valid (Bruwer, Emsle, Kidd, Lochner & Seedat, 2008; Canty-Mitchell et al., 1988). In the study of Bruwer and colleagues (2008), the authors revealed that the MSPSS is psychometrically sound and has excellent internal validity (coefficient  $\alpha$ , 0.88-0.90 for the subscales and 0.86 for the entire scale) among adolescents. In the study of Canty-Mitchell and colleagues (2000), good construct validity of the scale was demonstrated, as the MPSS subscales were correlated with both depression and anxiety. Specifically, perceived support from family was inversely related to both depression ( $r = -.24$ ,  $p < .01$ ) and anxiety ( $r = -.18$ ,  $p < .01$ ). Perceived support from friends was related to depression ( $r = -.24$ ,  $p < .01$ ) but not anxiety. In addition, Canty-Mitchell and co-authors revealed that the internal consistency of the scale as a whole (.88) and the subscales (family, .87; friends, .85) was good. The cyberbullying item, included in phase 3 has only been included in the HBSC study since 2009/10, and has yet to be validated within the HBSC network.

In terms of phase 2, the newly developed item assessing body image influences demonstrated good content (or face) validity; in that the adolescents clearly understood what was being asked of them and could answer the question without confusion or difficulty. The item was developed and included in the Irish HBSC, based on a request from the governmental Department of Health, given that body image has been identified as a pressing issue amongst Irish youth. It is unlikely that it will be included in future HBSC studies, due to its open-ended nature; however, it is anticipated that the categories that emerged from the question will be used as close-ended responses to the question in future survey cycles, which could be validated going forward.

#### *3.4.2.3 External Validity – Generalisability*

As mentioned above, the HBSC survey collects data from a nationally representative sample of youth, thus the findings that emerged from phase 2 and 3 are likely to be applicable to school-going adolescents across the Republic of Ireland. However, it should be noted that the findings may not apply to adolescents who do not attend school or who are home schooled. They also may not apply to adolescents from other

geographical locations across Europe, given that both phase 2 and 3 were conducted with youth living in Ireland only.

### **3.5 Ethics**

Each of the phases within the overall study, outlined above, were independently reviewed and approved by the National University of Ireland (NUI) Galway Research Ethics Committee. All ethical considerations in the qualitative and quantitative study procedures, and the respective information sheets and consent forms used in each study were reviewed and approved by the committee. The ethical consideration taken into account by the researcher in advance of both the qualitative and quantitative approaches used in the above studies are outlined below:

#### *3.5.1 Ethical Considerations*

It is imperative that consent should be obtained from research participants before any research is carried out or data collected (Shaw, Brady & Davey, 2011). Informed consent is usually sought from participants to minimise any risk or harm that might accrue to the research participant in the course of the research. For both the qualitative and quantitative aspects of this study, active consent from the schools, parents and pupils was sought before the questionnaires were distributed and before the focus groups took place; and voluntary participation was ensured throughout the process of data collection. All of the participants who agreed to take part in the study did not withdraw at any stage of the research.

Furthermore, a major concern in research ethics is the protection from, or minimising risks to research participants. For qualitative studies, it has been acknowledged in the literature that the revelation of too much information in a focus group setting is often a greater concern than a lack of disclosure (Halcomb, Gholizadeh, DiGiacomo, Phillips & Davidson, 2007); a concern that raises ethical issues related to privacy and confidentiality. To overcome this issue, at the beginning of each focus group (in phase 1 and 2), participants were asked to refrain from disclosing specific details of their own personal experiences regarding the topic under examination; rather they were asked to express and discuss their opinions and perspectives on the adolescent experience.

In addition, in order to ensure that each participant was aware of his/her right to confidentiality, the researcher asked each participant at the beginning of the focus group (in phase 1 and 2 of the overall study) not to disclose any information discussed in the group with peers outside of the focus group setting. Although the researcher had no control over what happened beyond the focus group setting, each participant did agree to keep the conversation private from other peers who had not participated. The participants were also assured that pseudonyms would be used in any material pertaining to the focus group discussion going forward. Furthermore, the participants were informed that the data collected, including audio and field notes, would be stored in a secure office in NUI Galway, accessible to the researcher and supervisor only. Lastly, given the sensitive nature of the topic, the assistant moderator (in both phase 1 and 2 of this study) was asked to observe whether an individual felt uncomfortable at any point during the focus group discussion. Fortunately, no participant displayed signs of distress during the focus groups, thus each focus group ran according to the study plan.

With regards to the quantitative aspect (phase 3) of the study, the question was developed using a youth participative approach to ensure that it was appropriate and would not, as far as possible, cause distress to prospective adolescents taking part in the 2013/14 HBSC study. Furthermore, a list of support services concerning mental health and wellbeing were circulated to all schools along with the 2013/14 HSBC survey, in the case that some individuals may have become distressed subsequent to completing the main HBSC survey, which includes questions on sensitive issues, such as body image and cyberbullying.

## Chapter 4: RESULTS

### 4.1 Introduction

The results of this study contribute to three peer-reviewed articles which have been accepted for publication in three different journals. Appendix 1 lists the final copy of these articles. In this chapter, the key findings from each article are highlighted and additional results are presented.

### 4.2 Summary of the key findings from the three articles

#### 4.2.1 *Article 1: Peer influences on adolescent body image: Friends or Foes?*

This article documents the mechanisms through which peers impact adolescent body image and the nature of their influence (positive and/or negative), from young peoples' perspectives. A thematic analytical approach was employed to explore the data; which resulted in the emergence of seven major themes and eleven sub-themes. Each theme and associated sub-themes are presented in Table 1, with quotes to illustrate them. The quotes differ from those included in the journal article, in order to give a broader view of the data collected. In addition, a thematic model was constructed during the analytical process; which further illustrates the peer influence process and how it impacts body image among adolescents in Ireland.

In summary the study found that overall, the peer environment has a negative impact on adolescent body image. Adolescents reported engaging in processes such as peer modelling and surveillance to ensure that they and others their age met and adhered to specific appearance-related rules and ideals endorsed within the peer environment. The pressure and/or consequences associated with failing to conform to strict appearance-related rules and ideals represented modes through which peers negatively impact adolescent body image. Both emotional and behavioural health consequences were alluded to as a result of negative peer influences, such as depression, suicide and self-harm. Fewer positive peer influences were described. In fact, adolescents' understanding of what constituted a positive influence was somewhat distorted. Peer encouragement to lose weight and to get fit were viewed as

positive peer influences, as was helping overweight peers to dress appropriately, for their weight status. Gender and age differences were also found. Appearance conformity and pressure to fit in were considered more important at younger ages, whereas, appearance ideals and appearance surveillance and comparison methods differed, by gender.

A thematic model outlining the peer influence process, with respect to body image was also developed to further illustrate the ways in which peers influenced each other. Each aspect of the model signifies a mechanism through which peers negatively influence adolescent body image; with each mechanism having an impact on the next, and possibly the former. In summary, the model proposes that adolescents model the appearance of their peers in order to conform to specific appearance ideals and rules inherent in the peer environment. The pressure to conform to peer expectations is further intensified by the use of surveillance activities, which serve to detect those who conform or fail to conform. Adolescents who fail to conform are subjected to negative peer experiences, such as teasing, judgment and exclusion. In order to avoid the negative peer sanctions associated with failing to conform, adolescents model the appearance of their peers in order to address appearance deviations or to ensure deviations do not exist. From here, the cycle of events continues in what appears as a cyclic order once again.

Table 1: An outline of the themes, sub-themes and examples of participant quotes

<b>Themes</b>	<b>Sub-themes</b>	<b>Examples of participants' quotes</b>
<b>Theme 1:</b> Peer Modelling	<i>Reasons for peer modelling</i>	(Girl, 4 <sup>th</sup> year) If your friends have their hair or makeup a certain way, you want to be like that because you don't want to be left out of the group or something.
	<i>Peer comparison</i>	(Boy, 5 <sup>th</sup> year) If all your friends were muscular, and you weren't, like you'd feel left out, you just wouldn't feel as good as them like or that you look

like them, so you'd go to the gym

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<b>Theme 2:</b>	<i>Appearance</i>	<i>Ideals:</i>
Pressure to conform	<i>ideals, rules and motivation</i>	(Girl, 4 <sup>th</sup> year) Everyone is feeling the pressure to get like a thigh gap or the perfect summer body.

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		<i>Rules:</i>
		(Boy, 4 <sup>th</sup> year) Like, whatever the style is out, you have to get all 'em, clothes. You can't wear anything else, or like people look at you and think you, like, they wouldn't hang around with you or anything. They won't want to be seen with you with them clothes on so like, you have to wear like, all big brands, like, Nike and Adiddas.

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		<i>Motivations:</i>
		(Boy, 5 <sup>th</sup> year) Lots of people go to the gym and do weights to look big in front of girls

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	<i>Appearance-related behaviours</i>	(Girl, 2 <sup>nd</sup> year) I remember people (peers) were just like "Do you want to come to the gym?" ... Then once we were done at the gym we will go for a run around the whole complex and then we will go into the steam room to lose more weight.
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	<i>Peer conversations</i>	(Girl, 4 <sup>th</sup> year) If you saw someone with like...who has a really fit body and they're like "Oh I'm so fat" and then you automatically think "I'm not as fit as them so I must be huge"... so there is so much
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pressure to be really really fit and really really skinny that you don't really know how far you're going.

<b>Theme 3:</b>	<i>Constantly surveilled and criticised</i>	<i>Constantly surveilled</i> (Boy, 2 <sup>nd</sup> year) You can't do anything outside, you can't do anything without being judged about it 'cause if someone was like really skinny and he went by they'd all be saying "Look at him he's anorexic or if someone who's overweight walks by look at him, he's diabetes."
Peer surveillance		
<hr/> <i>Constantly criticised</i>		
		(Girl, 5 <sup>th</sup> year) You're never going to be perfect, they're always going to say something bad about ya'.... You could have long hair, be naturally tanned and have pure clear skin but like someone will pick out something, the one thing that could be wrong with you.
	<i>Girls are worse than boys</i>	(Girl, 5 <sup>th</sup> year) People can't go outside the door without makeup on. If you go out without makeup you're just getting criticised and girls are like "Why don't you have makeup on? Why did you even come out without makeup?"
<b>Theme 4:</b>	<i>Peer teasing</i>	(Boy, 2 <sup>nd</sup> year) If someone is a bit overweight and they're with a group of sporty lads, you just see the one lad that would be a bit overweight you'll find they'll pick on him.
Failure to conform		
	<i>Peer exclusion</i>	(Girl, 2 <sup>nd</sup> year) If they (adolescents) are not like a size 0, they'd (peers) tell them to be like that. And if they

weren't they'd exclude them more, they'd just be really horrible to the people that weren't like that. And to the people who look like that, then everything would be perfect.

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**Theme 5:**  
Health consequences

(Girl, 4<sup>th</sup> year) If you're getting bullied at a young age, you'd become very self-conscious, and just say you're getting bullied about your weight, you'd try to lose more weight and then you might become paranoid and all, you know like, it would lead you to depression.

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(Girl, 3<sup>rd</sup> year) If you're pure skinny and you're just anorexic and someone kept calling you fat, how you see yourself could change and your whole personality aswell.

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**Theme 6:** *Peer encouragement*

Positive peer influences

(Boy, 2<sup>nd</sup> year) If you give them positive constructive criticism, they can like exercise and go to the gym with their friends, and lose weight and get healthier, and fitter and stronger.

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*Peer compliments, opinions and advice*

*Compliments*

(Boy, 5<sup>th</sup> year) Like saying nice things to them, even if they're fat or like they're not athletic or like they can't do much. But still like, don't like... say good things about them to make them feel better. So then they wouldn't feel like less self-esteem and they would have confident to do stuff that other teenagers would normally do.

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*Opinions*

(Girl, 4<sup>th</sup> year) If you're buying something in a shop, you want a second opinion before you like waste your money on buying the thing, so it can be helpful in that way.

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*Advice*

(Girl, 2<sup>nd</sup> year) If something doesn't suit ya, you'd rather someone be honest with ya.

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**Theme 7:**

*Age*

Age and  
gender  
differences

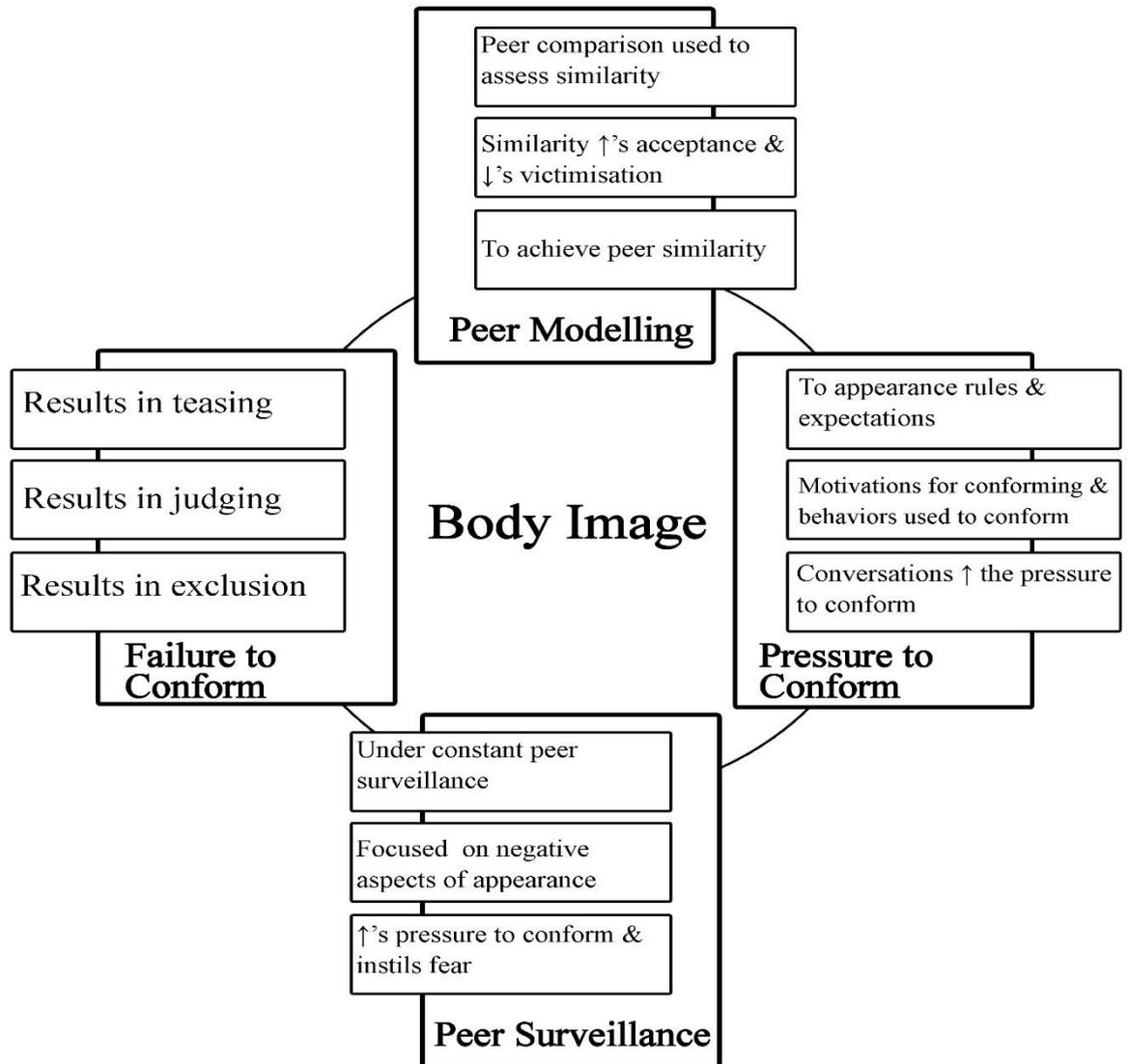
(Boy, 2<sup>nd</sup> year) Even if they don't show it, I'd say 100% of people are influenced by their peers in a school at this age. Maybe when you get older you get a bit more confident but like in a secondary school everybody is influenced by their peers.

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*Gender*

(Boy, 5<sup>th</sup> year) I know from talking to my sister and stuff, she's in an all girl's school and her peers make comments about people's hair. They'd make comments about how they look, they'd make comments about absolutely anything, like small things, had they got their hair in a plait or a bob.

Figure 3: A thematic model illustrating the proposed process in which peers negatively influence adolescent body image.



#### 4.2.2 Article 2: Young people's perspectives in developing a survey item on factors that influence body image.

The second paper focused on the methods employed to develop a survey item on body image influences, for inclusion in the HBSC Study. A youth participative process and a survey completed by young people, revealed that a variety of factors influence adolescent body image (see chapter 3 for a more detailed outline of the methodology used).

During the participative process, adolescents were first asked to describe their interpretation of each question and how they would answer them. They were also asked which question they preferred and why. Results revealed that adolescents' explanations of both terms 'body image' and 'body shape' were well aligned with current definitions used in the literature. Body shape, which refers to individual's perceptions of body appearance, size, and silhouette (da Silva, Dias, Maroco & Campos, 2014) and body image, which is defined as an individual's perceptions, thoughts, and feelings about their body, as well as objects associated with the body, such as clothes (Conti, Cordás & Latorre, 2009) were defined in a similar manner by the adolescents during the workshops (see Table 2). During the workshops, factors that influenced adolescent *body image* and *body shape* also emerged. The range of such factors are outlined in Table 3; however, clothes, comparison with others, food and exercise were perceived as having an impact on body shape only.

Mixed views were expressed by the adolescents on which question to include in the survey. For some, the term body image was too personal; whereas for others, it captured a wider array of one's physical attributes and thus was preferable. In terms of body shape, some articulated that it was clearer and easier to understand given that it deals with fewer attributes, while others stressed that the term was too restrictive. Although mixed views were expressed regarding both terms, a decision was made to use the term "body image" in the question developed for the 2013/14 HBSC study, given that it was the preferred term in the larger workshops; which also captured both male and female perspectives (n = 56 vs. n =18 in the male workshops).

Table 2: Examples of the type of feedback obtained on the newly developed questions

Question	Feedback from the consultative workshops
Interpretation	<ul style="list-style-type: none"> <li>➤ ‘Body shape is about how fat or thin you are’</li> <li>➤ ‘What your actual shape is’</li> <li>➤ ‘How tall or small you are’</li> <li>➤ ‘Body image is more how you see yourself, includes facial beauty and self-confidence’</li> <li>➤ ‘More about what you feel about yourself’</li> <li>➤ ‘Personal view’</li> </ul>
Ease of answering (Factors that emerged)	<ul style="list-style-type: none"> <li>➤ ‘Am... celebrities. Like you might see a famous person on TV and you might like their clothes and they might influence you to buy them clothes’</li> <li>➤ ‘Models. Like girls look up to models who are skinny. So if they want to be pretty they will have to be skinny aswell. They will have to fit into small sized clothes’</li> <li>➤ ‘I think that your friends and family could influence your body image ‘cause they’re the people that you care about’</li> </ul>
Question preference	<ul style="list-style-type: none"> <li>➤ ‘Use body shape. What influences how you feel about your body shape, its straight forward, easier to understand’</li> <li>➤ ‘I think pick the body image question because it’s about you aswell like. Body shape is just like fat or thin. But body image is am... If you have loads of problems or if you’re ginger, or what hair colour you have, or if you had a big head or big ears or something, or a weird nose’</li> </ul>

Table 3: Influencing factors for body image and body shape.

“✓” signifies that a specific factor impacts body image and/or body shape; “x” signifies that it does not impact body image and/or shape.

<b>Influencing factors</b>	<b>Body image</b>	<b>Body shape</b>
Weight	✓	✓
<b>Peers</b>	✓	✓
<b>Family</b>	✓	✓
Food & Exercise	X	✓
<b>The media</b>	✓	✓
Clothes	X	✓
<b>Being teased</b>	✓	✓
Comparison with others	X	✓

Results from the main HBSC survey revealed that many factors, similar to those that emerged in the participative workshops, influence adolescent body image. Specifically, six key themes emerged, which were grouped under the following categories: (1) Body image evaluation; (2) Body image investment; and (3) Socio-cultural impact. One theme emerged under “Body image evaluation” and was labelled “Appearance-related evaluations”. The themes that emerged under “Body image investment” included: (i) Physical Activity and Food; and (ii) Clothes. The themes that emerged under “Socio-cultural environment” included: (i) Peers; (ii) The media; and (iii) Other people. Once the six key themes were reviewed, grouped into specific categories and agreed upon by all authors, a decision was made to further divide them, to illustrate their content.

In terms of the first category, “Body image evaluation”, the theme “Appearance-related evaluations” was divided into one’s thoughts and feelings about their appearance (generally, or after looking in the mirror and/or stepping on the weighing scale), body (dis)satisfaction (one’s degree of content or discontent with the body as a whole, or with specific aspects of the body) and physical characteristics (where no mention of satisfaction/dissatisfaction with such characteristics was stated). In terms of the second category “Body image investment”, the theme “Physical activity and

food” was sub-divided into whether one is physically active (lazy vs. being physically active), ones’ athletic performance and ability (as part of team/hobby), the amount of exercise conducted (duration of time spent being physically active), and the amount and type (healthy/unhealthy) of food eaten. The second theme within this category, “Clothes” was sub-divided into how one looks and feels in their clothes (happy/unhappy) and how one looks in clothes in comparison to how others look (better/equal/worse).

In terms of the third category, “social-cultural impact”, the theme “peers” was sub-divided into peers in general, opposite sex peers, peer comparisons and peer comments (aimed at them or others). The second theme, “the media” was sub-divided into television (including programs, series and ads), magazines (via dieting advice/persuasion, promotion of idealised body types), models (the portrayal/endorsement of models in magazines and/or online), and the internet (via the dietary advice available and via social networking sites, where social comparisons with peers/celebrities are made). The theme “Other people” was sub-divided into others in general, what others think and say (positively/negatively) and being judged and teased by others. Table 4 outlines the main and sub-themes.

Table 4: Key influencing factors on adolescent body image and associated sub-components from the HBSC 2013/14 Study

Key themes	Sub-themes
<b><i>Category 1: Body image evaluation</i></b>	
Theme 1: Appearance-related evaluations	<ul style="list-style-type: none"> <li>➤ My thoughts and feelings about my appearance</li> <li>➤ Body (dis)satisfaction</li> <li>➤ Physical characteristics</li> </ul>
<b><i>Category 2: Body image investment</i></b>	
Theme 2: Physical activity & food	<ul style="list-style-type: none"> <li>➤ Being physically active</li> <li>➤ My athletic performance and ability</li> <li>➤ The amount of exercise I do</li> <li>➤ The amount and type of food I eat</li> </ul>
Theme 3: Clothes	<ul style="list-style-type: none"> <li>➤ How clothes look on me</li> <li>➤ How comfortable I am in my clothes</li> <li>➤ How I look in clothes in comparison to others</li> </ul>
<b><i>Category 3: Socio-cultural impact</i></b>	
Theme 4: Peers	<ul style="list-style-type: none"> <li>➤ Peers in general</li> <li>➤ Peer comparison</li> <li>➤ Peer comments</li> <li>➤ Opposite-sex peers</li> </ul>
Theme 5: The Media	<ul style="list-style-type: none"> <li>➤ Television</li> <li>➤ Magazines</li> <li>➤ Models</li> <li>➤ The internet</li> </ul>
Theme 6: Other people	<ul style="list-style-type: none"> <li>➤ Others in general</li> <li>➤ What others think and say</li> <li>➤ Being judged and teased by others</li> </ul>

Results from the analysis also revealed that peers emerged as the most frequently cited influencing factor (n = 1765), followed by the media (n = 1462), appearance-related evaluations (n = 1177), other people (n = 819), physical activity and food (n = 380) and clothes (n = 269).

In conclusion, it is evident that a wide array of factors influence adolescent body image, thus these need to be considered in future studies aiming to examine the factors at play for adolescent body image development, behaviour and/or preoccupation. In addition, the study also highlighted the importance of incorporating young people into the research process at the stages of question development. The insight and input of the adolescents involved in this study aided with the development of an instrument that helped to collect valid data on the factors influencing adolescent body image. As such, the competency of young people during the research process should be acknowledged, respected and valued, rather than criticised, downplayed and/or considered invalid. Lastly, it is anticipated that the current study will serve to encourage others to employ youth participatory approaches in their study designs, particularly in the field of body image research, whereby youth-centred approaches have not been routinely utilised to date.

#### *4.2.3 Article 3: The relationship between cyberbullying and friendship dynamics on adolescent body dissatisfaction.*

The third paper sought to explore the relationship between cyberbullying and friendship dynamics on adolescent body dissatisfaction using data from the HBSC study 2013/14. In study 3, the analytic sample was composed of 7,320 school-aged children (40.4 % male; 59.2% female) between the ages of 13 to 17 years.

Results from the study revealed that approximately 50% of the sample considered their bodies to be the right size, while a third of the sample perceived their body as too fat. Girls were less likely than boys to consider themselves too thin (OR=-0.28,  $p<0.001$ ), and were three times more likely than boys to consider themselves too fat. One-in-four participants reported being cyberbullied once or more in the past couple of months, with girls (31.0%) more likely than boys (17.4%) to report being cyberbullied. Table 5 provides a further breakdown of participants who considered their bodies to be either too thin or too fat by gender, cyberbullying experiences, and perceived friendship dynamics.

Results of the binomial logistic regression revealed that girls were less likely than boys to consider themselves too thin (OR=-0.32,  $p<0.001$ ), and were three times more likely than boys to consider themselves too fat. A significant association between adolescents who were cyberbullied and body dissatisfaction was also found. Specifically, adolescents who reported being cyberbullied were significantly more likely than adolescents who did not report being cyberbullied to consider themselves too fat (OR=1.79,  $p<0.001$ ). Furthermore, a significant association between friendship dynamics and body dissatisfaction was also found. Adolescents who reported strong friendship dynamics were less likely to perceive themselves as too fat compared to adolescents who reported weak friendship dynamics (OR=-0.79,  $p<0.01$ ).

Lastly, the final analyses aimed to investigate the association between cyberbullying experiences and body dissatisfaction (too thin and too fat) when adjusting for the potential mediator, friendship dynamics. The mediation revealed a significant but non-sizeable drop in the association between cyberbullying experiences and perceptions of being too fat amongst boys (Difference in Nagelkerke  $R^2=<0.001$ ),

from OR = 1.73 (CI: 1.40- 2.16) to OR =1.64 (CI: 1.30- 2.09) and girls (Difference in Nagelkerke  $R^2$ =<0.001), from OR = 1.93 (CI:1.69 -2.20) to OR =1.84 (CI: 1.60- 2.11). According to the Baron and Kenny (1986) model of mediation, the findings, being significant, suggest that friendship dynamics mediate the relationship between cyberbullying and perceptions of being too fat, for both boys and girls. However, this change is rather small, suggesting that the two variables are independently associated with perceptions of being too fat. However, results found that friendship dynamics did not mediate the relationship between cyberbullying experiences and perceptions of being too thin for boys or girls, as the prerequisites for mediation were not met.

In conclusion, this paper suggests that being cyberbullied may play a role in body dissatisfaction among adolescents; while supportive peer relationships may serve as a buffer against body dissatisfaction. This study also found differences in body dissatisfaction by gender, such that girls were more likely than boys to report being too fat, being a victim of cyberbullying and were more likely to have stronger friendship dynamics. Results of this study should be used to gain a better understanding of factors that contribute to adolescent body dissatisfaction, that have been overlooked, to some extent in the literature to date.

Table 5: Breakdown of participant's descriptive characteristics by gender

Descriptive Characteristic % (n)			
	<u>Total n=7320</u>	<u>Boys (n=2960)</u>	<u>Girls (n=4336)</u>
Body Dissatisfaction			
Too thin	11.7 (855)	18.7 (553)	6.9 (299)
Right size	52.2 (3820)	58.8 (1740)	47.7 (2069)
Too fat	33.9 (2482)	20.5 (607)	43.1 (1867)
Missing	2.2 (163)	2.0 (60)	2.3 (101)
Cyberbullied			
No	71.1 (5207)	78.2 (2315)	66.4 (2878)
Yes	25.5 (1866)	17.4 (514)	31.0 (1345)
Missing	3.4 (247)	4.4 (131)	2.6 (113)
Friendship Dynamics			
Weak	28.6 (2094)	32.6 (965)	25.9 (1123)
Strong	59.1 (4326)	51.0 (1510)	64.6 (2801)
Missing	12.3 (900)	16.4 (485)	9.5 (412)

Table 6: Breakdown of participant's descriptive characteristics by self-reported body dissatisfaction and gender

	Percent who think their body is 'too thin' (n)			Percent who think their body is 'too fat' (n)		
	<u>Total</u>	<u>Boys</u>	<u>Girls</u>	<u>Total</u>	<u>Boys</u>	<u>Girls</u>
Cyberbullied						
No	72.4 (619)	74.9 (414)	67.9 (203)	62.3 (1547)	72.7 (441)	59.1 (1103)
Yes	23.6 (202)	20.8 (115)	28.8 (86)	35.2 (874)	24.4 (148)	38.7 (723)
Missing	4.0 (34)	4.3 (24)	3.3 (10)	2.5 (61)	3.0 (18)	2.2 (41)
Friendship Dynamics						
Weak	32.5 (278)	35.8 (198)	26.1 (78)	30.5 (758)	37.2 (226)	28.4 (531)
Strong	55.2 (472)	49.2 (272)	66.6 (199)	58.3 (472)	48.3 (293)	61.5 (1149)
Missing	12.3 (105)	15.0 (83)	7.4 (22)	11.1 (276)	14.5 (88)	10.0 (187)

Table 7: Logistic regression analyses for participants who are dissatisfied with their body

Predictor	Too thin		Too fat	
	OR	p	OR	p
Gender				
Boys	1.00		1.00	
Girls	-0.32	0.000**	2.73	0.000**
Cyberbullying				
No	1.00		1.00	
Yes	1.10	0.323	1.79	0.000**
Friendship Dynamics				
Weak	1.00		1.00	
Strong	0.89	0.182	-0.79	0.000**

p<0.05. \*\*p<0.001.

### **4.3 Findings beyond the scope of the three papers**

Phase 1 of this overall study also aimed to examine adolescents' perceptions regarding the following: (i) what the term "body image" means to young people; (ii) whether friends influence body image differently to peers; and (iii) how body image can be improved for youth living in Ireland.

Two themes emerged from the question: "What does the term body image mean to you?". The first theme was labelled "Perceptions, Feelings and Behaviours", and the second theme was labelled "Physical Attributes and Personality".

#### *4.3.1 Theme 1: Perceptions, Feelings and Behaviours*

The adolescents in this study reiterated that the term body image involves how one perceives themselves and others, specifically mentioning, "how others view you", "whether you are happy with how others view you" and "how you are expected to look for others". Some adolescents also stated that body image is associated with how one feels about (confident/self-conscious) and behaves (mirror-checking) towards their body.

#### *4.3.2 Theme 2: Physical Attributes and Personality*

Physical attributes were also alluded to by the adolescents when asked what the term "body image" means to them. Weight, hair, facial features, skin complexion, skin colour, speech and body posture were amongst the physical attributes mentioned. In addition, they stated that body image refers to "the stuff that stands out about you", to the attributes that "you can change", for example, one's hair colour, and refers to being judged or teased based on one's physical attributes. An individual's personality type was also mentioned as being associated with body image, however, to a lesser extent than one's physical attributes.

Two themes also emerged from the question, "Do you think that friends influence body image differently than peers?" which include: (i) "Acceptance and Support"; and (ii) "Loyalty, Honesty and Commentary". Overall, the adolescents expressed that friends have a more positive influence on body image in comparison to peers, however, at times, some did express that friends play a more negative role.

### *4.3.3 Theme 3: Acceptance and Support*

Many of the adolescents stated that friends “accept you for who you are”, and not “how you look”. They also expressed that, unlike peers, friends try to “keep you as you are” and take note of and accept the good things about you. In addition, the adolescents mentioned that one does not have to conform to a specific body image, or “pretend to be someone else” for their friends, as they are more comfortable around them, as opposed to their peers. They also alluded to friends as a more prominent source of social support regarding their appearance, stating that, unlike peers, a friend will “get down too, if you’re not feeling good about yourself” and, will guide you in “the right direction”. However, a smaller number of adolescents did state that friends are harder to impress than peers, put more pressure on you to look a certain way, tease you in a friendly manner if they don’t like the way you look, and pay more attention to your appearance than peers, which can subsequently have a negative impact on the way you feel about your body image.

Regarding peers, the majority of adolescents stated that peers are less accepting of you, “put you down and tease you”, and do not offer their support as they “intend on being mean to you”. They also mentioned that peers judge you on your appearance as they don’t know you, and more often than not, they notice “all the bad things about you”. As such, some felt that adolescents can care more about how they look around peers, than around friends. They also asserted that peers expect other adolescents to dress and act like them. Those who fail to comply are teased and ignored until they alter their appearance to one that reflects their peers.

### *4.3.4 Theme 4: Loyalty, Honesty and Commentary*

In terms of loyalty and honesty, the majority of adolescents stated that “you can trust your friends more” as they are “more honest with you” in comparison to peers and they “stick up for you when others speak badly about you”. However, some did exercise the view that peers are more honest because “they don’t care what they say” and that friends attempt to “spare you the little truths” in order to avoid hurting one’s feelings. The adolescents also mentioned that friends deliver the truth about your appearance in a more sensitive manner than peers, because they take your feelings into account. Peers, on the other hand, were perceived, by most, as being “more

blunt” with the truth, and insensitive towards one’s feelings. However, some did state that peers are not comfortable commenting on how one looks, thus they more than likely “lie to your face” and comment on your appearance “behind your back”. Similarly, some stated that “peers lie to you about your appearance because they don’t want you to talk negatively about them to others if they tease you”.

In terms of commentary, mixed views were expressed regarding whether a friend’s comment or a comment from a peer has more of an influence on body image. Some expressed the view that one would be more aware of a flaw if a friend made a comment on their appearance, as they would trust a friend more on what they would have to say. Furthermore, the view that friends “only comment on your appearance for your best interests” and, thus are less hurtful than those of one’s peers, was also expressed. In addition, most of the adolescents mentioned that they would rather take a bad comment from a friend, as a bad comment from a peer would mean that they are “blatantly bullying you”. Lastly, the adolescents stated that they feel under more pressure to look good for peers than friends, in order to avoid their negative commentary. However, they did state that positive commentary from a peer means more to them, as “a friend is always going to be nice to you and will tell you what you want to hear”.

In terms of the final question, “How do you think body image could be improved for youth in Ireland?”, four themes emerged: (i) No Hope for Our Generation; (ii) Promote Appearance Diversity and Body Confidence; (iii) Promote a Healthy Lifestyle; and (iv) Combat Societal and School Level Changes.

#### *4.3.5 Theme 5: No Hope for Our Generation*

A recurrent theme across all focus groups was the view that it is impossible to change how young people view themselves. One individual in particular commented that “everyone wants the answer to this question... but it’s just too hard to change. One person can’t take ownership of trying to improve body image for young people”. In support of this view, the majority of adolescents stated that one can’t use an approach to change how people think and feel about their body image, rather, a desire to change has to come from within, as evidenced by the comment: “people must want to change for themselves”. In addition, they reiterated that appearance

criticisms stem from the media, and that it is simply impossible to change its influence. They also mentioned that “there will always be a famous person in the media that young people aspire to be”, and that young people themselves must learn how to become more resilient to appearance manipulation techniques (e.g. airbrushing) used by the media to enhance the appearance of public figures. They also mentioned that “beautiful” actors and actresses are always used in films or in TV shows, and thus, young people begin to self-compare with the appearance of such individuals. However, they stated that using “normal” looking actors/actresses would not make a difference to body image improvements, as young people would not take any notice of such individuals on the TV show or that the TV show would end up becoming “boring”.

They also repeatedly highlighted that the negative influence of peers, such as, their commentary, deceit and judgement, cannot be changed. The adolescents also mentioned that body image discussions are prominent from the very first year of secondary school, as there is always someone in the school that “everyone wants to be”, and that everyone wants to “look nice” and “fit in” with their peers. Interestingly however, they stated that, although peer commentary cannot be stopped, young people need to be taught about how to compartmentalise the opinions of their peers and appreciate their own perceptions regarding how they feel they should look. There was a very strong sense of despair among many that nothing could be done to improve body image among the current generation, as “people will always judge, bad mouth and self-compare” and that adolescents will always judge others when they enter the school setting in order to “fit in” with their peers. They also stated that body positive advertisements and posters, as well as body image campaigns would be “a waste of time” as “people will always bully and name call” and that people only care about the “skinny look”. They were, however, more hopeful of improving the situation for future generations, suggesting that young people could be taught, from a young age, how to be body positive and confident and more positive towards others. In saying that however, they did state that it would take “a very long time to change the body image that we strive for nowadays”.

#### *4.3.6 Theme 6: Promote Appearance Diversity and Body Confidence*

Although the vast majority of adolescents in this study did not feel that body image could be improved for youth in Ireland, few did suggest that appearance diversity and body confidence campaigns could possibly help with the situation. Specifically, they mentioned that such campaigns should teach adolescents not to focus on how they or others look, rather they should teach adolescents to focus on other attributes and skills that they might have, and should highlight to them that everyone has “a free rein on how they want to look”.

In addition to body image campaigns, they stated that parents and teachers could take control over the situation and promote appearance diversity among youth from a young age. They also mentioned motivational speakers as a potential avenue for promoting appearance diversity and confidence, as well as talks from past eating disorder sufferers. They also suggested that the promotion of positive peer relationships among youth is necessary in order to improve body image in Ireland. Specifically, they stated that young people need to be taught not to tease others about their appearance or weight, and that support groups could be developed to encourage this. Peer-led initiatives were also raised as a mechanism of improving body image in Ireland. The development of a Facebook page, TV ad and/or a YouTube video were suggested as ways of promoting appearance diversity and confidence. One adolescent stated that “we should be the one’s shouting out to other teenagers”, and proposed that the content of potential peer-led videos could include scenes relating to the consequences of appearance-related bullying and/or pressure from peers. In addition, peer-led talks within schools were mentioned as a way of improving appearance acceptance, diversity and confidence, as they felt young people would listen to each other more, than they would to adults.

#### *4.3.7 Theme 7: Promote a Healthy Lifestyle*

An additional idea raised by some of the adolescents was the development of a healthy eating advertisement or campaign that included a public figure (e.g. Ronan O’Gara) to promote healthy lifestyle choices and to indicate to young people that one needs to work hard for the appearance results they aspire for. They stated that the promotion of physical activity would be a particularly important aspect of such

advertisements or campaigns, as physical activity helps young people to feel better about themselves, helps them to set targets and helps them to become leaner and fitter. They also stated that a physical activity element to such ads/campaigns would be crucial due to the obesity epidemic among youth in Ireland, and that the consequences of obesity should be highlighted in future methods used to improve body image. On the opposite end of the spectrum, they also stated that such ads and campaigns need to teach young people about the dangers of extreme dieting, particularly amongst girls. The boys in particular, stated that girls need to be taught how to become patient when trying to achieve their appearance goals, rather than embarking on crash diets that will compromise their health. They also stated that girls need to be given healthy eating messages in order to reshape their attitudes towards food.

#### *4.3.8 Theme 8: Combat Societal and School Level Changes*

Although the vast majority of adolescents did state that societal changes, such as the media could not be tackled, some argued that the media needs to stop body shaming others, needs to stop portraying pictures of “perfect people” and needs to reduce the coverage given to celebrities embarking on “fad diets”. Changing mannequin sizes in shops, from a size 6 to a more realistic body size, as well as their tall stature was also raised as a way of improving adolescent body image. In addition, suggestions by the boys, regarding free gym membership for young people were made, in order to improve body image perceptions.

In terms of the school setting, there were mixed reviews regarding the compulsory nature associated with wearing school uniforms. Some of the adolescents stated that the school uniform should always remain within the school setting as it promotes equality, however, others argued that removing the school uniform in senior cycles would allow adolescents to express themselves more, and would allow them to see what type of clothing styles are popular amongst their peers. Furthermore, some mentioned introducing more of a variety of activities to the physical activity (PE) curriculum in order to cater for all individuals, or for individuals who might not be good at one specific sport. In addition, the boys in particular, mentioned that the importance of PE should be reiterated to girls, as many of the boys held the belief

that girls “just sit around and chat to one another” during PE lessons, which was not perceived as having a good influence on their body image.

The boys also stated that PE is only delivered in the Junior cycles in schools in Ireland, and thus the senior years spend most of their day sitting at a desk. They emphasised that a PE class at senior cycles is also necessary and equally as important as it is in younger years. The introduction of gyms to schools was also raised by adolescent boys as a method of improving body image; as many felt that a gym workout after school would help to improve one’s fitness and weight status. Combating the poor food environment perceived to be inherent in many school settings was also suggested as a way through which body image perceptions among youth could be improved. The adolescents suggested that school canteens need to consider the provision of healthier foods for secondary school students.

More body image talks in schools was suggested as a way of improving body image among youth in Ireland. The girls in particular, stated that focus group talks would give everyone a chance to express their views and would help to highlight to young people that no teenager “is alone” regarding their body image issues. The girls also stated that a more thorough discussion of body image issues within the Social Personal and Health Education curriculum or a “body appreciation” day at school would help to improve negative body image perceptions among adolescents, and should also be used to teach girls not to judge others based on their appearance.

## **Chapter 5: DISCUSSION**

### **5.1 Introduction**

This study was set out to explore peer influences on adolescent body image in Ireland. Theoretically and empirically, three sociocultural influences, namely, peers parents and the media have been found to play a role in adolescent body image development (Keery et al., 2004; Thompson & Heinberg, 1999), however, the peer context has been the least examined of all three to date, with quantitative approaches dominating. The findings from this study thus addressed an area that has not been comprehensively researched and where the provision of more information could be useful for research, practice and policy, particularly, in an Irish context. This chapter discusses the study's findings in the context of the extant literature and concludes with an overview of the implications and limitations of the overall research study, as well as recommendations for further research.

### **5.2 Linking each phase of the research study**

Across all three phases of the current research study, the peer context was found to play an important role in the development of adolescent body image. Peers were found to influence (i) the way in which adolescents perceive; (ii) behave towards; and/or (iii) feel about their body image, within and/or across the study phases. In addition, overlapping similarities, as well as differences, regarding the mechanisms through which peer influences are exerted were apparent across the study phases. Links regarding how adolescents conceptualise the term body image were also evident across the first and second phase of this study.

In the first phase of the current study, adolescents predominantly reported that peers have a negative influence on adolescent body image. The nature through which their influence was exerted included peer modelling, peer pressure, peer surveillance, peer teasing, peer exclusion, peer encouragement and peer advice. Overall, the study revealed that the peer context in which adolescents live today, is one in which "looks" are of paramount importance, support is limited, and pressure to live up to appearance expectations is high. Such a context, unfortunately, does not serve to

promote positive body image for adolescents, and thus needs to be addressed in future interventions aiming to alleviate body image concerns, among youth in Ireland.

In the second phase of the overall study, peers emerged as the most frequently cited influencing factor on adolescent body image, relative to five other key factors. The adolescents reported that peers in general and opposite-sex peers influence the way they feel about their body image. This finding was also apparent amongst the adolescents in phase 1 of this research study, who constantly reiterated that opposite sex peers play a key role in how they feel and act towards their body image. Furthermore, peer comparisons and peer comments (aimed at them or others) were listed as the key mechanisms through which peer influences are exerted in the second phase of this study. These modes of peer influence were also found in the first phase of this study, suggesting that they play a prominent role in adolescent body image.

Interestingly, familial influences were not listed in the top six influencing factors by adolescents in the second phase of this research study, yet they have been identified as a key source of influence in sociocultural models of body image and eating disturbances (Rodgers et al., 2014; Keery et al. 2004; Thompson & Heinberg, 1999). This perhaps suggests that familial influences may be more implicit than media and peer influences. Other factors such as clothing and eating experiences) were also reported as factors that influence adolescent body image. In addition to phase 1 of this study, phase 2 further highlights that peers play a crucial role in the way adolescents feel about their body image, and perhaps demonstrates that peers have become a prominent source of body image influence among adolescents in Ireland.

In the third phase of the overall study, peers were found to impact adolescent body dissatisfaction in a separate way than the mechanisms found in phase 1 and 2. Specifically, cyberbullying by one's peers and the strength of one's friendship dynamics emerged as important influencing factors in the third phase of the study. Specifically, adolescents who reported being cyberbullied were twice as likely to report body dissatisfaction, than those who did not report being cyberbullied; whilst strong, as opposed to weak, friendship dynamics was associated with greater body satisfaction. In addition to phase 1 and 2 of the research study, where peers clearly

emerged as a source of body image influence, the third phase of the study further revealed that friendship dynamics partially moderate the relationship between cyberbullying experiences and body dissatisfaction among adolescents. This finding thus suggests that strong friendship dynamics may act as a buffer against body dissatisfaction; a finding, which overlaps with the findings of the first phase of this study, whereby friends were perceived as playing a supportive role with respect to body image concerns. The third phase of the overall study also highlights the importance of cyberbullying and body image and that more research and attention to the online world and its relationship to body image is needed.

In addition to the overlapping similarities/differences regarding the modes of peer influence found in each phase of the study, this study also highlighted similarities regarding the way in which adolescents conceptualise the term body image. In phase 1 and 2 of this study, adolescents revealed that body image is associated with appearance-related perceptions, thoughts, attitudes and behaviours. The adolescents also made reference to attributes such as hair colour, nose shape, ear size and personality when asked to explain what the term body image meant to them, in both of the study phases. This is an important finding, as weight status perception is largely used as a measure to examine adolescent body image in the literature. It is clear from this study however, that adolescents' conceptualisations of body image go far beyond that of weight, to include a wider array of physical attributes. Going forward, it will be important to investigate other aspects of appearance rather than predominantly focusing on adolescents' degree of body dissatisfaction, which is currently measured via adolescents' current and ideal body shape status.

All in all, each phase within the overall study provided unique contributions to the extant literature, regarding the role of peers in the aetiology of body dissatisfaction and preoccupation among adolescents. In addition, each of the three studies highlighted that the peer context is a particularly influential environment with respect to body image, among adolescents, aged 13-18 years, currently living in Ireland.

## **5.3 Connecting the overall research findings to the extant literature**

### *5.3.1 Peer Influences and Adolescent Body Image*

Results from this study revealed that the mechanisms through which peers exert their influence on adolescent body image, align well with some of the mechanisms identified in the literature, such as peer comparisons (Carey et al., 2014), peer pressure (Gondoli et al., 2011), peer teasing (Harriger & Thompson, 2012), peer exclusion (Helfert & Warschburger, 2011), peer conversations (Tatangelo & Ricciardelli, 2013), peer support (Gerner & Wilson, 2005) and cyberbullying (Frisén et al., 2014). Extending the findings of prior research however, this study revealed, in more depth, the nature (implicit/explicit and positive/negative) of such mechanisms with respect to adolescent body image, and why they take place within the context of one's peer environment. Furthermore, this study specifically examined the role of cyberbullying and friendship dynamics (strong/weak), if any, on adolescents' level of body dissatisfaction.

#### *5.3.1.1 Peer Comparisons*

Results of this study showed that adolescents self-compare with their peers in order to seek out whether their appearance resembles that of, and conforms to, their peers. Additionally, this study highlighted that peer comparisons are primarily made with those who are deemed popular and/or who are romantically successful with opposite-sex peers. Results also revealed that virtual peer comparisons, via Facebook and Instagram represent a newer forum for adolescents to self-compare with their peers, particularly for girls, as well as direct peer-to-peer interactions.

#### *5.3.1.2 Peer Pressure*

Appearance-related peer pressure represented another mechanism through which peers appeared to exert their influence on adolescent body image, in this study. To date, both longitudinal and cross-sectional studies have revealed a positive association between perceived peer pressure for thinness and body dissatisfaction among adolescent girls (Gondoli et al., 2011; Kichler & Crowther, 2009) and perceived pressure for muscularity and body dissatisfaction among adolescent boys

(Helfert & Warschburger, 2011; Smolak et al., 2005; Smolak & Stein, 2006). To my knowledge, no prior study has revealed why adolescents feel pressurised by and succumb to certain appearance ideals for their peers – a gap the qualitative aspect of this overall study filled. According to the adolescents, youth conform to narrow appearance ideals and expectations for their peers in order to avoid negative peer sanctions, such as peer teasing, judging and exclusion. Similar to past studies, health-compromising behaviours were used to fulfil peer appearance ideals (Mooney et al., 2009; Hutchinson & Rapee, 2007); however, extending such findings, this study revealed that the use of extreme appearance-related behaviours are encouraged, and at times, glorified by peers. Findings also revealed that adolescents conform to specific peer ideals in order to enhance their romantic opportunities with opposite-sex peers. Particularly, this finding demonstrates that adolescents, as young as 13 years, are beginning to value Westernised ideals as the epitome of beauty and are prepared to meet such ideals for the sexual gratification of their opposite-sex peers.

#### *5.3.1.3 Peer Conversations*

Peer conversations emerged as another form of peer influence within the context of this study. Although previous cross-sectional studies have shown that peer conversations negatively impact adolescent body satisfaction (Carey et al., 2013; Matera, Nerini & Stefanile, 2013; Lawler & Nixon, 2011), these studies did not reveal the exact nature of such conversations and why they may lead to body image concerns. The qualitative part of this overall study however, revealed that peer conversations, pertaining specifically to one's body image goals and/or achievements, as well as their appearance-related behaviours and attitudes constitute the nature of appearance-related conversations within the peer context. The adolescents also declared that such conversations can lead to appearance internalisation and peer comparison tendencies; both of which exacerbate one's pressure to conform to very specific body image ideals. Furthermore, peer conversations have been reported to be particularly salient among adolescent girls in previous studies (Carey et al., 2013; Matera et al., 2013; Lawler & Nixon, 2011), however the boys included in the first phase of this study, reported that they too engage in appearance-related conversations with their peers.

#### *5.3.1.4 Peer Modelling and Peer Surveillance*

Peer influence mechanisms that have been somewhat overlooked in the body image research literature to date, such as peer modelling and peer surveillance also played a role in adolescent body image in this study. Indeed, prior cross-sectional and prospective research has highlighted that reciprocal friends are similar with respect to body image and dieting constructs, however such studies did not explicitly examine whether this similarity was a result of peer modelling and failed to include an adolescent male cohort in their design (Woelders et al., 2010; Hutchinson & Rapee, 2007). Moreover, to the best of my knowledge, only one cross-sectional study has specifically examined the relationship between peer modelling and body image; results of which highlighted that peer (and parental) modelling are associated with maladaptive eating attitudes and behaviors among adolescent girls (Kichler & Crowther, 2009). The qualitative part of this study however, highlighted that peer modelling is commonly drawn upon by both adolescent boys and girls and that adolescents model the appearance of their peers in order to enhance peer similarity and to avoid peer victimisation.

In addition, this is one of the first studies to reveal the implicit, yet inherent, occurrence of peer-surveillance activities within the peer context. This study demonstrated that peers monitor the appearance of others in order to determine whether appearance standards have been met and to determine what sanctions will be applied to those who fail to conform. Results also highlighted that girls are now engaging in surveillance activities to monitor the appearance of other girls, rather than primarily aiming their attention on the appearance of boys. This finding contradicts previous qualitative research that highlighted boys as being more involved in the criticism and surveillance of adolescent girls (Taylor, 2011); perhaps suggesting that appearance objectification trends are changing within adolescent peer cultures.

#### *5.3.1.5 Peer Teasing and Exclusion*

This study also revealed that peer sanctions are prominent for those who fail to conform, under the critical gaze of one's peers. Sanctions such as peer teasing, judging and exclusion are used when appearance expectations are not met. Unlike prior research that has predominantly focused on the impact of weight-related teasing

on adolescent body image (Taylor, 2011; Mooney et al., 2009; Eisenberg et al., 2006), this study highlighted that adolescents are teased about and judged on a wide range of appearance attributes, including their hair colour and length, skin tone and condition, teething colour and structure, clothing quality and style and/or their under- or overweight status. This finding is concerning given that previous longitudinal studies have revealed that teasing experiences are predictive of appearance dissatisfaction and emotional distress among adolescents six years later (Feragen & Stock, 2016), and that peer victimisation in early adolescence is predictive of self-surveillance and body shame in late adolescence (Lunde & Frisén, 2011). Furthermore, this study highlighted that peer exclusion is prominent for those who fail to conform to peer ideals; a finding that is yet again concerning, given that recent prospective research has revealed that appearance-based exclusion is a predictor of weight concerns in adolescent boys (Helfert & Warschburger, 2011).

#### *5.3.1.6 Cyberbullying*

Cyberbullying also emerged as form of peer influence that negatively affects adolescent body image in the current study. Results revealed that adolescents who report being cyberbullied are approximately twice as likely to perceive themselves as too fat, compared to those who do not report being cyberbullied; an association that remained after stratifying for gender. Although the current research study did not measure weight status, it is possible that those who reported being a victim of cyberbullying and feeling too fat were indeed overweight. If so, it is not surprising that these adolescents reported greater levels of cyber-victimisation, given that overweight, rather than underweight adolescents are more often targeted in cyberbullying experiences (DeSmet et al., 2014). Furthermore, results from this research study found no relationship between cyberbullying and underweight perception, perhaps indicating that a stigma towards over- rather than underweight status is more inherent in adolescent environments, however future research should examine the reasons behind this finding.

#### *5.3.1.7 Positive Peer Influences*

This study was one of the first to explore the nature of positive peer influences and the impact of strong friendship dynamics on adolescent body image. To date, only one qualitative study has examined how positive and negative peer comments impact

body image among Latino girls (Romo, Mireles-Rios & Hurtado, 2016); however, no study has examined positive peer influences more generally and how they may influence body image among both boys and girls. Overall, positive peer influences were mentioned to a far lesser extent than the negative peer influences outlined above in this research study. In addition, results revealed that adolescents' perceptions of what constituted a positive peer influence was somewhat distorted, as peer encouragement to lose weight, diet and get fit was alluded to in a positive manner, particularly when an individual is perceived as being overweight. Although obesity can lead to negative health consequences among adolescents (Kelly, Barlow, Rao, Inge, Thayman, Steinberger, Urbina, Ewing & Daniels, 2013), encouragement from peers to lose weight may inadvertently arouse or intensify self-image issues or feelings of insecurity among those carrying excess weight. Peer advice and compliments were also mentioned as having a positive influence on adolescent body image in this study; a finding that is consistent with previous qualitative research (Romo et al., 2016).

Results from this study also revealed that adolescents who reported stronger friendship dynamics were less likely to perceive themselves as too fat, compared to adolescents who reported weak friendship dynamics. As such, these results may indicate that positive peer relationships, characterised by strong friendship dynamics, can decrease the risk of perceiving oneself as too fat among adolescents. This association, however, needs to be studied further, as the direction of this relationship or whether other factors mediate the relationship between friendship dynamics and body image perceptions was not determined in this research study. Results also revealed no association between underweight perception and friendship dynamics. Given that overweight status is commonly stigmatised in the adolescent context (Taylor, 2010), it is possible that those who perceive themselves to be overweight require more support in their friendships, than those who report feeling underweight, or indeed that adolescents are more equipped to provide support to those who feel over- rather than underweight.

Results from this study also found that strong friendship dynamics partially mediate the relationship between cyberbullying and perceptions of feeling too fat, for both boys and girls. It must be acknowledged however, that the results from this study

suggest that the two variables, friendship dynamics and cyberbullying, are independently associated with perceptions of being too fat, with only a minor mediating effect of friendship dynamics. Future research is thus needed to explore the relationship between friendship dynamics, cyberbullying experiences and perceptions of feeling too fat among adolescents. Results from this study also reported no mediation effect between cyberbullying experiences and perceptions of being too thin, for either boys or girls. Perhaps adolescents do not perceive underweight status to be an issue of concern for adolescents, or indeed that adolescents choose to support overweight peers in particular, given that it was mentioned as a form of positive peer influence in the results outlined above. Overall, it is clear from the results of this study that future research on friendships and their impact on perceived and actual weight status is needed, in order to provide a more comprehensive picture of the role friendships can play on adolescent body image.

### *5.3.2 The Key Factors that Influence Adolescent Body Image (Relative to Peers)*

Results from this study also revealed that an array of factors influence adolescent body image relative to peers. In line with the two theoretical frameworks (Bronfenbrenner's model and Tripartite model) used to underpin this research study, and with previous qualitative/ quantitative studies, results from this study revealed that the media, peers and other people (Berge, Trofholz, Fong, Blue & Neumark-Sztainer, 2015; Greer, Campione-Barr & Lindell, 2015; Carey et al.,; Pope, Corona & Belgrave, 2014; O'Connell & Martin, 2012; Lawler & Nixon, 2011; Mooney et al., 2009) influence the way in which adolescents feel about their body image. Additionally, and in accordance with prior studies (Mellor, Waterhouse, bt Mamat, Xu, Cochrane, McCabe & Ricciardelli, 2013; Lawler & Nixon, 2011), body image evaluations, in the form of body image preoccupation and dissatisfaction, were also found to influence the way in which adolescents feel about their body image.

Interestingly however, this study noted that parents did not emerge as a key influencing factor with respect to the way in which adolescents feel about their body image, although previous cross-sectional research has indicated that parents influence adolescent body image via appearance-related conversations (Berge,

MacLehose, Loth, Eisenberg, Fulkerson & Neumark-Sztainer, 2015; Berge, MacLehose, Loth, Eisenberg, Bucchianeri & Neumark-Sztainer, 2013; Eisenberg, Berge, Fulkerson & Neumark-Sztainer, 2012), via weight-related teasing (Schaefer & Salafia, 2014; Eisenberg et al., 2012; Neumark-Sztainer et al., 2010) and via the type of body image attitudes they project and behaviours they adopt (Galioto et al., 2012).

Findings from this study also revealed that certain influencing factors, which have not been extensively explored in the literature to date, influence how adolescents feel about their body image. Factors such as, how one feels following food consumption and their athletic performance, as well as how one feels in their clothes, emerged as key influencing factors in this study. Clearly, these factors are crucial with respect to the perceptions adolescents hold towards their bodies, yet very little research has investigated their role. Thus far, cross-sectional research has revealed that body image is a positive predictor of moderate-to-vigorous physical activity for boys and girls, regardless of BMI (Kantanista et al., 2015), that high levels of physical activity are protective against body dissatisfaction, but not body distortion amongst boys and girls (Gaspar, Amaral, Oliveira & Borges, 2011), and that physical inactivity is significantly less likely for boys in late pubertal stages, whilst activity is more likely for girls with irregular menstruation (Finne, Bucksch, Lampert & Kolip, 2011). Furthermore, and more specific to adolescents' teasing experiences within the physical activity context, Slater & Tiggemann (2011) revealed that girls report more experiences of teasing whilst playing sport and other physical activities than boys, are more likely to feel that people are staring at them because of how they look, laugh at them because of their appearance or for being uncoordinated, and are more likely to be called names that refer to their size or weight. This paper also highlighted that girls and boys who reported more experiences of teasing while playing sport and other physical activities also reported higher levels of self-objectification and body image concern. Although the aforementioned studies have added an important contribution to the field of body image and physical activity research, no study has examined how an individual's sporting performance or ability contributes towards to their overall sense of body image – a factor that was emerged as having an influence on body image in this study.

Clothing and eating experiences were also found to influence the way in which adolescents feel about their body image in this study, yet again, very little research has examined the impact of both factors on adolescent body image. To date, qualitative research has highlighted that clothing choices are closely bound to adolescents' self-concept, and are used as a means of managing their public image and security in social settings (Piacentini & Mailer, 2004); however, no study has investigated how significant clothing experiences are to body image in adolescence, and the reasons for this significance if any. Regarding the relationship between food experiences and body image, one cross-sectional study has reported that lean restrained participants are significantly less satisfied with their weight after cue exposure to high-caloric foods in comparison to cue exposure to low-caloric foods (Fett, Lattimore, Roefs, Geschwind & Jansen, 2009); whilst laboratory research has indicated that female body-image satisfaction can be temporarily and adversely affected following consumption of high calorie foods or following exposure to high calorie food cues (Vocks, Legenbauer & Heil, 2007). While both studies have contributed to the area of food experiences and body image, both were conducted with adult samples, and failed to examine how food consumption in itself affects adolescent body image – even though it clearly influences how they feel, as revealed by this study.

Findings from this study also revealed that peers emerged as the most frequently cited influencing factor (n = 1765) on adolescent body image, followed by the media (n = 1462), appearance-related evaluations (n = 1177), other people (n = 819), physical activity and food (n = 380), and clothes (n = 269). These results thus show that peers play an important role in for many adolescents.

A key contribution this study makes is the clear need to move beyond examining constructs concerning peers, parents and the media (that predominate the literature), and to more closely examine the role of clothing, physical activity and food experiences on adolescent body image. Perhaps to date, body image researchers have been too focused on examining the three influences (parents, peer media) included in the Tripartite model, and thus have failed to acknowledge the key role of other factors at play for adolescents. Based on the results of this study, it might be worth questioning whether we, as researchers, need to start examining body image from a

different angle, or whether we have been asking young people the wrong type of questions? Going forward, it would be worth including items that capture clothing, physical activity and food experiences, into future measures aiming to explore body image influences among adolescents, in order to further explore the extent, relevance and validity of their impact.

### *5.3.3 The Influence of Friends versus the Influence of Peers on Adolescent Body Image*

Results from this study showed that clear differentiations were made by adolescents with respect to the manner through which friends and peers influence adolescent body image. To date, only one comprehensive review has explored 15 years of evidence concerning the separate/combined role of peers and friends on adolescent body dissatisfaction among those aged 10 to 18 years (Webb & Zimmer-Gembeck, 2014). In their review, Webb and Zimmer-Gembeck (2014) reported that appearance teasing and perceived pressure to be thin from friends, as opposed to peers, represent the most widely studied forms of body image influence among adolescents and have been most consistently linked to adolescent body dissatisfaction in both cross-sectional and longitudinal research. The current research study contributes to this limited body of knowledge by seeking out whether particular aspects of friendships influence adolescent body image differently than peer group characteristics.

Results revealed that a majority of adolescents expressed that friends are more accepting of and supportive towards their appearance and/or body image concerns, with the exception of a few stating that friends are harder to impress than peers. The perception of being accepted by friends has been found to be associated with greater body satisfaction among adolescents in prior quantitative research (Gerner & Wilson, 2005), however, this research further illuminates that specific friendship characteristics, such as support and acceptance, play an important positive role in adolescents' body image experiences.

Regarding the role of peers, the adolescents stated that young people are more concerned about their appearance in the presence of their peers; as peers are unaccepting of and critical towards adolescents' physical appearance, if it does not conform to their preferred appearance ideals. Indeed, research to date has shown that

certain characteristics of the peer group context, such as teasing, pressure and exclusion are associated with greater levels of body dissatisfaction (Lawler & Nixon, 2011; Helfert & Warschburger, 2011); however, this study is the first to substantiate such quantitative findings, through young peoples' perspectives. Clearly, peer relationships, as opposed to friendships, represent a more challenging and discouraging context for young people, where body image is concerned; thus it might be worth focusing on how friends in particular can help to promote positive body image among young people in future research studies.

Friends were also generally regarded as being more trustworthy and loyal among adolescents in this study. The adolescents stated that friends, as opposed to peers, are more honest and sensitive with the truth regarding one's appearance in comparison to peers. These findings are consistent with an older study by O'Koon (1997), which revealed that a stronger sense of trust, sensitivity and helpfulness from friends is associated with lower levels of body dissatisfaction in both boys and girls. A more up to date study was not found, thus demonstrating the need to further investigate the positive contribution friends can make in ameliorating adolescent body image concerns and/or promoting positive body image. Peers, on the other hand were generally perceived as being inconsiderate of and inattentive to one's feelings concerning appearance; although some adolescents did mention that peers tend to secretly discuss the appearance of others with their friends, in order not to tamper with their popularity levels within the wider peer network.

In line with previous cross-sectional (Lawler & Nixon, 2011) and qualitative (Taylor, 2010) research, commentary from both friends and peers played a particularly influential role on body image among the adolescents in this study. Some of the adolescents stated that negative commentary from friends heightens body image concerns to a greater extent than negative commentary from peers, as friends are perceived as a more trustworthy source of information. However, some of the adolescents stated that comments from friends are less hurtful than comments from peers, as negative peer commentary was considered a mode of bullying. Interestingly, however, positive commentary from peers was considered more reassuring than positive comments from friends, as friends were perceived as being naturally complimentary in nature.

Overall, results from this study show that both intentional and inadvertent appearance-related interactions that occur between friends and peers over time influence how adolescents feel about their body image. Specifically, the results clearly demonstrate that the characteristics of the broader peer context influence body image in a very different manner to that of friends; however, further research is needed to corroborate these findings, as this is the first study to investigate the differential influence of both social groups with respect to adolescent body image concerns.

#### *5.3.4 Improving Body Image for Young People in Ireland*

Results from this study revealed some interesting revelations regarding adolescents' perceptions on how body image can be improved for youth in Ireland. Most worryingly, the results indicated that adolescents were not hopeful that body image improvements could be made for the current generation; however, they did state that potential measures, such as the development of appearance diversity and body confidence campaigns, advertisements, posters, and/or peer led-initiatives might help to improve body image concerns for those in younger generations. Societal (changing the weight/height of mannequins in shops, tackling the derogatory nature of the media) and school level changes (increasing physical activity options and hours, providing healthier eating options in canteens) were also listed as measures that could be taken to improve body image for young people going forward. In addition, the positive role that parents, teachers and motivational speakers could make to promote positive body image among younger generations was also mentioned. Specifically, the adolescents stated that such supports could help to improve body image, by helping young people to feel confident about and accepting towards their body image from a young age.

Given these results, it would seem appropriate to approach adolescent body image in a positive manner, using a positive theoretical foundation, going forward, rather than focusing on ways of addressing negative body image perceptions. Such a theoretical foundation can be found in the concept of salutogenesis; which focuses on the causes of health, instead of the causes of disease (Antonovsky, 1996). More specifically, salutogenesis adopts an assets-based approach, which focuses on the assets/resources an individual has at their disposal, that are protective against negative health

outcomes and/or that promote health. To date, past body image intervention studies have focused on addressing the risk factors (e.g. internalisation of cultural appearance ideals, appearance-related conversations, appearance related teasing) associated with pre-adolescent and adolescent body image concerns in order to improve negative body image perceptions (Bird, Halliwell & Harcourt, 2013; Richardson & Paxton, 2010); whilst others have focused on eating disorder and body dissatisfaction prevention among adolescent cohorts (Wilksch & Wade, 2009; Holt & Riccardelli, 2008; Pratt & Woolfenden, 2002). Consequently, such interventions have tended to preclude consideration of the contextual factors that may operate as protective factors for adolescents. In addition, most of the aforementioned interventions were conducted with girls, excluding the consideration of males in tackling body image concerns. By considering the assets that could serve to promote and sustain positive body image, mentioned by adolescents in the qualitative element (phase 1) of this research study, future interventions could be better tailored to meet the needs of emerging generations.

In addition to the suggestion posed by the adolescents above, this overall study revealed that the peer context in particular plays (a largely) negative role on adolescent body image. If future interventions are guided by salutogenesis, and more specifically by an assets-based approach, the chance of making sustainable changes to adolescents' body image perceptions and the peer context will be enhanced. Specifically, future interventions should (i) help adolescents to focus on the attributes and skills that they have, as opposed to focusing on their perceived appearance deficits; (ii) aim to promote appearance diversity and acceptance among young people, by teaching them that everyone is entitled to a sense of freedom over how they want to physically look; (iii) teach adolescents how to become resilient to negative appearance-related comments made by and conversations with peers; and should (iv) teach young people how to become more empathic towards one another regarding body image issues, in order to increase solidarity within and across both friendship and peer group networks.

## 5.4 Implications for Future Research, Practice, and Policy

### 5.4.1 *Implications for Future Research*

- This study was conducted with adolescents living in Ireland. Whether the results of this study apply to adolescents from different ethnic and geographic backgrounds requires further exploration.
- The adolescents in this study were aged between 13 and 18 years. The role of peers and friendships on body image among younger children requires additional research.
- Future research examining the influence of opposite-sex peers on body image is warranted, given their influence in the current study.
- Further exploration of how, why, and to what extent social media outlets influence adolescent body image requires attention; given their impact in this study.
- Future research studies should seek out whether the model developed in the qualitative part (phase 1) of this study applies to or differs for other adolescents and/or children.
- Future research should explore how significant the overlooked influences that emerged in this study (e.g. clothing, eating, and exercising experiences) are to adolescent body image.
- Cyberbullying was found to significantly influence adolescent body dissatisfaction in this study. Future scholars need to corroborate this finding (qualitatively and quantitatively).
- Whether friendship dynamics play a role in how adolescents view their appearance more generally (beyond weight status) requires exploration in future research studies.

- Perceptions of thinness were not associated with cyberbullying experiences or friendship dynamics in this study. These findings warrant further examination.
- Future research needs to examine whether other variables are protective against or contribute towards body dissatisfaction and cyberbullying among adolescents.

#### 5.4.2 *Implications for Practice and Policy*

- A major contribution of this study is in demonstrating the specific relevance of the peer context in the determination of body image perceptions and concerns. Peers were most frequently listed as a source of body image influence in this study, and were mainly viewed as having a negative influence on adolescent body image.
- On a national level, policy makers should use the data from this study to support the development of a national body positive programme, specifically focusing on peer influences, for implementation in schools, clubs, societies and other settings in which youth spend their time. Funding for such a programme and the establishment of a national coordinating committee to advise schools, clubs, societies and other youth settings on the implementation of such a programme is required. A national body positive programme could serve to promote or sustain positive body image among future adolescent generations in Ireland.
- On an international level, future prevention and intervention programs could help increase awareness and understanding of the ways in which peers influence body image and undermine body satisfaction. The success of future initiatives and/or programmes could be enhanced if the results of this study are taken into account.
- This study also contributed new practice examples of how young people can be involved at the design stage of a research study, rather than relying on

their participation at the stage of data collection. Building on the use of youth participation in this study should give others the impetus to integrate youth in their research.

## **5.5 Limitations of this study**

- A sample of adolescents aged between 13-18 years was recruited for this study. It is thus unknown whether the findings of each study apply to those beyond this age range.
- Every element of this study was carried out in the school setting. It is therefore unknown whether the findings extend to those in other settings, such as those who are home-schooled or those who leave school early. The role of peers in other clubs/societies (sports, music, and art) was not explored.
- The study was conducted with adolescents living in Ireland. As such, the generalisability of each study is limited to adolescents in the Irish context.
- The qualitative approaches used in this study (focus groups and youth participation) may have hindered the participation of more withdrawn informants at times, due to the presence of more domineering personalities, in both group settings. However, every effort was made to give all participants an opportunity to speak within both of these studies.
- The newly developed model illustrating the ways through which peers exert their influence, developed as part of this study is the first of its kind in the literature. As such, it is not a generalisable empirical model; however, since its development, one study has qualitatively explored the accuracy and relevancy of the model with other groups of adolescents, as well as its directional influence (O'Shea, 2016). Further studies could however, lead to the development of an empirical model, and its evolution is encouraged.
- The model of youth participation (Lundy's model, 2007) used in this study could have been enhanced in many ways. As the newly developed questions

did not stem from an idea generated by youth in this study, one could argue that the level of youth participation was in some ways curbed. Moreover, young peoples' input as co-researchers was not sought beyond the stages of question development. However, due to practical constraints (e.g. timing, resources) their participation at these stages was restricted.

- The use of an open-ended question in the cross-sectional survey design in phase 3 of this study had its limitations. The non-response rate for the open-ended question was higher than the non-response rates found for closed questions included in the survey. In addition, analysing the open-ended question was very complex and time consuming, given that 4481 participants answered the survey question. However, it is anticipated that the key influencing factors that emerged from this paper will be used to inform the development of a close-ended question and its response options, for inclusion in future HBSC surveys.
- The cross-sectional design used to examine cyberbullying and friendship dynamics in phase 3 of this study relied on self-reported data, thus it cannot be determined whether students misreported their responses. However, students were ensured complete anonymity; therefore, would have had no reason to misreport their responses within the survey. In addition, the cross-sectional study design did not allow us to draw any conclusions about causal relationships or to differentiate a precursor of body dissatisfaction from a consequence of body dissatisfaction for the relationships explored in this study.
- The question for assessing cyberbullying in phase 3 of this study has not yet been validated. Its lack of validity thus represents a research limitation.

## **5.6 Strengths of this study**

The aim of the first phase of this overall study was to qualitatively examine peer influences on adolescent body image in Ireland, whether peers influence body image differently to peers and how body image could be improved for youth in Ireland. It

represented the first study, both internationally and in Ireland, to examine the specific nature of peer influences on adolescent body image from young peoples' perspectives. A thematic model relating to the mechanisms through which peers (negatively) exert their influence on adolescent body image was also developed within the qualitative element of this study. The model, which was described in chapter 4 above, is the first of its kind to propose that the peer influence process is cyclic in nature, concerning adolescent body image, with one influence having an impact on the next or the former. It was also the first study to examine adolescents' perceptions on whether friends have a different/similar influence on adolescent body image, and how body image could be improved for youth going forward.

The mixed methods phase of this study (phase 2) was the first of its kind to investigate body image influences using an open-ended style of questioning, within a cross-sectional research design. It was also one of the first studies within the HBSC network and within the body image research field to use a youth consultative approach in its survey-item development stage. Additionally, it was one of the first studies to investigate a broad range of factors at play for adolescent body image in Ireland, and to examine the relevance of peers in comparison to other influencing factors.

The quantitative part (phase 3) of this study also contributed to the current literature in many ways. Firstly, it was one of the first studies to explicitly examine the association between cyberbullying and body dissatisfaction. It was also one of few studies to examine the link between the strength of friendship dynamics and body dissatisfaction. It was also the first Irish study to investigate the impact of the aforementioned variables on adolescent body dissatisfaction, and to investigate whether friendship dynamics mediate the relationship, between cyberbullying and body dissatisfaction.

## **5.7 Conclusion**

Overall, results from this study provide a clear indication that peers play a major role in adolescent's body image experiences. In particular, this study highlighted the ways through which peers negatively, and to a lesser extent positively influence

adolescent body image, in Ireland. In addition, the study highlighted that peers represent the immediate form of influence to adolescents with respect to body image, relative to other identified factors.

Given the public health importance of negative body image perceptions and behaviours, and the early age at which these may begin to manifest, identifying effective health promotion strategies to address the ways through which peers impact these issues in adolescence is essential. Health-promoting initiatives to prevent body image concerns seldom take into account the role peers and friends may have in determining adolescents' body image experiences, and this is likely to be an important omission. The findings of this study clearly suggest that there is an urgent need to address the impact of peers on adolescent body image to alleviate body image concerns, and to develop programs that teach adolescents how to view their appearance in a more holistic manner and how to utilise appearance-related behaviours in a more protective, rather than a health-damaging manner.

In conclusion, it is clear that peers and friends are a central source of influence on adolescent body image, and play an important role in influencing adolescent's developing body image attitudes and behaviours. Not only do adolescents look to their peers and friends for advice and encouragement, they also act as a social source of reinforcement for adolescents' evolving body image attitudes, preoccupations and/or behaviours. If peers and friends are to serve as agents of positive change in adolescence, interventions aimed at improving their body image attitudes and behaviours need to be grounded in deep understanding of the ways these influential figures can affect adolescent body image development.

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# **Appendices**

## **Appendix 1: The three journal articles**

### **Journal Article 1:**

Title: Peer influence on adolescent body image: Friends or Foes?

Authors: Ursula Kenny, Michal Molcho & Colette Kelly  
Journal: Journal of Adolescent Research (2016)

### **Journal Article 2:**

Title: Young people's perspectives in developing a survey item on factors that influence body image.

Authors: Ursula Kenny, Michal Molcho & Colette Kelly  
Journal: YOUNG (2016)

### **Journal Article 3:**

Title: The relationship between cyberbullying and friendship dynamics on adolescent body dissatisfaction: A cross-sectional study

Authors: Ursula Kenny, Lindsay Sullivan, Mary Callaghan, Michal Molcho & Colette Kelly  
Journal: Journal of Health Psychology (2017)

## Peer Influences on Adolescent Body Image: Friends or Foes?

Journal of Adolescent Research

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DOI: 10.1177/0743558416665478

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Michal Molcho<sup>1</sup>, and Colette Kelly<sup>1</sup>**

### Abstract

The aim of this study was to investigate how peers influence adolescent body image, and whether this influence was positive and/or negative from young peoples' perspectives. One hundred and eleven adolescents aged 13 to 18 years from the Republic of Ireland participated in this study, in 17 focus groups. Data were analyzed using a thematic analysis approach. Findings demonstrated that peers have an overwhelming negative impact on adolescent body image, and consequently, health. Both boys and girls revealed that the peer environment is characterized by a significant pressure to conform to appearance expectations, and deviations from such expectations lead to negative peer experiences. Positive peer influences were also revealed but to a far lesser extent.

### Keywords

Body image, peer influences, adolescents, qualitative methods, Ireland

Body image (how one sees, thinks, feels, and acts toward his or her physical appearance; Cash & Smolak, 2011) and body dissatisfaction (the extent to which one experiences displeasure with the whole or specific parts of his or

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her body; Kimber, Georgiades, Jack, Couturier, & Wahoush, 2015) are well-recognized issues of concern for adolescents. In Ireland, a national survey examining adolescents' perceptions of and attitudes toward body image revealed that 43% of participants aged 10 to 21 years were dissatisfied with their body image (O'Connell & Martin, 2012). Moreover, cross-sectional studies in Ireland revealed that 81% of girls and 55% of boys aged 12 to 18 years reported a desire to alter their body shape (Lawler & Nixon, 2011), while 13% of non-overweight children, aged 10 to 17 years, reported that they were on a diet (Kelly, Molcho, & Nic Gabhainn, 2010). Furthermore, poor self-image (i.e., how individuals perceive themselves and how others perceive them) is the leading contributing factor negatively impacting the mental health of adolescents aged 12 to 18 years in Ireland (McEvoy, 2009).

Body image perceptions and experiences differ for both boys and girls during adolescence. Research studies have indicated that girls experience greater body dissatisfaction than males during this period, in both cross-sectional (Kantanista, Osiński, Borowiec, Tomczak, & Król-Zielińska, 2015; Lawler & Nixon, 2011; Meland, Haugland, & Breidablik, 2007; Xu et al., 2010) and longitudinal studies (Eisenberg, Neumark-Sztainer, & Paxton, 2006). In addition, more specific gender differences have been identified with regard to body image behaviors and concerns. Research has shown that girls are more likely than boys to engage in general appearance conversations (Jones, Vigfusdottir, & Lee, 2004; Lawler & Nixon, 2011); whereas boys are more likely to engage in appearance conversations related to muscularity (Jones & Crawford, 2006). Moreover, Jones and colleagues (2004) found that appearance criticism from peers was the strongest direct predictor of body image dissatisfaction among boys but not among girls. Lawler and Nixon (2011) found that girls report greater internalization of appearance ideals than boys. The sources of appearance pressure also differ for boys and girls. Xu et al. (2010) found that peer pressure to increase muscle bulk among boys predicts body dissatisfaction, while pressure to lose weight from peers, adult relatives, and the media predicts body dissatisfaction among girls. Boys and girls also differ in terms of the body ideals they aspire to achieve. Specifically, boys tend to value a muscular, lean, and fit ideal, while girls primarily value thin and fit ideals (Birbeck & Drummond, 2006; Clark & Tiggemann, 2006; McCabe & Ricciardelli, 2003; Tatangelo & Ricciardelli, 2013). In addition, weight perceptions differ for boys and girls. Research has found that girls are more likely than boys to perceive themselves as overweight (Standley, Sullivan, & Wardle, 2009), while boys are more likely than girls to perceive themselves as underweight (Currie et al., 2012).

A variety of models and theories have been developed and used as theoretical frameworks to help identify which and how certain factors may affect

adolescent body image development and concern. The Tripartite Influence Model of Body Image and Eating Disturbance is one such model (Thompson, Heinberg, Altabe, & Tantleff-Dunn, 1999), and was drawn upon in the current study, which posits that peers, parents, and the media influence body dissatisfaction via internalization of body ideals and appearance comparison. Since its development, the model has been consistently supported among adolescent girls (Keery, Van den Berg, & Thompson, 2004; Papp, Urbán, Czeglédi, Babusa, & Túry, 2013; Shroff & Thompson, 2006) and boys (Rodgers, Ganchou, Franko, & Chabrol, 2012; Smolak, Murnen, & Thompson, 2005). Complete reference details added. Although peers are recognized within this framework, there is a general lack of qualitative research focusing on peer influences and adolescent body image.

This is surprising, given that the time spent with, value given to, and influence of peers increase significantly during adolescence (Brown, 2004). As such, peers have the potential to impact and shape adolescents' views of their bodies. From peers, adolescents learn about their own and others' appeal by directly observing and comparing themselves to the physical attributes of their peers. They also learn what body images are associated with social privilege and popularity (Carey, Donaghue, & Broderick, 2014). Furthermore, the peer environment provides them with a forum to discuss and reinforce appearance-related issues, to share appearance-related behaviors (Carey, Donaghue, & Broderick, 2013, 2010; Clark & Tiggemann, 2006; Jones, 2004; Jones & Crawford, 2006) and to single out and/or criticize those who do not conform to specific appearance ideals. Overweight/obese adolescents may be particularly susceptible to peer influences, given that they experience greater levels of body dissatisfaction (Caccavale, Farhat, & Iannotti, 2012; Calzo et al., 2012; McCabe, Ricciardelli, & Holt, 2010) and sociocultural messages to lose weight, in comparison with their healthy/underweight peers (McCabe et al., 2010). Peers also have the potential to positively impact adolescent body image by providing support to those who experience difficulty coping with their changing physique and/or to those who are subjected to appearance-related teasing and criticism from other peers.

Indeed, studies to date have highlighted some of the mechanisms through which peers influence body image. Specifically, Carey et al. (2013) found that body comparisons with peers significantly mediate the relationship between the endorsement of thinness norms and body image concern among adolescent girls, while Jones (2004) found that appearance conversations and appearance comparisons with peers were significant predictors of change in body dissatisfaction among adolescent girls over a 1-year period. In addition to appearance comparisons and conversations with peers, Paxton, Eisenberg, and Neumark-Sztainer (2006) found that the dieting habits of one's peers and

peer teasing were prospective risk factors for body dissatisfaction over a 5-year period. Barker and Galambos (2003) found that being teased by one's peers was a significant risk factor for both boys' and girls' body dissatisfaction over a 3-year time frame. Furthermore, Eisenberg, Neumark-Sztainer, and Story (2003) found that peer teasing is associated with low body dissatisfaction, low self-esteem, high depressive symptoms, and suicide ideation and attempt among both boys and girls, even after controlling for body weight. Moreover, Lunde and Frisen (2011) found that being a target of peer victimization at age 10 is related to more habitual appearance monitoring and body shame at age 18 among both boys and girls. In addition to the above influences, previous research has shown that peer pressure to engage in body change behaviors predicts body dissatisfaction among both boys and girls (Xu et al., 2010), while peer encouragement to control body weight and shape predicts weight concerns in girls and muscle concerns in boys (Helfert & Warschburger, 2011). Lastly, prior studies have indicated that body image attitudes and weight-loss behaviors among friendship cliques contribute significantly to the prediction of individual body image concern, weight-loss, and eating behavior among adolescent girls (Hutchinson & Rapee, 2007; Paxton, Schutz, Wertheim, & Muir, 1999).

While the aforementioned studies have provided us with a glimpse of the various ways in which peers impact adolescent body image, most of these studies adopted a quantitative approach, and thus do not provide us with an in-depth understanding of the mechanisms and processes through which peers influence body image. Moreover, most of these studies focused on the contribution of a single mechanism or process through which peers impact adolescent body image and/or the contribution of peers to body weight and shape concerns. Other characteristics, related to body image, such as hair, skin, and teeth, have not been explored.

While a quantitative approach has been frequently used to examine peer influences on body image, qualitative studies in this area are sparse. In the few qualitative studies published to date, peers were included as one variable among many others (e.g., family, self-perception) and were conducted with pre- and early adolescents (Frisén & Holmqvist, 2010; Tatangelo & Ricciardelli, 2013). The current study, however, examines the contribution of peers to body image among early-, mid-, and late adolescents, given that body dissatisfaction increases with age during this life stage, particularly among girls (Bearman, Presnell, Martinez, & Stice, 2006; Olive, Byrne, Cunningham, & Telford, 2012; Paxton et al., 2006). Furthermore, research to date has primarily focused on the negative aspects of body image, and thus has been primarily pathology focused (Tylka, 2011). Consequently, very little attention has been paid to positive peer experiences, a gap this study aimed to fill.

In light of existing literature, the current study sought to explore, through a series of focus group discussions, adolescents' perspectives on (a) the processes and modes (including behaviors, norms, and attitudes, both implicit and explicit) through which peers influence adolescent body image, and (b) whether this influence is positive and/or negative. A qualitative approach was used to unveil the processes through which peers influence body image. It was hypothesized that negative peer influences would dominate discussions. Specifically, we hypothesized that peer pressure, peer teasing, and peer exclusion would dominate, whereas the positive influences might include peer support and advice to help adapt to adolescent-related body changes.

Differences in peer influences on body image by age and gender were also hypothesized, given that boys report lower levels of body dissatisfaction (Lawler & Nixon, 2011), have a lower risk of developing eating disorders and are less concerned about being thin (Ricciardelli & McCabe, 2004), internalize appearance ideals to a lesser extent (Knauss, Paxton, & Alsaker, 2007), are more embedded in a sporting culture than an appearance culture (Tatangelo & Ricciardelli, 2013) and are less likely to perceive themselves as overweight (Standley et al., 2009) in comparison with girls.

## Method

### *Participants*

Seventeen focus groups were conducted with single-gender groups to explore whether opinions and views on the topic differed between males and females. Overall, 111 youth (59 females and 52 males) from second, third, fourth, and fifth year participated in the study. In Ireland, students in second and third year are generally aged between 13 and 15 years, while students in fourth and fifth year are generally aged between 15 and 17 years. This age group was recruited in order to explore the impact of peer influences on body image during early-, mid-, and late adolescence. Participants were predominantly White; only two adolescents were Black. Socioeconomic status was not collected; however, two of the six schools were located in lower class areas. Each school (with one exception) facilitated three focus groups. Schools were recruited from the Irish Department of Education and Science published list of schools to take part in this study. School Principals were contacted and invited to participate in the study. The initial communication was followed up with school visits and phone calls to discuss with each school Principal the nature of the research in greater detail. Upon approval from the respective school Principal, a choice of active or passive consent was given. Letters, consent forms, and information sheets for both participants and parents were

delivered to each school by the researcher. Only adolescents who returned a completed parental consent form and who volunteered to take part were randomly selected to participate in the focus group discussion. Adolescents were informed that they could withdraw at any time if they wish. There was no incentive for participation for the schools or students.

### *Design*

Focus groups were selected as most appropriate for measuring the peer context as they are intended to facilitate naturalistic discussion among participants in a nonthreatening environment. We anticipated that focus groups would better reflect the ways in which adolescents interact with one another, in comparison to one-to-one interviews, where researcher observation of group interactions is absent. Furthermore, focus groups were considered an appropriate means of gaining insight into how peer influences unfold in the peer environment, directly linking to the aims of our study. In addition, focus groups empower participants to drive the discussion, often taking the research in new and unexpected directions (Tiggemann, Gardiner, & Slater, 2000). This was deemed particularly suitable for the current study, given that few studies used a qualitative approach to examine peer influences on adolescent body image.

### *Focus Group Interviews*

The focus groups were conducted by the first author, with a moderator present for note taking to aid the subsequent transcription process. All focus groups were conducted in an empty school classroom provided by the school principal. On average, focus groups lasted approximately 45 minutes and included six to eight participants who were in the same year at school. Each focus group commenced with a short introduction by the researcher and agreement of ground rules. Ice breakers were used to allow the participants to become as comfortable with the question process as possible (Krueger & Casey, 2009). Focus group questions were developed by the study investigators who had previous experience in constructing and conducting focus groups with children and adolescents. In addition, the study investigators consulted with an independent expert in body image and qualitative methodology to review the questions developed. In total, six questions were developed (see the appendix), in accordance with the guidelines provided by Krueger and Casey (2009). This article focuses on two questions: "How do you think peers influence body image?" and "Do you think this influence is positive and/or negative?" All questions were supplemented by clarifying and probing questions to elicit further discussion.

Three pilot focus groups were conducted with a convenience sample of students ( $n = 19$ ) aged 13 to 18 years from one of the participating schools, to discern the appropriateness and sequencing of the questions; to establish if any key issues were omitted and to ascertain the length of the focus group sessions. No changes were made to the question sequence and content after the pilot, thus the data were used for the main study. This study received ethical approval from the Institutional Human Research Ethics Committee.

### *Data Analysis*

From the tape recordings and notes created by the moderator, the focus groups were transcribed verbatim by the first author and analyzed using an inductive thematic approach (Braun & Clarke, 2006). Initially, the first author became immersed in the transcripts, by repeatedly reading and listening to each focus group in order to grasp what the participants had said about the research topic. In addition, the first author constructed descriptive accounts of each focus group discussion, to afford the last author the opportunity to take note of any inductive codes and themes. The first author continued the process by examining the transcripts, paragraph by paragraph, and developing initial codes (as closely related to the raw data as possible) for interesting features. The qualitative software package QSR NVivo 10 was used to facilitate the coding process. Codes that reflected similar ideas and that were prevalent throughout the transcripts were collated and grouped into seven themes and 18 subthemes. However, in line with Braun and Clarke's (2006) suggestions, we did not solely rely on frequency in the search for our themes. Rather, some themes were built from segments that were not necessarily the most prevalent, but, together with the other themes, they captured important features of the way in which peers influence adolescent body image.

The potential themes and subthemes were then reviewed to ensure that they corresponded to the coded extracts (Level 1) and entire dataset (Level 2). During this process, the number of main themes remained the same; however, some of the subthemes were combined, given that they reflected overlapping ideas, a process that resulted in 11 subthemes. Throughout the analysis, meetings were held between the authors to discuss the codes, subthemes, and themes and to reach a consensus on the final themes. Once the themes had been identified, a third researcher, with experience in qualitative research, read through a random sample of the focus group transcripts (seven of the 17 focus groups; 41% of the transcripts). For each of these transcripts, she formed an opinion on which themes she believed were present. Interrater agreement of 85% between the first author and third

researcher was found. The final step involved selecting compelling extract examples which were believed to best summarize the main patterns and key findings of the data.

Concurrent to the thematic analysis, a thematic model of the peer influence process was developed as part of this study. This model was guided by the themes that emerged from the analysis.

## Results

Seven major themes and 11 subthemes emerged from the thematic analysis. Each theme and associated subthemes are described in detail in Table 1, with quotes to illustrate them. A thematic model (see Figure 1) further illustrates the proposed process by which peers influence adolescent body image.

### *Theme 1: Peer Modeling*

In each of the focus groups, the desire to be similar to one's peers was raised by many of the adolescents. Their reflections on this first theme are summarized in the following two subthemes: (a) "Reasons for peer modeling" and (b) "Peer comparison."

*Reasons for peer modeling.* The adolescents repeatedly reported that peer similarity facilitated peer inclusion, helped maintain peer friendships, and enhanced peer approval and acceptance. In particular, high-status peers, that is, perceived popular peers and peers with the most desirable attributes (good looking/in good shape) were predominantly copied by the wider peer environment. They also articulated that looking like their peers increased self-confidence, self-respect, and self-esteem and helped reduce peer victimization. According to the adolescents, those who differ in their appearance are subjected to peer teasing and exclusion. Peer competition was also mentioned as a reason for copying peers. Both boys and girls claimed that they copied their peers to ensure that they looked better than them.

In an attempt to achieve peer similarity, the adolescents expressed that they modeled their friends and peers' hair and clothing styles, hair color, body weight and shape, piercings, and specific to girls, their makeup, eyebrow shape, and tanning habits. The girls also reported that they model peers who receive the most verbal compliments regarding their appearance from others and who receive the most "likes" on Facebook. Apparent across all groups of girls was the belief that peers with "stick thin figures" received the most attention, and that modeling such an appearance would increase their likelihood of receiving similar levels of attention on Facebook.

**Table 1.** An Outline of the Themes, Subthemes, and Examples of Participant Quotes.

Themes	Subthemes	Examples of participants' quotes
Theme 1: Peer modeling	Reasons for peer modeling	(Boy, third year) If there's clothes that everyone else is wearing you wouldn't want to be the only one not wearing them. You know you'd try to fit in, not be the odd one out. Like when you kind of standout you'd be like an easy target and you'd be teased.
	Peer comparison	(Girl, fourth year) Your friend could be like, not even a 6, it could be a size 8 and you could be a size 10 and then you would be so self-conscious that you'll try and be better. You'd try every little thing, like eating less food or healthier food, do more exercise, to be the same.
Theme 2: Pressure to conform	Appearance ideals, rules, and motivation	Ideals: (Boy, fourth year) They put pressure on you to get the body they think is right, like soccer players, skinny strong and muscley.
		Rules: (Girl, second year) They'd set a limit . . . am . . . at a certain size and if you weren't that size people would slag you and they'd call you fat or whatever and people would kind of follow them, so everyone would be that size then.
		Motivations: (Girl, fourth year) If a boy likes a girl with blonde hair, who's skinny tall and tanned, you'd try to get skinny, blonde hair and you'd be doing sunbeds to try and get tanned and just try be the way they want you to look. (Girl, second year) They would just be like . . . "Do you want to come to like the gym with me" or "Do you wanna' do a diet with me? It's a really good diet" and . . . like they'd say, "No don't bring in any lunch or you don't need lunch money like it doesn't matter . . . Like just have half your dinner and that's it like."
Peer conversations	(Boy, fifth year) Gaining muscle and looking thin, there's a bit of pressure in it. Because they'd be just like, "Oh yeah I went to the gym today, lifted 100 kgs, so massive, you know" and then you'd follow it.	

(continued)

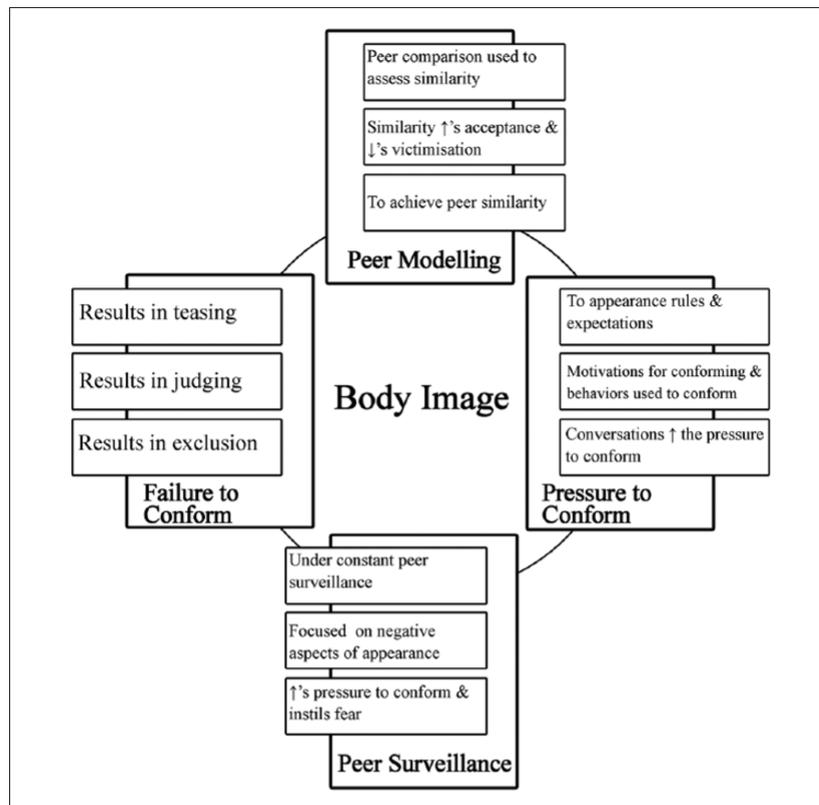
Table 1. (continued)

Themes	Subthemes	Examples of participants' quotes
Theme 3: Peer surveillance	Constantly surveilled and criticized	Constantly surveilled (Girl, fifth year) Everything you do is pretty much watched, like you hair, your make up, your body weight. Everyone comments on everything you do. Constantly criticized (Boy, fifth year) If you're too skinny you're being called skinny. If you're big and strong you're called too big like so there's no pleasing them.
	Girls are worse than boys	(Girl, fifth year) You have to impress girls more than you have to impress boys because they are more bitchy than boys are . . . 'Cause like boys love girls but girls hate each other so they are bitching, putting you down ten times more than boys would be.
Theme 4: Failure to conform	Peer teasing Peer exclusion	(Boy, fifth year) It's mostly slugging that's the negative really . . . people saying you are too skinny or your hair isn't right and saying you're not strong. (Boy, second year) Like if you were kind of fat they wouldn't really like talk to you. They'd leave you out of all the games and say picking teams for a match you'd always be the last picked just because you're fat and you weren't sporty.
Theme 5: Health consequences		(Girl, fourth year) If people constantly teased you from a young age, like it's gonna' stay in your head as a teenager, it's not gonna' go away, and it's hard to live with like, like you keep sayin' it to yourself, if you see like your reflection, you keep saying it to yourself. (Boy, second year) If a person who was overweight, was in a group of fellas who were like, pure skinny they'd all slag him for being overweight and then . . . they can't help it, like, they'll get like really upset over it at some stage but they won't show anyone else. And then it'll go down to like, self-harm or suicide.

(continued)

**Table 1. (continued)**

Themes	Subthemes	Examples of participants' quotes
Theme 6: Positive peer influences	Peer encouragement Peer compliments, opinions, and advice	(Boy, fourth year) If you were a bit fat, they might push you to lose a bit of weight and become fitter . . . and they'd try and help you. Compliments (Girl, fourth year) If you're wearing a new outfit and someone said to you "Oh you look lovely today" that's going to immediately boost your confidence and you're going to want to dress like that more often.
		Opinions (Girl, fourth year) If you like a certain thing and other people don't like it, they'll say to you straight away, "You don't look nice in that top." Advice (Boy, fifth year) They can kind of help you improve your looks because, like you want to look good and if you're not, you'd appreciate their help like in telling you how you could look better.
Theme 7: Age and gender differences	Age	(Boy, fourth year) It's very important to look the same as your peers at a younger age, going into secondary school because it will help you, like going on with like relationships, friendships later on. And once you get older you start to think, "Well I can wear this because I like this" and aah people will respect you, that's because you're independent, you're yourself and you're older and more mature. When you're younger, ju' know, it's good playing it safe, and wearing the same clothes as everybody else.
	Gender	(Boy, fifth year) I know from talking to my sister and stuff, she's in an all girl's school and her peers make comments about people's hair. They'd make comments about how they look, they'd make comments about absolutely anything, like small things, had they got their hair in a plait or a bob.



**Figure 1.** A thematic model illustrating the proposed process in which peers negatively influence adolescent body image.

However, digitally altered (“photo-shopped”) photos posted by peers on social media placed the girls under pressure to heighten their social desirability, which in turn appeared to arouse self-presentation and appearance concerns.

*Peer comparison.* Body weight and shape comparisons were used by the adolescents to approximate how closely they resembled the appearance of their peers. However, methods of comparison differed by gender. Weight and clothing size comparisons with peers were most often used by the girls, while hair style, muscularity, and sporting ability comparisons were the most common points of peer comparison for boys.

## Theme 2: Pressure to Conform

The second theme highlights the appearance norms and expectations adolescents are expected to conform to for their peers. Their reflections on this theme are summarized in the following three subthemes: (a) "Appearance ideals, rules, and motivations," (b) "Appearance-related behaviors," and (c) "Peer conversations."

*Appearance ideals, rules, and motivations.* The adolescents repeatedly highlighted that they are expected to conform to specific appearance ideals and rules for their peers. According to the boys, an aesthetic-athletic body ideal (which consisted of being slim, strong, and muscular) is the most widely accepted image among peers and is also perceived to be a requisite for sports participation. According to the boys, conforming to such an ideal helps minimize peer exclusion and teasing, both on and off the sporting field. They also mentioned that they had to conform to the latest hair and clothing styles worn by their peers.

The girls gave more detailed descriptions of the appearance they were expected to conform to for their peers. This included having long hair, a pretty face, tanned flawless skin, white teeth, thick eyebrows, and being "perfect." When asked to describe the meaning of perfection, it was described as having "a thigh gap," "collar bones and hip bones," and being able to "fit into a size 0." The girls were further prompted to define the term "a thigh gap," which was delineated as "Your legs aren't touching in between even though your feet are because you're so skinny." According to the girls, those who attain such attributes are the most popular and are often appraised by their peers (e.g., they are labeled "God" and "perfect"). Although the girls were aware that such aspirations were unrealistic, they nonetheless felt bad about themselves for not conforming to the ideal image endorsed by their peers. Common to both, however, was the desire to be fit, which was described as being "thin" and "healthy" by the boys and being "healthy," "a pure stick," "exercising more," and "losing weight" by the girls. For boys, however, fitness was strongly linked to sports functionality, whereas girls most often associated fitness with being and looking thin. In addition, some of the boys expressed concerns regarding the narrow body ideal girls are expected to conform to for their peers.

Furthermore, the peer setting appeared to reinforce rules and limits regarding the appearance adolescents were expected to conform to for their peers. The adolescents reported that peer acceptance was enhanced for those who conformed to peer rules concerning appearance, while peer rejection, teasing, and judgment were prevalent for those who resisted them. The adolescents

claimed that peers executed rules that predominantly concerned how someone should look, weigh, and dress. Certain rules were sex specific (e.g., How girls should shape their eyebrows?), and others were weight specific (e.g., overweight adolescents were “forbidden” from wearing clothing items such as belly tops, given that their weight status did not conform to the body ideals held by their peers). Consequently, the adolescents reported that they invested a lot of time in their appearance to ensure that they adhered to peer rules and expectations.

Interestingly, the adolescents outlined their motivations for adhering to appearance rules and ideals set by their peers. For girls, there was a strong perception that adherence to a thin beauty ideal was mandatory to attract male attention. One girl stated that boys choose “A girl who’s skinny, she has to have very good looks,” and that personality was not as high a rating factor as looks “They wouldn’t go for the personality or anything.” Furthermore, the girls reported that they feel obliged to wear revealing clothes to heighten their probability of receiving male attention. The manner in which the girls felt they had to dress for boys was depicted by one girl as “wearing a Hollister tracksuit bait onto your ass” and by another as “showing off as much flesh as you can.” Furthermore, some of the girls in this study expressed that boys’ apparent preoccupation with thin attractive girls was due to peer pressure from their same-sex peers. Despite this awareness, the girls in our study admitted that they nonetheless conform to or alter their looks to an appearance they believe receives the most male attention among their same-sex peers. Similar to girls, the boys expressed that they conformed to a muscular body shape and gelled their hair to heighten female attention but also to fit in and avoid being targeted by stronger peers.

*Appearance-related behaviors.* Consequently, conforming to such narrow appearance ideals and rules appeared to give rise to the use of health-compromising behaviors. The adolescents outlined that appearance-related practices such as dieting, dietary restraint, purging, excessive exercise, and muscle enhancement behaviors are used by adolescents to conform to body-related expectations held by peers, and use of such behaviors is encouraged by peers. Furthermore, they emphasized that peer encouragement to lose weight intensifies when a social event is approaching. Moreover, many girls agreed that dieting attempts by thinner peers made them feel they ought to be dieting, while both boys and girls indicated that appearance-related behaviors are frequently exercised as a group activity; as something that adolescents do together in order to consolidate peer relationships and confirm or enhance the continuation of peer acceptance.

*Peer conversations.* Peer conversations concerning appearance also placed the adolescents under pressure to conform to specific body ideals and had a negative impact on how they viewed themselves. The occurrence of “fat talk” (which involved complaining about weight and discussing weight-loss regimes or achievements) placed them under immense pressure to engage in dieting and/or muscle enhancement behaviors. Discussing the appearance of peers, particularly in their absence, also negatively impacted how the adolescents viewed themselves. Being spoken about or fear of being spoken about appeared to exacerbate the pressure of conforming to an appearance perceived as “acceptable” by peers. However, smaller peer groups were perceived to minimize the occurrence of peer discussions that concern the appearance of others.

### *Theme 3: Peer Surveillance*

Peer surveillance, which appeared to occur more subtly than other peer influence mechanisms, also impacted how the adolescents viewed themselves and behaved in accordance with appearance expectations. Being constantly surveilled by one’s peers appeared to give rise to self-policing tendencies, to ensure that appearance expectations were being met. Adolescent reflections on this third theme are summarized in the following two subthemes: (a) “Constantly surveilled and criticized” and (b) “Girls are worse than boys.”

*Constantly surveilled and criticized.* The adolescents expressed a strong sense of frustration that they were being constantly surveilled and scrutinized by their peers. Being surveilled by one’s peers appeared to coincide with feelings of fear of potential rejection and criticism, and exacerbated appearance concerns within the peer context.

Common to both girls and boys was the view that peers perpetually focused on the negative aspects of one’s appearance. Acknowledgment or recognition of one’s admirable physical attributes appeared to be a rare occurrence; rather they are intentionally ignored or criticized. Furthermore, the girls outlined that their peers always manage to find appearance flaws, regardless of how perfect one appears to be. Thus, it is unsurprising that the adolescents felt frustrated by the impossibility of impressing their peers. According to the adolescents in this study, the school setting provides ample opportunities to surveil the appearance of peers, particularly during physical education (PE) classes, where their appearance is more exposed (e.g., in changing rooms/swimming class). However, who the adolescents surveilled appeared to differ by gender. The boys asserted that they surveilled peers from older years at school who were successful at sports; whereas the girls surveilled peers they perceived as being the “prettiest” within the peer environment.

*Girls are worse than boys.* Both boys and girls expressed that adolescent girls surveil and criticize the appearance of other girls more frequently than boys. However, the girls also mentioned that boys surveil the appearance of girls but to a far lesser extent.

#### *Theme 4: Failure to Conform*

The adolescents in our study stated that those who deviate from appearance norms and ideals are at greater risk of receiving negative attention from their peers. Their reflections on this fourth theme are summarized in the following two subthemes: (a) "Peer teasing" and (b) "Peer exclusion."

*Peer teasing.* The adolescents claimed that peer teasing occurs for a variety of appearance-related reasons. In particular, boys predominantly mentioned that they are teased by their peers for not conforming to a muscular body shape, and to how others dressed and styled their hair. They also mentioned that they are teased about their skin complexion. The situation appeared to be worse for girls, who reported that they are teased if they fail to meet certain weight criteria, if their makeup is not applied satisfactorily or at all times, if their skin presents itself with flaws, if their teeth aren't straight and pristine white, and if they have a hair color their peers don't approve of. The adolescents also reported that overweight peers are stigmatized and experience teasing and exclusion more frequently than non-overweight peers. The boys stated that overweight peers are largely excluded during PE classes at school, because they are regarded as "fat," "not sporty," "slow," and "unfit," while the girls stated that failing to conform to a "size 0" or "the perfect size" was associated with peer exclusion and teasing. Interestingly, both boys and girls stated that overweight peers are stigmatized and teased; however, some claimed that overweight peers can be protected from peer teasing if they have a "nice personality."

Furthermore, the adolescents delineated that weight-related teasing in particular perpetuates the thin and fit ideal, and that teasing experiences have a negative impact on body image. They also highlighted that underweight peers are also subjected to teasing due to their underdeveloped physique. In addition, they claimed that they are judged by their peers if they fail to conform to certain clothing styles and quality. Although the adolescents labeled it as "being judged" or "judging," it appeared to take place through teasing mechanisms such as "pointing," "laughing at you," and "throwing dirty looks."

Moreover, there was a strong sense among the adolescents that their peers were intolerant to appearance diversity. This evoked a sense of frustration for

some because they felt it compromised peer individuality. The adolescents emphasized that young people should “be themselves” and should not be “forced” to conform to the appearance of their peers. Despite such an attitude, the adolescents in our study claimed that they protected themselves from negative peer experiences by altering their appearance to one that does not look different from their peers. Only a small number of adolescents perceived that there was no harm in looking the same as others because they felt it gave young people a sense of belonging in the peer group they were part of.

*Peer exclusion.* According to the adolescents, failing to conform to peer rules and ideals results in peer exclusion. Specifically, the adolescents outlined that being overweight was a significant risk factor for peer exclusion.

### *Theme 5: Health Consequences*

The adolescents reported that overconcern with body image could be taken to “the extreme” as a result of negative peer influences. The extreme behaviors mentioned include self-harm, suicide, binge eating, social isolation, and extreme weight-loss and exercise behaviors. Furthermore, negative peer experiences appeared to stimulate feelings of inadequacy, anxiety, low self-esteem, paranoia, and depression. Interestingly, the adolescent girls mentioned that negative peer influences affect the entire person and how they view themselves. Furthermore, the girls outlined that the consequences of negative peer experiences may not be irreversible and/or can act as a precursor for negative health outcomes for adolescents in subsequent years.

### *Theme 6: Positive Peer Influences*

Adolescents’ views on positive peer influences were also sought as part of this study. Their opinions on this sixth theme are summarized in the following two subthemes: (a) “Peer encouragement” and (b) “Peer compliments, opinions and advice.”

*Peer encouragement.* Peer encouragement to lose weight and to get fitter, stronger, and more muscular was perceived as a positive peer influence among adolescent boys. Peer encouragement to lose weight was believed to be most beneficial to overweight peers. In particular, accompanying overweight peers to the gym or on runs was perceived as providing social support, and thus a positive form of peer influence. Interestingly, peer teasing was also perceived as having a positive impact on overweight peers because it further encouraged them to lose weight and get fit.

*Peer compliments, opinions, and advice.* The adolescents in our study perceived that peer compliments and advice had a positive impact on their body image. They claimed that peer compliments increase self-esteem and self-confidence, and for some, offered reassurance that appearance expectations had been met. However, the girls mentioned that personality played a role in whether girls viewed compliments as having a critical undertone, while others made it explicitly clear that peer compliments are far from guaranteed. They stressed that compliments are only given to those who dress and act accordingly to peer preferences and expectations concerning appearance, thus, indicating that positive peer influences only exist for those who obey appearance expectations.

Furthermore, genuine and/or honest peer advice was perceived as a positive peer influence, particularly when making decisions regarding the outfits one should wear for social events or when out clothes shopping together. However, some did not consider their peers to be as promising a source as others did, due to peer jealousy. The girls stated that jealousy may underlie a peer opinion, whereby calculated advice is offered concerning how one looks/what one wears, to ensure they looked better than their friend(s). The boys on the other hand did not perceive peer advice as being false, rather peer advice was spoken about in a positive manner.

Interestingly, the adolescents again pointed out that peer advice was most beneficial for those who are overweight, as it prevents them from looking bad in the presence of others and may motivate them to lose weight and become fit. However, both boys and girls mentioned that peer honesty regarding weight could inadvertently be hurtful at times.

### *Theme 7: Age and Gender Differences*

The final theme outlines the age and gender differences the adolescents pointed out. Interestingly, the age differences were only articulated by the boys in this study. Older boys articulated that it was important to copy peers and conform to their expectations at a younger age, because it helped form new friendships, particularly when transitioning to a secondary school. They also expressed that, as adolescents age, they become more mature and independent; thus, peers are not as influential in terms of body image perceptions. They articulated that peer diversity is respected rather than criticized at an older age. However, the younger boys stated that peer similarity was of paramount importance in order to fit in with surrounding peers.

Gender differences were also apparent among the adolescents in this study. First, the body ideals that boys and girls strived to conform to for their peers were highly gendered. Boys claimed that they had to meet a slim, yet

muscular body shape for their peers, whereas girls had to achieve extreme thinness to be approved of and accepted by their peers. The boys articulated that they felt pressured by their peers to go to the gym to attain a muscular body ideal, and to support certain hair and clothing styles worn by their peers. In contrast, girls appeared to be influenced by their peers to diet and exercise in order to achieve extreme thinness. Second, methods of peer comparison appeared to differ for both boys and girls concerning the body ideals they strived for. Girls appeared to compare themselves to their peers in terms of weight and clothing size, while boys seemed to compare themselves to their peers in terms of hair styles, muscularity, and sporting ability. Lastly, methods of peer surveillance differed by gender. The boys expressed that they surveilled their peers at school, while girls appeared to surveil their peers via the photos they posted on social media and in school. Our findings now reveal that it is important to consider the gender and age differences when examining peer influences in future body image studies.

## Discussion

This study sought to examine the impact of peers on adolescent body image in Ireland. Given that this is one of the first studies to exclusively examine peer influences on body image using a qualitative approach, we constructed a model relating to our aims. The initial stages of the thematic model were guided by the themes and subthemes that emerged consistently across the dataset. Upon closer examination, it became clear that certain themes had an impact on other themes, and a pattern began to emerge. The emergent pattern did not, however, consist of all the major themes and their associated subthemes. Rather, it appeared to be associated with the themes relating to how peers negatively impact adolescent body image. Efforts were made to seek out whether all the major themes (both positive and negative) could be included in one model; however, the opposing influences did not seem to be well connected. Perhaps, this lack of connection is linked to the explicit separation of both positive and negative peer influences made by the adolescents during the focus groups, and their tendency to favor discussion related to how peers negatively impact body image. As such, including both positive and negative influences in the same model was deemed inappropriate and misrepresentative of their views. In light of this, a decision was made to include the themes and subthemes that related to negative peer influences in the model.

Each aspect of the proposed model signifies a mechanism in which peers negatively influence adolescent body image, with each mechanism having an impact on the next or possibly the former. Given this pattern, the peer influence process is deemed cyclic in nature. However, whether the chain of cyclic

events begins at a certain point, or whether the cycle is uni- or bidirectional is not yet clear. The proposed model, therefore, does not seek to declare the exact direction of the peer influence process and how it impacts body image. Furthermore, it is not intended to be a generalizable empirical model; however, further studies could lead to testable models, and we encourage its evolution. Although further exploration is needed, our model is the first of its kind to propose that the peer influence process may be cyclic in nature, with respect to body image.

In summary, the model proposes that adolescents model the appearance of their peers in order to conform to specific appearance ideals and rules inherent in the peer environment. The pressure to conform to peer expectations is further intensified by the use of surveillance activities, which serve to detect those who conform or fail to conform. Adolescents who fail to conform are subjected to negative peer experiences, such as teasing, judging, and exclusion. In order to avoid the negative peer sanctions associated with failing to conform, adolescents model the appearance of their peers in order to address appearance deviations or to ensure deviations do not exist. From here, the cycle of events continues in a cyclic order once again. For the remainder of the discussion, the major themes will be discussed in light of existing literature.

Our study is the first to highlight the role of and reasons for peer modeling. The adolescents in our study modeled the appearance of their peers in order to achieve peer similarity. Consistent with social comparison theory (Festinger, 1954), which suggests that individuals use information about others to derive conclusions about the self, body weight, and shape, comparisons were used by the adolescents to approximate how closely they physically resembled their peers. Furthermore, social media outlets were used by the girls to self-compare with peers; with such comparisons having a negative impact on their body image. Previous research connecting social media usage and body image concerns among Australian adolescents found that high levels of Facebook usage are related to appearance comparisons, weight dissatisfaction, and increased drive for thinness (Tiggemann & Miller, 2010). Similarly, research with female high school students in the United States found that Facebook users had higher levels of self-objectification and made more appearance comparisons than did nonusers (Meier & Gray, 2014). Findings from the current study and previous research therefore clearly show that social media usage may have a negative impact on adolescent girls' body image, and represents a forum through which peer comparisons are made. Our study however extends previous findings, by explaining the reasons for peer comparisons. The adolescents claimed that peer comparisons, through social media, or otherwise, are made in order to seek out whether their

appearance resembles that of their peers and conforms to the strict ideals inherent within their peer environment.

Unfortunately, peer similarity was not easily attainable, due to the extremely narrow ideals one was expected to conform to for their peers. The appearance ideal girls were expected to conform to was consistent with Western feminine beauty ideals, described frequently in the body image literature (Diedrichs, Lee, & Kelly, 2011; Tatangelo & Ricciardelli, 2013): a predominantly thin, fit, and flawless (hair, skin, makeup, teeth) ideal. The boys also claimed that they strived toward very specific ideals, in order to conform to the narrow preferences of their peers. Specifically, they conformed to an ideal that boasted their strength, muscularity, and sporting skill, and furthermore, they mentioned dressing and styling their hair in a similar way to their peers. Although males previously claimed that they place less importance on appearance ideals and are protected by a greater diversity of appearance ideals presented in the media (Diedrichs et al., 2011), our study shows that boys experience a pressure, similar to girls, to conform to very specific ideals when in the presence of their peers, and only one specific ideal is appraised.

Furthermore, both boys and girls claimed that they conformed to the aforementioned ideals in order to impress opposite-sex peers. As such, their views further substantiate the objectification theory (Fredrickson & Roberts, 1997) by demonstrating that adolescents as young as 13 years, in this study, clearly viewed and valued themselves based on their physical appearance, and treated themselves, to some extent, as objects for male/female gratification.

Appearance rules, which included how one could/should look, and peer conversations pertaining to appearance issues or the appearance of others also appeared to place the adolescents under an increased pressure to conform to specific ideals. Health-compromising behaviors were drawn upon in order to satisfy peer rules and expectations. In previous studies, adolescents' motivation to draw upon such behaviors has been largely associated with their own desire to alter their body shape (Hutchinson & Rapee, 2007; McCabe & Ricciardelli, 2003; McCabe, Ricciardelli, & Holt, 2005; Paxton et al., 1999); however, it is clear from our study that such behaviors are used to conform to peer expectations/rules, and even worse, are encouraged by peers. According to the adolescents, this encouragement particularly intensifies when a social event is approaching. Unlike previous research, where desires to lose weight for social events stemmed from adolescents' self-motivated interest (Mooney, Farley, & Strugnell, 2009; Paxton et al., 1999), the adolescents in our study reported that their weight-loss attempts were a result of peer pressure.

Aligning with previous research (Carey et al., 2013; Clark & Tiggemann, 2006; Jones, 2004; Lawler & Nixon, 2011; Taylor, 2010), appearance conversations were associated with negative body image perceptions. It is likely that adolescents do not realize the extent to which these apparently casual conversations may inadvertently impact how their peers view themselves. Perhaps, sharing and openly discussing appearance-related issues or the appearance of others with peers may be teaching them how they should feel about their own bodies and how to implement restrictive appearance practices in order to conform to peer ideals.

The pressure to conform to strict appearance expectations was further heightened by intense surveillance activities used by peers. Such activities appeared to instill a great sense of fear among the adolescents, given that peers tended to predominantly focus on one's negative appearance attributes. Consistent across both boys and girls was the view that girls are more actively engaged in peer-policing tendencies than males, and thus are more critical of and derogatory toward the appearance of their peers. This finding contradicts previous qualitative research conducted with American adolescents, who reported that boys surveil and criticize adolescent girls' appearance more frequently than girls (Taylor, 2010). It is unsure from our study whether appearance objectification trends are changing for adolescents, in that girls objectify one another to a greater extent than boys objectify girls; however, it would be worth exploring in future body image research. Theoretically, it has been proposed that women experience appearance objectification most often by males (Fredrickson & Roberts, 1997); however, our research indicates that girls are also evaluated on their appearance and subjected to habitual appearance monitoring by their female peers. To the best of our knowledge, this is one of the first studies to explicitly highlight the prevalence of appearance-surveillance activities within adolescent peer cultures; thus, the discrepancy between both studies requires further exploration. Although more implicit in nature than other peer influences, our study clearly indicates that peer surveillance arouses feelings of fear and provokes feelings of appearance uncertainty among adolescents. Furthermore, it allowed adolescents to observe and/or single out those who deviate from appearance expectations. Consistent with the deviance hypothesis (Pearce, 1989), those who failed to conform, under the critical gaze of their peers, were subjected to peer exclusion, criticism, and teasing.

In particular, the adolescents maintained that it was socially acceptable to exclude overweight peers, given their divergence from explicit appearance rules and expectations. In contrast to previous research, whereby adolescents highlighted that overweight girls are teased and subjected to weight stigma experiences more frequently than overweight boys (Taylor, 2010), the adolescents in our study stated that both overweight boys and girls are teased and excluded by

peers. Weight-related teasing perpetuated the thin and fit ideal among the adolescents in our study; and consistent with other studies (Barker & Galambos, 2003; Paxton et al., 1999; Thompson et al., 2007) had a negative impact on their body image. Although it is clear that weight deviations are associated with negative social sanctions in the peer context, research to date has primarily focused on weight-related teasing experiences among adolescents (Eisenberg, Neumark-Sztainer, Haines, & Wall, 2006; Janssen, Craig, Boyce, & Pickett, 2004; Mooney et al., 2009; Taylor, 2010; Thompson et al., 2007). Our study, however, reveals that weight deviation is not the only appearance attribute associated with peer teasing, judging, and exclusion. Failing to conform to specific clothing and hair styles, teeth color and structure, skin tone and complexion, and body shapes is associated with negative peer experiences.

In an attempt to protect one from undesirable peer experiences, the adolescents claimed that they modeled and conformed to the appearance of their peers, whether or not they wished to do so. Although a lack of peer diversity infuriated some of the adolescents in this study, the majority refused to disobey the appearance culture endorsed within their peer environment. They actively modeled the appearance of their peers in order to achieve peer similarity and avoid negative peer sanctions, bringing us back to the starting point of the proposed model.

Although not included in the model, the adolescents claimed that body image is predominantly impacted by negative peer experiences. As such, it is not surprising that they alluded to the emotional, behavioral, and mental turmoil one suffered as a result. Alarming claims that negative peer experiences may provoke the use of extreme behaviors such as suicide, starvation, and self-harm were highlighted.

This study also aimed to understand how peers positively influence body image, given the acknowledgment that researchers need to focus on positive body image experiences (Diedrichs et al., 2011; Frisén & Holmqvist, 2010). To the best of our knowledge, only one qualitative study has examined the way in which peers positively impact adolescent body image (Romo, Mireles-Rios, & Hurtado, 2016); however, the authors specifically focused on how positive and/or negative peer comments impact body image and further, the study was conducted with mid-adolescent Latino girls only. Our study further contributes to the literature by focusing on adolescents' perceptions of positive peer influences from a broader perspective with both boys and girls, aged 13 to 17 years.

Our results show that adolescents' interpretation of what constitutes a positive peer influence is, for the most part, distorted. Peer encouragement to diet, get fit, and lose weight largely constituted their understanding of positive peer influences. Even more surprising was the view that such encouragement was

extremely beneficial to overweight peers. Although previous research indicates that peers can motivate overweight peers to exercise and increase their physical activity levels (Salvy et al., 2009), it is possible that this motivation may inadvertently heighten self-image issues for overweight peers. They did however state that peer compliments and advice had a positive impact on their body image, which is consistent with previous studies (Gerner & Wilson, 2005; Romo et al., 2016). Furthermore, the current study sought to examine whether the impact of peer influences on body image differs by age and gender. In line with previous research, this study highlighted that peer influences varied by gender (Carey et al., 2013; Helfert & Warschburger, 2011; Taylor, 2010); however, to the best of our knowledge, this is the first study to highlight that peer influences concerning body image also differ by age. Interestingly however, age differences were only mentioned by the boys, who highlighted that appearance conformity is most important at a younger age because it facilitates peer approval and the formation of new friendships. The gender differences that surfaced centered on the body ideals the adolescents were expected to conform to for their peers and the modes of peer comparison/surveillance used to assess levels of peer similarity.

Although the current study did not aim to examine whether peer influences and their impact on body image differed relative to one's socioeconomic status, some interesting findings did emerge. Specifically, the adolescents from socially disadvantaged schools reported that they modeled their peers on attributes, such as tattoos and piercings, which were not mentioned by adolescents from other schools. Furthermore, the girls in these schools highlighted that their male peers judged them on the type of underwear they wore. Specifically, they stated that their male peers are "disgusted" by girls who do not wear a thong and for those who fail to adhere to this look are ignored or disregarded. Furthermore, the girls in these schools expressed that girls who have shorter hair are judged and labeled "lesbians" by their peers, as this type of hair style does not conform to their narrow ideals. These findings thus indicate that specific peer influences may be more prominent in socially disadvantaged schools; however, more research is warranted to substantiate these tentative findings.

### *Limitations and Future Directions*

In the current study, Irish adolescents describe distinct and predominantly negative modes through which peers impact body image. However, this study is not without limitations. One such limitation comes from the methodology used. In applying focus group methodology, participation of more withdrawn informants was at times overshadowed by a small number of domineering personalities.

However, every effort was made by the interviewer to include the participants from the beginning and probe them on each question asked. In addition, honest disclosure could not be guaranteed, as underlying thoughts and feelings may have been influenced by the presence of other peers and/or the researchers. Furthermore, a time limit of 45 minutes per focus group did not allow for certain issues to be probed in sufficient detail. For example, the exploration of how and why opposite-sex peers and social media outlets impact adolescent body image could have been delved into a little bit deeper. The adolescents made it clear that both forms of influence had an impact on how they viewed themselves; thus, future research that examines these processes is warranted.

Furthermore, it must be acknowledged that the sample could have been biased. Given that body image is a sensitive topic, the sample more than likely represented adolescents who were comfortable discussing the topic at hand and had low levels of concerns themselves. As such, we are unsure whether this impacted the data collected. Another limitation is that the sample predominantly represented Caucasian adolescents, from one setting, in the Republic of Ireland. As a result, the generalizability of the study's findings is limited. Future scholars could examine whether peer influences on adolescent body image vary across boys and girls from various ethnic and geographic backgrounds to extend and/or corroborate our findings. In addition, we focused on post-primary school students only (whereby youth are generally aged between 12 and 18 years). Given that peers had a predominant negative impact on adolescent body image, a critical direction for future research would be to examine the impact of peers on children's body image. Would their experience with peers be as negative as the experiences described in this study? Would their peers have an even greater influence on how they viewed themselves? Or would their influence be less extreme than the influence outlined in this study? It would also be interesting to seek out whether the model developed as part of this study applies to or differs for children's body image.

Another limitation worth mentioning is that the findings of the current study are based on the views and experiences of adolescents from single-sexed schools and single-sexed focus groups. Although this restricts our findings, dividing focus groups by gender facilitated within- and across-group comparisons and enabled us to examine more pronounced differences by gender. Future research, however, should conduct mixed-sexed focus groups in co-educational schools to see whether adolescents' responses differ, when in the presence of their opposite-sex peers and/or in a mixed-gender school environment. It would be interesting to examine whether adolescents in co-educational schools are more resilient to peer influences concerning body image, or whether they are at an even greater risk due to the presence of their opposite-sex peers.

It is also worth mentioning that the model constructed as part of this study is the first of its kind. Thus, future studies could further explore its use, validity, and directionality with other adolescents/children in order to refine its construction. The rich and complex nature of the current findings suggests several directions for future research concerning peer influences and adolescent body image.

### *Research Implications*

A major contribution of the present study is in demonstrating the specific relevance of the peer context in the determination of body image perceptions and concerns. The adolescents in this study mainly viewed the peer context in a negative manner with respect to body image. They alluded to processes that they engaged in, such as internalizing appearance ideals, self-objectification, and self-comparison, as a result of peer influence. The tendency to engage in such processes seemed to occur as a result of the strict appearance rules executed and the dissemination and/or discussion of appearance-related behaviors and issues within the peer context. Given that previous studies have shown that internalization of appearance ideals and self-objectification are associated with negative body image experiences (Grabe, Hyde, & Lindberg, 2007), our findings have implications for body image concern prevention and intervention programs for adolescents in Ireland.

Prevention and intervention programs could help increase awareness and understanding of the ways in which peers influence body image and undermine body satisfaction. Specifically, the programs could serve to highlight the potential role of peers in creating and reinforcing specific appearance standards in the peer context, and the effects these standards have on adolescent body image, health, and well-being. The programs could also serve to broaden adolescents' perspectives concerning appearance, by promoting an environment that embraces appearance diversity. Furthermore, results of our study and those of Tiggemann and Miller (2010) show that social media outlets also represent a mechanism in which peers influence adolescent body image. As such, future body image concern prevention and intervention programs need to consider this in their design, so that adolescents are more aware of and considerate toward others on such forums. Specifically, the programs need to teach adolescents that their pictures and appearance information sharing on these forms of media can also pose risks for adolescent body image.

Promoting peer-supportive appearance contexts could also serve to prevent the onset of health-compromising behaviors associated with body dissatisfaction, such as unhealthy eating and exercising behaviors. Furthermore, given that body image begins to develop in children at the age of 6 years

(Smolak & Thompson, 2009), it may be particularly crucial to implement prevention programs in primary school settings (whereby youth are generally aged between 4 and 11 years), when cognitions are less ingrained and perhaps more responsive to change than in later life. Nonetheless, results from the current study highlight the important role the peer group imparts on body image among adolescents in Ireland. The success of future intervention and prevention programs may be enhanced if these considerations are taken into account.

Our findings provide strong evidence that peers act as powerful conveyors of appearance ideals for adolescents, by reinforcing and executing specific appearance rules and ideals within the peer environment.

## Conclusion

Overall, it is clear that the peer context in which adolescents live today is one in which looks are of paramount importance, support is limited, and pressure to live up to appearance expectations is high. Such a context, unfortunately, does not serve to promote positive body image for adolescents. Perhaps most importantly, it is evident from our study that peers negatively impact body image, and perceptions of positive peer influences are distorted, at least for the adolescents in this study. Consequently, these findings suggest that there is an urgent need to address the impact of peers on adolescent body image and develop programs to teach adolescents how to view appearance in a more holistic manner, to alleviate body image concerns.

## Appendix

### *Focus Group Protocol Including the Main Questions*

- What do you think body image means?
- How do you think peers influence body image?
- Do you think this influence is positive and/or negative?
- Do you think friends influence body image differently than peers?
- How do you think body image could be improved for adolescents in Ireland?
- What to you was the most important thing discussed today?

### **Declaration of Conflicting Interests**

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

### Funding

The author(s) received no financial support for the research, authorship, and/or publication of this article.

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# Young People's Perspectives in Developing a Survey Item on Factors That Influence Body Image

YOUNG  
25(4S) 1-19  
© 2017 SAGE Publications and  
YOUNG Editorial Group  
SAGE Publications  
sagepub.in/home.nav  
DOI: 10.1177/1103308816674136  
<http://you.sagepub.com>



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## Abstract

Body image concerns are prevalent among adolescents; however, a single item assessing what influences their body image does not exist. Thus, the aim of this study was to develop a survey item on the factors influencing adolescent body image for inclusion in a nationally representative health behaviour survey. This article describes the methodology used to develop a survey item and the results obtained through its inclusion in the survey. The research design included a literature review, consultation work with young people and data analyses of the new survey item included in the survey. Results from the current study revealed that a variety of factors influence adolescent body image, some of which have been overlooked in the traditional body image literature to date. This study demonstrates consultation with young people can contribute to the development of quantitative measures.

## Keywords

Survey methods, question development, youth consultation, adolescents

## Introduction

Body image is a complex psychological construct that involves body-related thoughts, beliefs, emotions and behaviours (Cash and Smolak, 2011). The construct comprises two core facets: body image evaluation and investment (Cash et al., 2004). The former facet refers to a person's evaluative thoughts, beliefs and emotions about their physical appearance. As such, this facet comprises body (dis)satisfaction, which

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reflects an individual's degree of (dis)content with their appearance. The latter facet, body image investment, reflects the cognitive and behavioural importance that individuals place on their appearance (Chang et al., 2014) and can be divided into two components. The first, self-evaluative salience, reflects the extent to which one's appearance is integral to self-worth, and the second, motivational salience, refers to the use of behaviours designed to either manage or enhance appearance, such as excessive exercise and/or caloric restriction. Disturbances in body image have been found to be associated with a variety of psychological and social variables, including depression, suicidal ideation, disordered eating, low self-esteem, academic performance and physical activity participation (Bearman and Stice, 2008; Neumark-Sztainer et al., 2006; Yanover and Thompson, 2008). Clearly, poor body image is a public health issue for adolescents; thus, identification of the factors that contribute to body image concern is crucial.

A variety of models and theories have been developed and used as theoretical frameworks to help identify which and how certain factors may affect body image and its facets during adolescence. The tripartite influence model of body image and eating disturbance is one such model (Thompson et al., 1999), and was drawn upon in the current study to increase our understanding of potential body image influences in adolescence. The model posits that peers, parents and the media influence body dissatisfaction via internalization of body ideals and appearance comparison. Since its development, studies have found that thin-ideal internalization fully (Papp et al., 2013) and partially (Shroff and Thompson, 2006) mediates the relationship between sociocultural influences and body dissatisfaction for girls. In a modified version (using muscle building techniques as the dependent variable), sociocultural influences have been found to be independently related to the use of muscle building techniques, with each influence partially mediated by social comparison tendencies for boys (Smolak et al., 2005).

Although the tripartite influence model is empirically supported and has highlighted the role of sociocultural factors on adolescent body image, it does not take into account the role of individual psychological and biological variables, which have been shown to impact body image in previous research (Muris et al., 2005; Quick et al., 2013; Wojtowicz and Von Ranson, 2012). We thus drew upon a second model, the biopsychosocial model of body image concerns and disordered eating (Rodgers et al., 2014), which takes into account the role of sociocultural, psychological and biological variables in the development of body image concern and disordered eating, to further increase our understanding of established body image influences. The model was tested with adolescent girls and supported the inclusion of negative affect, body mass index (BMI) and sociocultural influence as predictors of body image concern and disordered eating (Rodgers et al., 2014).

In addition, two prominent theories, social comparison theory (Festinger, 1954) and objectification theory (Fredrickson and Roberts, 1997), were drawn upon to increase our understanding of the mechanisms through which sociocultural influences lead to or exacerbate adolescent body image concern. Social comparison theory posits that individuals compare themselves with others, usually with others whom the individual considers thinner or more attractive, in an effort to self-evaluate. Among

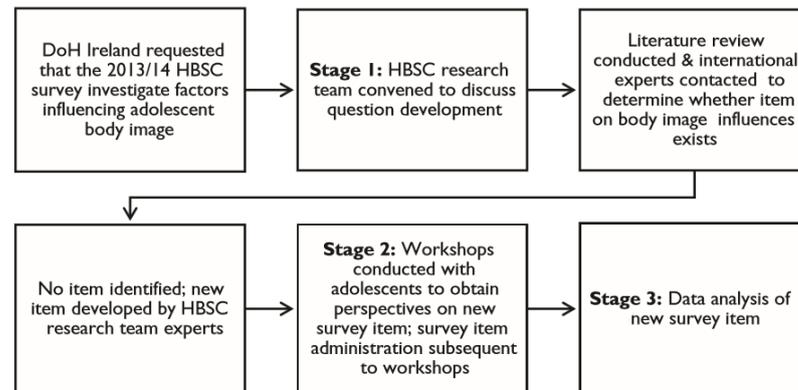
adolescent girls, body comparisons with peers and models have been found to significantly mediate the relationship between the endorsement of thinness and body image concern (Carey et al., 2014). Objectification theory posits that, in Western society, women's bodies are treated as objects used for male gratification. This often leads women to self-objectify, whereby they treat their own bodies as objects that should be evaluated. The tendency to self-objectify has been reported by children as young as 6 years, which in turn is associated with body image and eating disturbance (Jongenelis et al., 2014).

Although the aforementioned models and theories have enhanced our understanding of body image influences during adolescence, it still remains unclear whether other factors are at play for adolescents, beyond which these models and theories include. Furthermore, the above theories and models have been largely developed from a psychological and/or sociological perspective and have been predominantly utilized in quantitative research designs in these respective fields. Nonetheless, they have served to highlight the prevalence of body image concerns among adolescents in both Western and non-Western countries (Helfert and Warschburger, 2011; Holmqvist et al., 2007; Mellor et al. 2013).

Specific to Ireland, young people have highlighted body image as an issue of concern for them. A recent national survey revealed that 43 per cent of young people aged between 10–21 years were dissatisfied with their body image (O'Connell and Martin, 2012). In a separate national study on adolescent mental health, 'self-image' (which was conceptualized as 'how you look', 'being judged on how you look' and 'pressure to look a certain way') was listed by adolescents, aged between 12–18 years, as the number one factor that negatively impacts their mental health (McEvoy, 2009). Further, the adolescents expressed that poor self-image corresponded with body image-related behaviours, including eating disorders, comfort eating, obsessive eating and bulimia. Given the prevalence of body-dissatisfied adolescents in Ireland, the Department of Health (DoH) in Ireland utilized an established nationally representative survey (Health Behaviour in School-aged Children [HBSC] study, Ireland) to collect data on factors that influence adolescent body image.

The HBSC study is a cross-sectional study that collects data in relation to key indicators of children's lives: the social contexts of their lives, their health behaviours as well as health outcomes. The study is conducted every 4 years, in collaboration with the World Health Organization (WHO), and is the longest running international study focusing on the health behaviours and social contexts of young people (Currie et al., 2012).

In the HBSC study, body image is conceived as one's attitudinal disposition towards the physical self, and is examined using body (dis)satisfaction measurements. Such measurements have served to provide an insight into the degree of body (dis)satisfaction among adolescents; however, the study does not contain a question on factors influencing body image. Therefore, the aim of this study was to (i) develop a question on body image influences, for use in the 2013/2014 HBSC Ireland survey; (ii) assess the face validity of the question through consultative work with young people; and (iii) investigate the factors influencing adolescent body image in Ireland (Figure 1).



**Figure 1.** An Overview of the Survey Item Development Process

Source: Authors' own.

## Methods

### *Question Development: A Review of the Literature*

To begin the question development process, a literature review was conducted to investigate whether other cross-national surveys had included a question exploring body image influences. International experts on body image, within the international HBSC network, were also contacted to assist in identification of a question. A single item was not identified; thus, a draft of measures used in other cross-sectional surveys, examining specific body image influences, was compiled. This compilation was circulated to and discussed amongst members of the Irish HBSC team in order to determine further steps. All members agreed that no measure in the current literature could be used to meet the study's aim; thus, developing a new item to capture data on the factors influencing adolescent body image was considered most appropriate.

Following deliberation between team members, *two* open-ended question(s) were developed: 'What influences how you feel about your body image?' and 'What influences how you feel about your body shape?' Two questions were developed to include both terms 'body image' and 'body shape' given that the HBSC survey uses the term 'body shape' in other survey items, and thus we know this term is well understood by adolescents. However, given the DoH's request to collect data specifically on *body image*, the HBSC team decided to test both terms amongst adolescents to decipher which term would be better understood and preferred by adolescents. Although the question(s) were developed *de novo*, it is important to note that the constructed questions were guided by adolescent health experts, with invaluable experience in question development procedures.

Use of an open-ended question to assess the factors influencing adolescent body image was deemed most appropriate for two reasons. First, body image is a multidimensional construct, and thus is influenced by a variety of factors. Members agreed that providing participants with predetermined response options may be forcing them to choose an option that does not reflect their true thoughts or feelings. Second, very

little is known about the factors influencing adolescent body image, from adolescents' perspectives. It was anticipated that an open-ended question would elicit more information about the issue, given that this style of questioning offers participants an opportunity to voice their opinion, in their own words, with little structure imposed by the researcher.

### *Qualitative Approach: Youth Consultation Workshops*

Five workshops were conducted with adolescents ( $n = 74$ ) aged 13–17 years from two post-primary schools. Schools were recruited from the Irish Department of Education and Science-published list of schools, to take part. Participation was voluntary and consent was sought from school principals, parents and children. Three workshops were conducted with adolescent males ( $n = 18$ ;  $n = 6$  per workshop) from the first school and two workshops were conducted with larger mixed gendered groups from the second school ( $n = 26$  in the first workshop, of which 16 were boys and 10 were girls, and  $n = 30$  in the second workshop, of which 15 were boys and 15 were girls). The aim of the workshops was to determine whether the proposed survey questions were suitable (how the question(s) were interpreted and answered) for inclusion in the 2013/14 HBSC survey and which question was preferred. The purpose of the workshop was explained at the beginning of each session. Adolescents were also told that there were no right or wrong answers to the questions asked. Each workshop was facilitated by two researchers and conducted in a spare classroom within each school.

During the workshops, adolescents were first asked to express their views on the proposed survey questions in an oral manner during an open group discussion (which were subsequently transcribed verbatim). All the adolescents were given an equal opportunity to share their views. They were not asked to speak directly about their experiences but rather, as an expert group, to reflect on the experiences of adolescents in general. No participant was singled out; rather they were invited to share their views on the topic at their own free will. It was anticipated that the group discussion would stimulate conversation and debate on the new survey items. Following the open group discussion, a reflective writing activity was used, whereby adolescents were asked to reflect on the open group discussion and document additional or more detailed responses to the questions asked. We anticipated that the reflective writing activity would deepen our understanding of adolescents' experiences on the topic and provide a safe space for all participants to express their views. The use of these methods worked well and positioned youth as active agents in the research process.

The reflective written and transcribed verbal responses obtained during the workshops were analyzed. Factors that reflected similar ideas were collated into key themes for each of the terms body image and shape. Furthermore, the face validity of and preference for the proposed survey item(s) was examined by grouping adolescent responses into three groups: (i) interpretation; (ii) ease of answering; and (iii) preference.

The consultative approach used adhered to Lundy's (2007) model of child participation; an open space was provided to adolescents where they could freely express their views, using reflective writing and oral activities, and have those views listened to, valued and acted upon. It was anticipated that such an approach would give the adolescents a sense of control over the initial stages of the research process,

and further, would empower them to evaluate and critique the wording, content and structure of the proposed survey questions, and entitle them to make a choice on which question to include in the 2013/14 survey. In addition, we anticipated that a youth consultative approach would provide us with a platform to conduct our research ‘with’ adolescents as opposed to ‘on’ adolescents (Bird et al., 2013). Following the workshops, members of the Irish HBSC research team reconvened to determine which question was best understood and preferred by the adolescents, where the new item would be sequenced in the questionnaire and to determine the final wording of and response format for the new item.

### *Quantitative Approach: Questionnaire Administration (The HBSC 2013/14 Study)*

Data for the HBSC 2013/14 study were collected from a nationally representative sample of adolescents. Schools were randomly selected from the Irish Department of Education and Science-published school listings, and individual classrooms within these schools were subsequently randomly selected for inclusion. Self-completion questionnaires were administered by teachers in the classroom. Student participation was anonymous and voluntary, and consent was obtained from school administrators, parents and students. Schools were recruited between April and October 2014 and response rates at school and student levels were 59 and 84 per cent, respectively. In total, 95 post-primary schools took part in the study, including 7,565 children. HBSC Ireland was funded by the DoH, and ethical approval was granted by the Institutional Research Ethics Committee. In total, 4,481 students aged 13–17 years answered the question on factors influencing adolescent body image, the findings of which are presented below. A total of 972 respondents (21.6 per cent) did not answer the question, which does not compare as well as non-response rates relating to other items included in the HBSC survey. For example, 148 (2.2 per cent) adolescents did not answer a question relating to body image perception and 223 (3.4 per cent) did not answer a question relating to cyberbullying.

The open-ended responses were entered into SPSS (Version 20), and were then transferred to Microsoft Office Excel 2010 for preliminary examination. Subsequently, the data were exported from Microsoft Excel to the qualitative software package, QSR NVIVO 10 package, for auto-coding (analysis). The auto-coding process reflected a thematic analytical approach, similar to the process outlined by Braun and Clarke (2006). First, the open-ended responses were read a number of times in order to become familiar with the data. Following this, each response was given an initial code (e.g., peers) and each of the initial codes were given a description to reflect their content; for example, ‘peers’ included references made by the participants to both ‘peers/friends’. Once the initial codes were developed and reviewed, they were grouped into key themes based on whether they reflected similar ideas. For example, references made to the peer environment, such as ‘people in my class/other classes’, ‘how people my age/the students in my school look’, ‘how I look in comparison to my peers’, ‘what people in your class/friendship group say about your appearance or the appearance of others’ and ‘whether opposite sex peers/romantic partners like how I look’, were grouped into an overall theme such as ‘peer environment’. The key themes were then scrutinized to determine whether and how they could be broken down into sub-themes. For example, in the case of the peer environment, the

overall theme was divided into sub-themes, such as ‘peers in general’, ‘peer comparison’, ‘opposite-sex peers’ and ‘peer comments’. Disagreements in the coding were resolved through discussion and/or making minor modifications to the criteria that characterized the theme in question. Once the key themes and sub-themes were agreed upon, a decision was made to include themes that were most commonly referred to (given that an extensive range of influencing factors emerged from the large sample included in the survey;  $n = 4,481$ ).

## Results

### *Developing a Question to Capture Body Image Influences among Adolescents: A Review of the Literature*

During the literature search, various factors found to impact body image in prior studies were documented. This documentation allowed us to become familiar with the factors at play for adolescents, in advance of data collection and analysis procedures. Social influences, including family, peers and the media, were documented for their role in the aetiology of adolescent body (dis)satisfaction. Specifically, Lawler and Nixon (2011) revealed that peer appearance conversations, criticisms and internalized appearance ideals significantly predict adolescent body dissatisfaction. Peer pressure to increase muscle bulk among boys also predicts body dissatisfaction, while pressure to lose weight from peers, adult relatives and the media has been found to increase body dissatisfaction among girls. In addition, pressure from the media and adult relatives has been found to predict body change behaviours in both boys and girls (Xu et al., 2010). Cross-sectional research has also consistently reported a positive relationship between peer teasing and adolescent body dissatisfaction (Barker and Galambos, 2003; Thompson et al., 2007).

In relation to body image investment, clothes and physical activity were noted for their implications in adolescent body image experiences; however, research in this area was limited. In terms of clothing experiences, in the few qualitative studies conducted thus far, adolescents reported that one’s choice of clothing style is linked with negative peer and appearance-related cyberbullying experiences (Berne et al., 2014; Kenny et al., 2016), while athletic clothing experiences in particular were reported to give rise to body exposure concerns amongst overweight adolescents during physical activity participation (Reddy-Best and Harmon, 2015). Moreover, Beaudoin and Lachance (2006) found that peers, parents, fashion innovators and self-esteem significantly impact adolescents’ clothing decisions. In relation to physical activity, Gaspar et al. (2011) indicated that higher level of physical activity among adolescents has a protective effect on body dissatisfaction, independent of BMI or gender, while negative body image is associated with low levels of physical activity among both girls and boys (Finne et al., 2011).

Lastly, prior studies have demonstrated that appearance-related evaluative thoughts (Lawler and Nixon, 2011; Mellor et al., 2013) and mechanisms (Carey et al., 2014; Jones et al., 2004; Tiggemann and Miller, 2010) negatively impact adolescent body image.

Furthermore, during the literature search, a plethora of scales examining various body image influences were found, for example, the perceived sociocultural

influences on body image and body change questionnaire (McCabe and Riccardelli, 2001), the social comparison to models and peers scale (Jones, 2001), the multidimensional scale of perceived social support (MSPSS, Zimet et al., 1988) and the Rosenberg scale of self-esteem (Rosenberg, 1965); however, it was noted that the majority of existing measures have not been developed from a multidimensional view, rather they include only a single dimension of body image or influence, and thus do not capture the complexity of this construct.

Lastly, it was noted that most of the measures used to date have not been developed using input from adolescents' perspectives. In fact, most quantitative measures developed in this field have been primarily 'expert' led, relying on the input of academic researchers, rather than the young people themselves. Consequently, a single item examining body image influences was constructed and young people were given a platform to express their opinions on and make decisions about the newly developed item(s).

### *Assessing the Face Validity of the Newly Developed Survey Items Using a Youth Consultative Approach: Qualitative Findings*

During the consultative workshops, adolescents were asked to describe their interpretation of each question and how they would answer them. They were also asked which question they preferred and why. Table 1 outlines the range of responses

**Table 1.** Examples of the Type of Feedback Obtained on the Newly Developed Questions

Question	Feedback from the Consultative Workshops
Interpretation	<ul style="list-style-type: none"> <li>• 'Body shape is about how fat or thin you are'</li> <li>• 'What your actual shape is'</li> <li>• 'How tall or small you are'</li> <li>• 'Body image is more how you see yourself, includes facial beauty and self-confidence'</li> <li>• 'More about what you feel about yourself'</li> <li>• 'Personal view'</li> </ul>
Ease of answering	<ul style="list-style-type: none"> <li>• 'Am...celebrities. Like you might see a famous person on TV and you might like their clothes and they might influence you to buy them clothes.'</li> <li>• 'Models. Like girls look up to models who are skinny. So if they want to be pretty they will have to be skinny as well. They will have to fit into small sized clothes.'</li> <li>• 'I think that your friends and family could influence your body image 'cause they're the people that you care about.'</li> </ul>
Question preference	<ul style="list-style-type: none"> <li>• 'Use body shape. What influences how you feel about your body shape, its straight forward, easier to understand.'</li> <li>• 'I think pick the body image question because it's about you as well like. Body shape is just like fat or thin. But body image is am...If you have loads of problems or if you're ginger, or what hair colour you have, or if you had a big head or big ears or something, or a weird nose.'</li> </ul>

Source: Authors' own.

**Table 2.** Influencing Factors for Body Image and Body Shape: '✓' Signifies That a Specific Factor Impacts Body Image and/or Body Shape; 'x' Signifies That it Does Not Impact Body Image and/or Shape

Influencing Factors	Body Image	Body Shape
Weight	✓	✓
<b>Peers</b>	✓	✓
<b>Family</b>	✓	✓
Food and exercise	x	✓
<b>The media</b>	✓	✓
Clothes	x	✓
<b>Being teased</b>	✓	✓
Comparison with others	x	✓

Source: Authors' own.

obtained. During the workshops, factors that influenced adolescent *body image* and *body shape* also emerged, which were subsequently grouped into themes. Differences and commonalities listed in terms of influencing factors for both body image and body shape are illustrated in Table 2. Common themes (codes that reflected similar ideas and that were frequently raised) are highlighted in **bold**.

Adolescents' explanations of both terms body image and body shape were well aligned with current definitions used in the literature. Body shape, which refers to individuals' perceptions of body appearance, size and silhouette (da Silva et al., 2014), and body image, which is defined as an individual's perceptions, thoughts and feelings about their body, as well as objects associated with the body, such as clothes (Conti et al., 2009), were defined in a similar manner by the adolescents during the workshops. The adolescents stated that the term body image incorporates a broader range of physical attributes, such as facial beauty, weight, nose size and hair colour, whereas body shape is restricted to body weight, build and height.

As such, the adolescents clearly understood the meaning of both terms 'body image' and 'body shape', given their above explanations and both terms were differentiated, which ensured the face validity of the items. Results from the workshops also revealed that the adolescents were capable of answering both questions without confusion or difficulty. In doing so, a list of influencing factors for both body image and body shape emerged. The range of such factors is outlined in Table 2; however, clothes, comparison with others, food and exercise were perceived as having an impact on body shape only.

Mixed views were expressed by the adolescents on which question to include in the survey. For some, the term body image was too personal, whereas for others, it captured a wider array of one's physical attributes and thus was more preferable. In terms of body shape, some articulated that it was clearer and easier to understand given that it deals with fewer attributes, while others stressed that the term was too restrictive. Although mixed views were expressed regarding both terms, a decision was made to use the term 'body image' in the question developed for the 2013/14 HBSC study, given that it was the preferred term in the larger workshops, which also captured both male and female perspectives ( $n = 56$  vs  $n = 18$  in the male workshops).

### *Examining the Factors That Influence Adolescent Body Image Using the HBSC 2013/14 Survey: Quantitative Findings*

Six key themes emerged from the main study analysis, which were grouped under the following categories: (i) body image evaluation; (ii) body image investment; and (iii) sociocultural impact. One theme emerged under 'body image evaluation' and was labelled 'appearance-related evaluations'. The themes that emerged under 'body image investment' included (i) physical activity and food and (ii) clothes. The themes that emerged under 'sociocultural environment' included (i) peers; (ii) the media; and (iii) other people. Once the six key themes were reviewed, grouped into specific categories and agreed upon by all authors, a decision was made to further divide them, to illustrate their content.

In terms of the first category, 'body image evaluation', the theme 'appearance-related evaluations' was divided into one's thoughts and feelings about their appearance (generally, or after looking in the mirror and/or stepping on the weighing scale), body (dis)satisfaction (one's degree of content or discontent with the body as a whole, or with specific aspects of the body) and physical characteristics (where no mention of satisfaction/dissatisfaction with such characteristics was stated). In terms of the second category 'body image investment', the theme 'physical activity and food' was sub-divided into whether one is physically active (lazy vs being physically active), one's athletic performance and ability (as part of team/hobby), the amount of exercise conducted (duration of time spent being physically active) and the amount and type (healthy/unhealthy) of food eaten. The second theme within this category, 'clothes', was sub-divided into how one looks and feels in their clothes (happy/unhappy) and how one looks in clothes in comparison to how others look (better/equal/worse).

In terms of the third category, 'sociocultural impact', the theme 'peers' was sub-divided into peers in general, opposite-sex peers, peer comparisons and peer comments (aimed at them or others). The second theme, 'the media', was sub-divided into television (including programmes, series and ads), magazines (via dieting advice/persuasion, promotion of idealized body types), models (the portrayal/endorsement of models in magazines and/or online) and the Internet (via the dietary advice available and via social networking sites, where social comparisons with peers/celebrities are made). The theme 'other people' was sub-divided into others in general, what others think and say (positively/negatively) and being judged and teased by others. Table 3 outlines the main and sub-themes.

Results from the analysis also revealed that peers emerged as the most frequently cited influencing factor ( $n = 1,765$ ), followed by the media ( $n = 1,462$ ), appearance-related evaluations ( $n = 1,177$ ), other people ( $n = 819$ ), physical activity and food ( $n = 380$ ) and clothes ( $n = 269$ ).

#### *Qualitative (Workshops) versus Quantitative (Survey) Results*

Similar influencing factors on body image and shape emerged during the question development stages(s); however, clothes, comparison with others and food and physical activity were not perceived as having an impact on body image during the workshops. These factors were, however, listed as having an impact in the larger 2013/14 HBSC study. These differences may be accounted for by the different methodological

**Table 3.** Key Influencing Factors on Adolescent Body Image and Associated Sub-components from the HBSC 2013/2014 Study

Key Themes	Sub-themes
<b>Category 1: Body Image Evaluation</b>	
Theme 1: Appearance-related evaluations	<ul style="list-style-type: none"> <li>• My thoughts and feelings about my appearance</li> <li>• Body (dis)satisfaction</li> <li>• Physical characteristics</li> </ul>
<b>Category 2: Body Image Investment</b>	
Theme 2: Physical activity and food	<ul style="list-style-type: none"> <li>• Being physically active</li> <li>• My athletic performance and ability</li> <li>• The amount of exercise I do</li> <li>• The amount and type of food I eat</li> </ul>
Theme 3: Clothes	<ul style="list-style-type: none"> <li>• How clothes look on me</li> <li>• How comfortable I am in my clothes</li> <li>• How I look in clothes in comparison to others</li> </ul>
<b>Category 3: Sociocultural Impact</b>	
Theme 4: Peers	<ul style="list-style-type: none"> <li>• Peers in general</li> <li>• Peer comparison</li> <li>• Peer comments</li> <li>• Opposite-sex peers</li> </ul>
Theme 5: The media	<ul style="list-style-type: none"> <li>• Television</li> <li>• Magazines</li> <li>• Models</li> <li>• The Internet</li> </ul>
Theme 6: Other people	<ul style="list-style-type: none"> <li>• Others in general</li> <li>• What others think and say</li> <li>• Being judged and teased by others</li> </ul>

Source: Authors' own.

approaches used at the stages of question development and administration (consultative workshops vs survey, respectively). Furthermore, the workshops included a significantly smaller sample size than the main HBSC study (74 vs  $n = 4,481$ ) and were imbalanced in terms of the gender composition (49 boys and 25 girls).

## Discussion

### *Youth Participation*

In order to fulfil the first aim of the current study, which included (i) developing a question to capture the factors that impact adolescent body image, body image experts and a review of the literature were drawn upon, both of which served to highlight some of the factors at play for adolescent body image and the measures

utilized to assess their influence. The second aim (ii) assessing the face validity of the newly developed items was fulfilled using a youth participatory approach. The use of youth participatory approaches in research has been positively influenced by the 1989 Convention on the Rights of the Child (United Nations, 1989), which codified children's right to participate in decisions that affect their lives, over the past decade. In addition, sociologists of childhood and children's rights advocates have argued that researchers have an ethical and practical responsibility to take children's views into account during all stages of the research process (Christensen and James, 2008). Subsequently, a shift to a 'new sociology of childhood' has occurred, which recognizes children as active social agents, rather than passive objects, capable of making sense of and affecting the world around them (Prout and James, 1997). Prior to this shift, young people were rarely asked to voice their views or partake in the development of research intended to benefit them (Wong et al. 2010). As such, their views, which were filtered through interpretations offered by adults, were marginalized (Coad and Evans, 2008).

Youth participatory approaches encourage the active participation of young people in the research process, rather than simply eliciting their views at the stages of data collection (Coad and Evans, 2008). It has been argued that this approach helps to reduce power imbalances between the researcher and the researched, as both parties are viewed as active participants in the research process (Christensen and James, 2008). Further, youth participation promotes personal development, and provides young people with substantive knowledge, practical skills and a sense of empowerment (Checkoway, 2011). Whilst youth participatory approaches are being increasingly used in childhood, social care, social policy and educational studies, they have been rarely incorporated into the study designs of body image research. Rather, young people have been engaged almost exclusively as subjects, informants and respondents by body image researchers, rather than as partners and/or resources in the discovery of new knowledge or in the development of new research tools. Consequently, their involvement to date has been, to an extent, overshadowed.

In order to address this shortcoming, a participatory methodology, theoretically inspired by the 'new sociology of childhood', was employed in the initial stages of this research. Lundy's (2007) model of child participation, which identifies four distinct contexts within which children's participation occurs (space, voice, audience and influence), was used to frame the way in which young people were actively engaged in this study. The primary participatory task for adolescents was to advise on the research process at the stages of question development. In an open, safe and inclusive environment, they were given an opportunity to freely discuss and validate how relevant and appropriate two newly developed survey items were to them.

Inviting young people to contribute at such an early stage of the research gleaned valuable information on the scope of the issue under examination, as well as potential language and cultural conventions associated with the proposed survey items. In addition, their participation provided an insight into the face validity of and preference for the proposed survey items. Ensuring the face validity of newly developed question(s) is especially pertinent to an international survey, such as the HBSC study, given that measures are often imported by international members for use in other countries. Their views were subsequently acted upon by including their preferred question in the subsequent survey.

## *Methodological Considerations*

### *Youth Participation*

While conscious efforts were made to ensure that each view expressed was respected, listened to, valued and acted upon, in accordance with Lundy's (2007) model, on reflection it is inevitable that there are a number of ways in which the participatory process could have been improved. Much of what took place during the workshops was circumscribed from the outset, including the selection of the issue under consideration, the choice and content of the newly developed survey items and the activities used to seek out young peoples' views. Moreover, their input as co-researchers was not sought beyond the stages of question development. If given a choice to partake at the stages of data interpretation, analysis and dissemination, their authority as stakeholders in the research process would have been optimized. However, due to practical constraints (e.g., timing, resources), their participation at these stages was restricted.

Nonetheless, our study demonstrates that Lundy's (2007) model of participation is a good fit for gathering valid and reliable data from adolescents on newly developed survey items. Lundy's (2007) model guided the participatory process in a manner that facilitated the adolescents and researchers to absorb new ways of seeing and thinking and helped them to learn about each other and the subject of the study. In addition, it helped to frame the manner in which the researchers and adolescents worked together to develop a survey item that was accessible to groups of youth. Going forward, the level of youth participation could be considerably enhanced by creating more of a partnership with adolescents at each stage of the research process, rather than seeking their input at the beginning only.

There are also some methodological considerations worth mentioning regarding the workshops. We are unsure whether the presence of other peers/female moderators impacted the nature of data collected, given that body image is a sensitive issue and has been documented as a taboo topic amongst adolescent boys (Diedrichs et al., 2011). However, previous research has found that adolescent boys prefer female facilitators in group discussions as they are considered less threatening than males (Grogan and Richards, 2002). Consideration to the type of information girls were willing to share amongst their opposite-sex peers should also be highlighted, given that the gender dynamic of intervention work concerning body image has been found to impact their level of participation (Yager et al., 2013).

### *Open-ended Questioning*

In terms of the survey item used in the HBSC 2013/14 study, it is important to acknowledge that an open-ended questioning method is not without limitations. Its use restricted measuring the significance of the influencing factors listed, as quantitative scales typically do. In addition, the non-response rate for the open-ended question was higher than the non-response rate found for other variables included in the HBSC survey. Perhaps adolescents did not have the time to document their responses, given that this style of questioning requires more time and reflection than a close-ended question. The open-ended question was also complex and time-consuming to code, thus including it in future HBSC survey rounds is not feasible. However, we anticipate that the key influencing factors that emerged as part of this study will be

used to inform the development of a close-ended question and its response categories in future HBSC surveys; in order to further examine the scope of each key influencing factor and its level of significance to adolescent body image. Moreover, we anticipate that other countries within the HBSC network will utilize the close-ended question, once developed, in their surveys, so that international comparisons can be made. Such comparisons will serve to provide an even greater contribution to the field of body image research.

*Factors Influencing Adolescent Body Image: Calls for Future Research Directions*

The third aim of the current study was to investigate, through the HBSC 2013/14 survey, the factors that influence adolescent body image in Ireland. Results from the survey corroborate existing literature, in that social influences, such as peers, the media and other people, as well as the diverse ways through which they exert their impact, were listed as key influencing factors on adolescent body image. Interestingly, however, of the three core influences (peers, parents, media) identified in sociocultural models, familial influences did not fall into the top six most commonly cited influencing factors by adolescents in this study. This perhaps indicates that familial influence is not as influential as other sociocultural factors listed, or that the immediate impact of peers and the media is more salient for adolescents, while familial influences may be more implicit. Lastly, like prior studies (Lawler and Nixon, 2011; Mellor et al., 2013), body image evaluations, in the form of body preoccupation and dissatisfaction, impacted adolescent body image.

Our findings also highlight that fundamental factors have been, to an extent, overlooked in the literature (e.g., clothes, how one feels following food consumption and sporting performances), yet these influences are likely to be just as important to the perceptions individuals hold towards their bodies. Physical activity and body image research to date has investigated the link between both constructs, in terms of physical activity *levels (low/high)* (Finne et al., 2011; Gaspar et al., 2011). However, our study indicates that in addition to physical activity *level*, one's athletic performance and ability and being physically active generally impact adolescent body image. In terms of food consumption, to our knowledge, no study has investigated adolescents' feelings prior and subsequent to food consumption, yet it appeared to have an impact on the adolescents in this study. Future body image research should thus focus its attention on the aforementioned factors in order to enhance our understanding of the reasons for and the extent to which they impact adolescent body image.

Clothes also emerged as an influencing factor in this study. Prior research has shown that clothing choices are closely bound to self-concept among adolescents, and are used as means of managing their public image and security in social settings (Piacentini and Mailer, 2013). Despite this, no study has explicitly examined the impact of clothing experiences on adolescent body image, although the link has emerged in some qualitative studies (Berne et al., 2014; Finne et al., 2011; Gaspar et al., 2011; Kenny et al., 2016). Extending this limited research, our study demonstrates that clothing comfort and how one looks in their clothes, in comparison to how others look, impact adolescent body image. Future studies, however, need to investigate how significant clothing experiences are to body image in adolescence and the reasons for this significance, if any.

## Conclusion

The current study found that peers, the media, other people, clothes, physical activity, food and appearance-related evaluations play an integral role in how young people feel about their body image. However, the generalizability of the current study's findings is limited. This study was conducted in Ireland; therefore, the influencing factors reported may not be applicable to those in other countries. Further, the HBSC survey is conducted in the school setting, thus there is no certainty that the body image influences that emerged in this study apply to those in other settings. Nonetheless, a key contribution this article makes is the need to move beyond examining constructs concerning peers, parents and the media (that predominate the literature), and to more closely examine the role of clothes, physical activity and food on adolescent body image. Including the latter constructs into future measures aiming to explore body image influences among youth is essential in order to further explore the extent, relevance and validity of their impact.

This study also contributes new practice examples of how young people can be involved at the design stage of a study, rather than relying on their participation at the stage of data collection. Their involvement and insight at the question development stage yielded an instrument that helped to collect valid data on the factors influencing adolescent body image. We thus encourage researchers' respect for and use of youth participatory methodologies in research focused on young people. Using youth-centred approaches will serve to give adolescent voices international value, recognition, respect and status.

One of the core aims of the HBSC study is to synthesize valuable evidence relating to adolescent health and to contribute to the development of evidence-based guidance in particular topic areas. Previous studies conducted by the international HBSC network have been successful in influencing change at policy level. We thus anticipate that including a new question on body image influences in future HBSC surveys will help to promote an awareness amongst and inform future government policies and practitioners about the factors at play for adolescents internationally. Given that body image has been raised as an issue of concern by many adolescents in Ireland, new strategies and/or interventions aiming to ameliorate their concerns are essential. The data generated through the HBSC study could help to inform the development of such strategies and their need to attend to and tackle the impact of specific influencing factors on adolescent body image.

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# The relationship between cyberbullying and friendship dynamics on adolescent body dissatisfaction: A cross-sectional study

Journal of Health Psychology  
1–11  
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sagepub.co.uk/journalsPermissions.nav  
DOI: 10.1177/1359105316684939  
journals.sagepub.com/home/hpq  


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## Abstract

The relationship between cyberbullying and friendship dynamics on adolescent body dissatisfaction was examined. Data from the Irish contribution to the international cross-sectional 2013/2014 Health Behaviour in School-aged Children study were used. Results showed that girls were three times more likely than boys to report that their body is too fat, and adolescents who were cyberbullied were almost twice as likely as adolescents who were not cyberbullied to consider themselves too fat. Stronger friendship dynamics were associated with decreased levels of body dissatisfaction, and friendship dynamics were found to partially mediate the relationship between cyberbullying and body dissatisfaction.

## Keywords

adolescence, body image, health behaviour, internet, quantitative methods, social support

## Introduction

Body image, which represents how one sees, thinks, feels and acts towards their physical appearance (Cash and Smolak, 2011), is an issue of concern for adolescents, both internationally (Bun et al., 2011; Eidsdottir et al., 2014; Fonseca and De Matos, 2005; Xu et al., 2010) and in Ireland (Kelly et al., 2010; Lawler and Nixon, 2011; Mooney et al., 2009). Studies have indicated that from early to late adolescence, the prevalence of negative body image increases (Fenton et al., 2010; Kostanski et al., 2004), which may have a lasting impact on body image perceptions during adulthood (Smolak, 2011). Furthermore, body dissatisfaction, a measure of

body image, may lead to the development of low self-esteem, eating disturbances and suicidal ideation among adolescents (Brausch and Muehlenkamp, 2007; Verplanken and Velsvik, 2008). Societal factors impact on the way in which adolescents view and act towards their body image. Namely, the Tripartite Model of

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body image and eating disturbance assigns parents, peers and the mass media as the major sociocultural factors that influence body image (Keery et al., 2004). Although this model recognises the importance of all three forms of influence on body image, peer influences have received the least research attention to date. What is known is that peers exert their impact on adolescent body image via a variety of mechanisms, including appearance-related modelling and conversations (Kenny et al., 2016); comparisons (Carey et al., 2014); teasing, exclusion and criticism; and/or appearance-related pressure (Helfert and Warschburger, 2013).

Friendships are a core part of adolescence, and engagement with peers can enhance socio-emotional maturity, self-esteem and well-being (Berndt, 2002). However, peer engagement is increasingly reliant on social media or electronic communication. This shift from face-to-face communication to online communication has created a unique and potentially harmful dynamic for social relationships, which is explored in the literature as cyberbullying (Nixon, 2014).

Cyberbullying, threatening or harassing another via communication technologies, is an emerging public health issue among adolescents. On average, approximately 20–40 per cent of adolescents report cyber victimisation (Frisén et al., 2014), which has been associated with higher levels of subjective complaints (Fridh et al., 2015) and with poorer health and psychological outcomes (Callaghan et al., 2015; Cassidy et al., 2009; Mishna et al., 2010). Although cyber victimisation and body dissatisfaction are salient issues among adolescents, research exploring their relationships is sparse. Studies have shown that appearance is the most commonly reported reason for being cyberbullied among Canadian adolescents (Cassidy et al., 2009; Mishna et al., 2010) and that appearance-related cyber victimisation is associated with lower body esteem and feelings of depression among Swedish adolescents (Frisén et al., 2014) and suicidal ideation among severely obese Belgian adolescents (DeSmet et al., 2014). Furthermore, a qualitative study found that appearance-related cyberbullying is

more common among girls, is used as a means of attaining higher social status in the peer group setting and has a negative impact on adolescent mental health (Berne et al., 2014). In Ireland, both cyberbullying rates (Gavin et al., 2015) and body image concerns (Kelly et al., 2010; Lawler and Nixon, 2011; Mooney et al., 2009) are high, yet limited, if no data, exists on their relationship among Irish adolescents.

As noted earlier, peer influences on body image are less well researched than the role of family or media influences. This is particularly true for research concerning the role of positive friendship dynamics on adolescent body image. The few studies conducted to date show that social engagement with peers has a positive impact on body image among overweight/obese adolescent girls (Caccavale et al., 2012), while low friendship quality contributes to body dissatisfaction among adolescent girls (Gerner and Wilson, 2005; Schutz and Paxton, 2007). Positive peer relationships have the potential to protect against various life stresses and can provide one with the emotional security, support and advice required (Romo et al., 2016); thus, we envisaged that strong friendship dynamics, that enable youth to rely on, confide in, disclose emotions to and problem share with peers may help to reduce the risk of body dissatisfaction among adolescent boys and girls.

In light of the gaps identified in the body image and peer literature, the current cross-sectional study aims to examine (1) the relationship between cyberbullying and body dissatisfaction, (2) the relationship between friendship dynamics and body dissatisfaction and (3) whether friendship dynamics mediate the relationship between cyberbullying and body dissatisfaction. Although theoretical frameworks (Keery et al., 2004) have identified peers as having an impact on adolescent body image, and more specifically, qualitative research has indicated that peers target adolescents' appearance in cyberbullying incidents (Berne et al., 2014), quantitative research examining whether friendships mediate the relationship between cyberbullying and body

image does not exist – a gap this study aimed to fill.

In terms of the study aims, we hypothesised that cyberbullying and weak friendship dynamics would negatively impact adolescent body satisfaction. Furthermore, we hypothesised that strong friendship dynamics would buffer the impact of cyberbullying on adolescent body dissatisfaction.

## Methods

Data from the 2013/2014 Irish Health Behaviour in School-aged Children (HBSC) survey were used for this study. The HBSC study is a cross-sectional survey, conducted every 4 years, in collaboration with the World Health Organization (WHO) Regional Office for Europe. The study aims to gain new insights into, and increase our understanding of adolescent health, health behaviours and their social context (Inchley et al., 2016).

## Procedures

Data for the Irish HBSC 2013/14 study were collected from a nationally representative sample of 13,529 school children aged 10–17 years (Gavin et al., 2015). Schools were randomly selected from the Irish Department of Education and Science published school listings, and individual classrooms within these schools were subsequently randomly selected for inclusion. Self-completion questionnaires were administered by teachers, in the classroom. The questionnaire took approximately 40 minutes, or one class period, to complete. Student participation was anonymous and voluntary, and consent was obtained from school administrators, parents and students. Schools were recruited between April and October 2014 and response rates at school and student levels were 59 and 84 per cent, respectively. Ethical approval was granted by the Institutional Research Ethics Committee. For the purpose of this study, the final analytic sample was composed of 7320 school-aged children (40.4% male; 59.2% female) between the ages of 13 and 17 years.

## Measures

The item assessing cyber victimisation was developed based on the Olweus Bully/Victim Questionnaire, which has been found to be reliable and valid in prior studies (Solberg and Olweus, 2003). Two new items were added using the same format to measure cyberbullying which include:

How often have you been bullied at school in the past couple of months in the ways listed below:  
(i) Someone sent mean instant messages, wall postings, emails and text messages, or created a Web site that made fun of me, and (ii) Someone took unflattering or inappropriate pictures of me without permission and posted them online.

Response options included ‘I have not been bullied in this way in the past couple of months’, ‘Only once or twice’, ‘2 or 3 times a month’, ‘About once a week’ and ‘Several times a week’. For the purpose of this study, responses were dichotomised into ‘yes’ and ‘no’ for each item. If the participant selected ‘Only once or twice’, ‘2 or 3 times a month’, ‘about once a week’ or ‘Several times a week’ to either being sent mean messages and/or to having unflattering photos posted of them, they were coded as ‘yes’ for a new variable ‘cyberbullying experiences’. Responses were coded as ‘no’ if the participant selected ‘I have not been bullied in this way in the past couple of months’ to both cyberbullying items.

Body (dis)satisfaction was measured using the following item: Do you think your body is ...? ‘much too thin’, ‘a bit too thin’, ‘about the right size’, ‘a bit too fat’ or ‘much too fat’. Participants’ responses were recoded into ‘too thin’, ‘the right size’ and ‘too fat’. The test–retest reliability of this item was found to be excellent among Finnish adolescents (intraclass correlation coefficient (ICC)=0.81; 95% confidence interval (CI)=0.76–0.85; Ojala et al., 2012). The perception of weight, whether accurate or not, was of interest as overweight perception is associated with negative behaviours and outcomes in adolescence, including maladaptive weight-loss strategies (Isomaa et al.,

**Table 1.** Breakdown of participant's descriptive characteristics by gender.

Descriptive characteristic, % (n)	Total (n = 7320)	Boys (n = 2960)	Girls (n = 4336)
Body dissatisfaction			
Too thin	11.7 (855)	18.7 (553)	6.9 (299)
Right size	52.2 (3820)	58.8 (1740)	47.7 (2069)
Too fat	33.9 (2482)	20.5 (607)	43.1 (1867)
Missing	2.2 (163)	2.0 (60)	2.3 (101)
Cyberbullied			
No	71.1 (5207)	78.2 (2315)	66.4 (2878)
Yes	25.5 (1866)	17.4 (514)	31.0 (1345)
Missing	3.4 (247)	4.4 (131)	2.6 (113)
Friendship dynamics			
Weak	28.6 (2094)	32.6 (965)	25.9 (1123)
Strong	59.1 (4326)	51.0 (1510)	64.6 (2801)
Missing	12.3 (900)	16.4 (485)	9.5 (412)

2011) and weight gain (Banfield and McCabe, 2002).

Friendship dynamics were measured using the Multidimensional Scale of Perceived Social Support (MSPSS; Zimet et al., 1988). Participants were asked to rate the following statements: 'My friends really try to help me', 'I can count on my friends when things go wrong', 'I have friends with whom I can share my joys and sorrows' and 'I can talk about my problems with my friends', on a scale from 1 (*very strongly disagree*) to 7 (*very strongly agree*). A variable was computed to calculate a mean friendship dynamics score for all participants who answered the four items within the above scale. Following this, the friendship dynamics item was dichotomised into weak (1–4.49) and strong friendship dynamics (4.50–7). The friends' relation measures within the MSPSS have been well used in previous research with youth and have shown good reliability and validity (Bruwer et al., 2008).

### Statistical analyses

First, we computed descriptive statistics for the sample by gender. Next, frequencies for cyberbullying and friendship dynamics were also computed for participants, by body dissatisfaction,

considering their body to be either too thin or too fat. To analyse the association between gender, cyberbullying and friendship dynamics with body dissatisfaction, we used logistic regression with the enter method. These regression models tested the association between these variables with two dichotomised body dissatisfaction variables (too thin and too fat). Using the Baron and Kenny (1986) model of mediation, we then examined the mediating role of friendship dynamics in the association between cyberbullying experiences and body dissatisfaction (too thin and too fat). All analyses were stratified by gender, as it is now well established that body dissatisfaction and health-related practices differ by gender, among adolescents (Jones et al., 2004; Lawler and Nixon, 2011). All analyses were performed with SPSS Version 22. Cases were excluded if they were missing the data required for the specific analysis. Statistical significance was established a priori at  $p < 0.05$ .

### Results

Table 1 presents descriptive statistics (not statistically significant) of the study variables by gender. Approximately 50 per cent of the sample considered their bodies to be the right size, while a third of the sample perceived their body

**Table 2.** Logistic regression analyses for participants who are dissatisfied with their body.

Predictor	Too thin		Too fat	
	OR	<i>p</i>	OR	<i>p</i>
Gender				
Boys	1.00		1.00	
Girls	-0.32	0.000**	2.73	0.000**
Cyberbullying				
No	1.00		1.00	
Yes	1.10	0.323	1.79	0.000**
Friendship dynamics				
Weak	1.00		1.00	
Strong	0.89	0.182	-0.79	0.000**

OR: odds ratio.

\*\**p* < 0.001.**Table 3.** Breakdown of participant's descriptive characteristics by self-reported body dissatisfaction and gender.

	Percentage who think their body is 'too thin' (n)			Percentage who think their body is 'too fat' (n)		
	Total	Boys	Girls	Total	Boys	Girls
	Cyberbullied					
No	72.4 (619)	74.9 (414)	67.9 (203)	62.3 (1547)	72.7 (441)	59.1 (1103)
Yes	23.6 (202)	20.8 (115)	28.8 (86)	35.2 (874)	24.4 (148)	38.7 (723)
Missing	4.0 (34)	4.3 (24)	3.3 (10)	2.5 (61)	3.0 (18)	2.2 (41)
Friendship dynamics						
Weak	32.5 (278)	35.8 (198)	26.1 (78)	32.5 (278)	35.8 (198)	26.1 (78)
Strong	55.2 (472)	49.2 (272)	66.6 (199)	55.2 (472)	49.2 (272)	66.6 (199)
Missing	12.3 (105)	15.0 (83)	7.4 (22)	12.3 (105)	15.0 (83)	7.4 (22)

as too fat. Boys were more likely than girls to consider their bodies to be too thin, whereas girls were more likely than boys to consider their bodies to be too fat. One in four participants reported being cyberbullied once or more in the past couple of months, with girls (31.0%) more likely than boys (17.4%) to report being cyberbullied. Table 2 provides a further breakdown of participants who considered their bodies to be either too thin or too fat by gender, cyberbullying experiences and perceived friendship dynamics.

The results of the binomial logistic regression, shown in Table 3, suggest that girls were less likely than boys to consider themselves too thin

(odds ratio (OR) = -0.32, *p* < 0.001) and were three times more likely than boys to consider themselves too fat. We found a significant association between adolescents who were cyberbullied and body dissatisfaction. Specifically, adolescents who reported being cyberbullied (OR = 1.79, *p* < 0.001) were significantly more likely than adolescents who did not report being cyberbullied to consider themselves too fat. Results also showed a significant association between friendship dynamics and body dissatisfaction. Adolescents who reported strong friendship dynamics were less likely to perceive themselves as too fat compared to adolescents who reported weak friendship dynamics (OR = -0.79, *p* < 0.01).

Finally, the final analyses aimed to investigate the association between cyberbullying experiences and body dissatisfaction (too thin and too fat) when adjusting for the potential mediator, friendship dynamics. The mediation revealed a significant, but non-sizeable drop in the association between cyberbullying experiences and perceptions of being too fat among boys (difference in Nagelkerke  $R^2 \leq 0.001$ ), from  $OR = 1.73$  (CI: 1.40–2.16) to  $OR = 1.64$  (CI: 1.30–2.09) and girls (difference in Nagelkerke  $R^2 \leq 0.001$ ), from  $OR = 1.93$  (CI: 1.69–2.20) to  $OR = 1.84$  (CI: 1.60–2.11). According to the Baron and Kenny (1986) model of mediation, the findings, being significant, suggest that friendship dynamics mediate the relationship between cyberbullying and perceptions of being too fat, for both boys and girls. However, we acknowledge that this change is rather small, suggesting that the two variables are independently associated with perceptions of being too fat. We also found that friendship dynamics did not mediate the relationship between cyberbullying experiences and perceptions of being too thin for boys or girls, as the prerequisites for mediation were not met.

## Discussion

The aim of this study was to examine the relationship between friendship dynamics and cyberbullying on adolescent body dissatisfaction. In line with previous studies, the results of this study showed that girls are more likely to report that their body is too fat, compared to boys, while boys are more likely to report that their body is too thin (Currie et al., 2012; Gabhainn et al., 2008). In contemporary Western society, high value is placed upon appearance, in particular, on body shape. For females, a thin, pre-pubescent-like body has become synonymous with beauty, desirability and status, while the ideal body shape for males is muscular and lean (Olivardia et al., 2004). Given that current ideals are often internalised by many adolescents, and/or used as targets in attaining unrealistic appearance ideals, it is not surprising that our study found that girls are more likely to report feeling too

fat, while boys are more likely to report feeling too thin.

Interestingly, our study also found that more girls than boys report being cyberbullied. To date, research concerning gender-related cyberbullying experiences is inconsistent. Some studies report no gender differences (Hinduja and Patchin, 2008; Raskauskas and Stoltz, 2007), while others report that girls are more likely to be cyberbullied and are more likely to report being a victim of a cyberbullying incident to someone else (Smith et al., 2008; Sourander et al., 2010; Wang et al., 2009). Our research, however, found that girls are more likely to be cyberbullied by their peers than boys. Given that girls are more likely to engage in indirect bullying than boys (Sourander et al., 2010; Wang et al., 2009), the cyber context, which is characterised by an absence of face-to-face confrontation with peers and can be exercised anonymously, for example, in the privacy of one's home, may be more appealing to girls. In addition, previous research highlights that girls are more active on social networking sites (whereby indirect communication in a virtual setting can be made) than boys (Pujazon-Zazik and Park, 2010), which may also explain why our study found that more girls report being cyber victims than boys.

This study also found that adolescents who report being cyberbullied are approximately twice as likely to perceive themselves as too fat, compared to adolescents who do not report being cyberbullied. This association remained the same after stratifying for gender. Indeed, general appearance has been targeted in cyberbullying incidents in previous research (Berne et al., 2014; Cassidy et al., 2009; Mishna et al., 2010); however, we cannot confirm whether this is the case with our study. Interestingly, however, there was no association between underweight perception and cyberbullying. Given that we did not examine adolescent weight status, it may be that adolescents who perceive themselves as too fat are indeed overweight. If so, it is not surprising that these adolescents are reporting greater levels of cyber victimisation given that overweight adolescents

are more often cyberbullied by their healthy weight peers (DeSmet et al., 2014). Overall, it seems likely that perceptions of being too fat are more closely interlinked with cyber victimisation than perceptions of being too thin. The direction of these relationships, however, cannot be confirmed, given the cross-sectional nature of this study.

Reliance on peers for support increases significantly during adolescence (Fridh et al., 2015; Romo et al., 2016). Peers can either serve as protective social supports or can arouse or augment feelings of distress, anxiety and/or anguish. Yet, few studies have examined the relationship between friendship dynamics and adolescent body dissatisfaction. Research to date has focused on whether social engagement and friendship quality with peers impacts body image among adolescents (Caccavale et al., 2012; Gerner and Wilson, 2005). Our research, however, explicitly examines friendship dynamics in terms of problem sharing, solving and comfort. We found that girls report stronger friendship dynamics than boys. Previous research shows that girls from a young age report more self-disclosure, supportiveness and friendliness in friendships than boys, value social friendships to a greater extent than boys and are more likely to endorse goals that involve mutual participation (Murphy and Eisenberg, 2002), all of which may partly explain why girls report stronger friendship dynamics in this study.

Furthermore, our study found that adolescents who report stronger friendship dynamics were less likely to perceive themselves as too fat, compared to adolescents who reported weak friendship dynamics. As such, our results may indicate that positive peer relationships, characterised by strong friendship dynamics, can decrease the risk of perceiving oneself as too fat among adolescents. This association, however, needs to be studied further, as we cannot determine the direction of this relationship or whether other factors mediate the relationship between friendship dynamics and body image perceptions. Previous research suggests that during adolescence, body satisfaction is at its

lowest, and negative body image evaluation is heightened, for both boys and girls (Fenton et al., 2010; Kostanski et al., 2004). Given that many physical and hormonal transformations are taking place during this life stage (Abbott and Barber, 2010), it is no surprise that awareness towards and preoccupation with body image is salient. It is thus important to identify protective factors that contribute to positive body image development. Our study highlights the relevance of strong friendship dynamics for the positive evaluation of physical self. Specifically, strong friendship dynamics may help to promote body acceptance and appraisal and enable adolescents to cope with their changing physique. Similar to cyberbullying, there was no association between underweight perception and friendship dynamics. This association has not yet been explored in the literature; thus, future research is needed to substantiate our findings.

Finally, given that cyberbullying and friendship dynamics were (separately) found to impact adolescent body image in this study, we sought to explore whether the relationship between cyberbullying and body image was mediated by friendship dynamics, given that peers were found to be protective against body dissatisfaction in our initial analysis and have been found to impact how adolescents think about their bodies in previous research (Webb and Zimmer-Gembeck, 2013). Results from the mediation analyses found that strong friendship dynamics partially mediate the relationship between cyberbullying and perceptions of feeling too fat, for both boys and girls. However, we acknowledge that our results suggest that the two variables, friendship dynamics and cyberbullying, are independently associated with perceptions of being too fat, with only a minor mediating effect of friendship dynamics. Therefore, future research is needed to explore the relationship between friendship dynamics, cyberbullying experiences and perceptions of feeling too fat among school-aged children. It is possible, although not explored in this study, that appearance, including one's weight status, was targeted in the cyberbullying incident and that friends, in

turn, provide appearance reassurance, during or subsequent to cyberbullying experiences to the cyber victim. Moreover, we found that friendship dynamics did not mediate the relationship between cyberbullying experiences and perceptions of being too thin, for either boys or girls. Perhaps, this suggests, given the obesity stigma inherent within peer environments (Kenny et al., 2016), that friends know how to support overweight friends (although adolescent weight status is unknown in this study), rather than those who feel too thin.

### Limitations and future directions

The cross-sectional study design does not allow us to draw any conclusions about causal relationships or to differentiate a precursor of body dissatisfaction from a consequence of body dissatisfaction for the relationships explored in this study. Another limitation of this study is that it relied on self-report for all variables. However, students were ensured complete anonymity and, therefore, had no reason to misreport their responses. This study also had a higher proportion of female participants; however, we stratified results by gender to combat this. It is also important to note the strengths of our study. The main strength of this article is that to our knowledge, it is one of the first studies to examine the relationship between friendship dynamics and body image in the Irish context. Other strengths of this study include the large and nationally representative sample of adolescents and the use of standardised and validated research methods. However, it would be useful to determine whether our results apply to adolescents in other countries where cultural differences will apply and where the impact of both cyberbullying and friendship dynamics may differ. Finally, the question for assessing cyberbullying in this study has not yet been validated. Its validity should be confirmed in future research. Furthermore, future research could examine the mediating role of objectively measured weight status in the relationship between cyberbullying and body dissatisfaction. While overweight

perception, whether accurate or not, is key (Kantanista et al., 2015), the role of actual body weight should also be teased out.

### Conclusion

To sum up, this study suggests an association between cyberbullying and body dissatisfaction among adolescents. Gender differences were clear; girls were more likely than boys to report being too fat, being a victim of cyberbullying and were more likely to report stronger friendship dynamics. Finally, this study revealed that the relationship between cyberbullying and body dissatisfaction is partially mediated by strong friendship dynamics. Results of this study should be used to gain a better understanding of factors that contribute to adolescent body dissatisfaction. Since body dissatisfaction and cyberbullying are prevalent among adolescents, future research should examine the causal relationship of these variables, beyond friendship dynamics, to assess whether other variables are protective against or contribute to body dissatisfaction and cyberbullying.

### Acknowledgements

The authors of this study wish to thank all the schools and students who took part in the HBSC surveys and the Department of Health for funding the Irish HBSC study.

### Declaration of conflicting interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship and/or publication of this article.

### Funding

The author(s) disclosed receipt of the following financial support for the research, authorship, and/or publication of this article: The HBSC study was funded by the Irish Department of Health.

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## **Appendix 2: Focus Group Protocol – Phase 1**

### *Focus Group Question Protocol*

1. What do you think body image means?
2. How do you think peers influence body image?
3. Do you think this influence is positive and/or negative?
4. Do you think friends influence body image differently than peers?
5. How do you think body image could be improved for adolescents in Ireland?
6. What to you was the most important thing discussed today?

### Appendix 3: Letter to Principal: Phase 1



Dear Principal,

Many thanks for agreeing to take part in my study. I have outlined below exactly what it will involve, following our discussion yesterday.

This study involves students taking part in a group discussion about three themes; body image, friendships and peer influences. Students aged 13-17 years are of interest, therefore access to 2<sup>nd</sup>, 4<sup>th</sup> and 5<sup>th</sup> year would be welcomed. It is anticipated that the selection of such year groups will allow me to compare and contrast data obtained from students, both in early and late adolescence.

A total of 6 students from each year group will be invited to participate in the group discussions. The selection of students who volunteer to take part will be randomly selected by me. It is anticipated that the group discussions will take place in school classrooms and will run over the course of one class period hour. I would like to audio record all focus groups with permission from you and the selected students.

The list of questions for the focus group discussions can be sent to you for your prior perusal; please contact me if you would like a copy. I have attached information sheets for parents and students. I can post these to you or you can print them at the school. Whichever is the most convenient for you please do let me know? Written consent will be requested if you consider this to be appropriate for you school. Your school's involvement will not be publicised nor will it be possible to identify the school, class within it, or any individual pupil. Ethical approval for this study has been granted by the Research Ethics Committee, NUIG, Ireland.

The desired outcome of this study is to improve body image among young people in Ireland, which in turn will contribute to young people's mental health.

Many thanks for your time.

Yours sincerely,

Ursula Kenny

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Health Promotion Research Centre

National University of Ireland, Galway

Email: [u.kenny2@nigalway.ie](mailto:u.kenny2@nigalway.ie)

## Appendix 4: Letters to parents (Passive consent) – Phase 1

### Peer Influences on Body Image among adolescents in Ireland



Dear Parent,

I am writing to ask for your permission for your child to take part in a group discussion in school. The group discussion will help to find out about teenagers' body image and whether peers and friends influence their perceptions.

This group discussion will contribute to the work of my PhD which is being conducted in the Health Promotion Research Centre, National University of Ireland, Galway. Your child's school is one of the schools within the Galway city region that is being invited to take part.

The purpose of the research and what is involved for your child is described in the information sheet enclosed. If there is anything that is not clear, or you would like more information, please get in touch using the contact details below.

Please could you sign the attached consent form, indicating whether or not you would like your child to take part, and ask your child to bring it into school tomorrow. You can decline your child's participation without giving reasons. Your decision will not affect your rights in any way. You can withdraw your consent, without giving a reason, by contacting the school before the group discussion.

I hope that you will be happy for your child to take part in this study. Thank you for your time.

Yours sincerely,

Ursula Kenny  
PhD candidate  
Áras na Coiribe,  
Health Promotion Research Centre,  
NUI Galway.  
Ph (091) 493149  
Email: [u.kenny2@nuigalway.ie](mailto:u.kenny2@nuigalway.ie)

Dr Colette Kelly  
Senior Researcher  
Áras na Coiribe,  
Health Promotion Research Centre,  
NUI Galway.  
Ph (091) 493186  
[colette.kelly@nuigalway.ie](mailto:colette.kelly@nuigalway.ie)

## Appendix 5: Letters to Parents (Active Consent) – Phase 1

### Peer Influences on Body Image among adolescents in Ireland



Dear Parent,

I am writing to ask for your permission for your child to take part in a group discussion in school. The group discussion will help to find out about teenagers' body image and whether peers and friends influence their perceptions.

This group discussion will contribute to the work of my PhD which is being conducted in the Health Promotion Research Centre, National University of Ireland, Galway. Your child's school is one of the schools within the Galway city region that is being invited to take part.

The purpose of the research and what is involved for your child is described in the information sheet enclosed. If there is anything that is not clear, or you would like more information, please get in touch using the contact details provided below.

If you do **NOT** want your child to participate please sign the attached consent form and ask your child to bring it into school tomorrow. You can decline your child's participation without giving reasons. Your decision will not affect your rights in any way. If I do not receive a form from you, your child will be invited to participate. You can withdraw your consent, without giving a reason, by contacting the school before the focus group.

I hope that you will be happy for your child to take part in this group discussion. Thank you for your time.

Yours sincerely,

Ursula Kenny  
PhD candidate  
Áras na Coiribe,  
Health Promotion Research Centre,  
NUI Galway.  
Ph (091) 493149  
Email: [u.kenny2@nuigalway.ie](mailto:u.kenny2@nuigalway.ie)

Dr Colette Kelly  
Senior Researcher  
Áras na Coiribe,  
Health Promotion Research Centre,  
NUI Galway.  
Ph (091) 493186  
[colette.kelly@nuigalway.ie](mailto:colette.kelly@nuigalway.ie)

## Appendix 6: Participant Information – Phase 1

### Participant Information



### Peer influences on body image among adolescents in Ireland

#### Part 1: Invitation

Your child is being invited to take part in a study about how friends and peers influence body image. Before you decide whether or not to take part, it is important for you to understand why the research is being done and what it will involve.

If you agree to your child taking part, I will ask you and your child to sign a *Consent Form*. If there is anything that you are not clear about, I will be happy to explain it to you.

Thank you for reading this.

#### Part 2: The purpose of the study

This study aims to learn about the ways in which teenage friends and peers have an influence on body image.

In order to do this, I would like to talk to your child in a small group (no more than 7 people) for approximately one hour.

#### Privacy

Your child's name will not appear in any reports from this study. All information collected during the research will be stored in a way that protects your child's identity. Only the researcher and her supervisor will have access to the information, which will be password protected.

#### Part 3: Taking part- what it involves

Taking part in the study will involve a group discussion with Ursula Kenny (the researcher). The group discussion will include your child and up to 6 other students from the school. In this group discussion I will ask your child some questions on the following key themes; body image, friendships and peer influences. The idea of the discussion is to give your child an opportunity to express his/her thoughts and feelings about these themes. There will be no right or wrong answer and your child's opinions will not be judged.

The interview will be recorded and later studied.

***What are the possible benefits in taking part?***

Taking part in the research will help the researcher to develop a clear picture of whether peers and friends have an influence on body image among teenagers. It will also allow your child to give his/her opinions on the subject which will be kept strictly confidential.

***What are the possible disadvantages in taking part?***

There are no foreseeable risks attached to taking part in this study.

***What happens at the end of the study?***

The findings will form part of a research study that will be submitted for examination in the National University of Ireland, Galway. The findings will be used to inform the Department of Children and Youth Affairs and the Department of Education with respect to friendship and peer influences on body image and mechanisms to improve body image among youth in Ireland.

***Do I have to take part?***

It is up to you whether or not you would like your child to take part. If you decide to take part, you are still free to withdraw at any time without giving a reason.

***What happens if I change my mind during the research?***

You can change your mind about taking part at any time during the study without disadvantage.

***What if I have a question during my participation in the study?***

If you have any questions in relation to the research process you may refer these to:

Ursula Kenny  
PhD candidate  
Áras na Coiribe,  
Health Promotion Research Centre,  
NUI Galway.  
Ph (091) 493149  
Email: [u.kenny2@nuigalway.ie](mailto:u.kenny2@nuigalway.ie)

Dr Colette Kelly  
Senior Researcher  
Áras na Coiribe,  
Health Promotion Research Centre,  
NUI Galway.  
Ph (091) 493186  
[colette.kelly@nuigalway.ie](mailto:colette.kelly@nuigalway.ie)

## Appendix 7: Student Consent Forms – Phase 1

### Peer Influences on Body Image among adolescents in Ireland



#### STUDENT CONSENT FORM

I confirm that I have read the information sheet (or that its contents have been fully explained to me) and I am satisfied that I understand the information provided. I have had enough time to consider the matter and I have decided to take part in the study.

I understand that my participation is voluntary and that I am free to withdraw from the study at any time with no disadvantage to myself.

Name of Participant: \_\_\_\_\_

Date: \_\_\_\_\_

Signature: \_\_\_\_\_

## Appendix 8: Information sheet for Principal (HBSC Pilot) – Phase 2

### SCHOOL PRINCIPAL INFORMATION SHEET

The 2014 World Health Organisation cross-national study, **Health Behaviour in School-aged Children** (HBSC) aims to gain new insight into, and increase our understanding of young people's health and well-being, health behaviours and their social context. HBSC is an international study involving pupils from 43 countries. HBSC Ireland is funded by the Department of Health and is conducted by the Health Promotion Research Centre, NUI, Galway ([www.nuigalway.ie/hbsc](http://www.nuigalway.ie/hbsc)). This will be the fifth time that HBSC Ireland is involved in this international collaboration; copies of earlier reports can be found at [www.hbsc.org](http://www.hbsc.org).

**Q. How does the HBSC survey differ from other surveys on health behaviour?**

**A.** HBSC is unique because it attempts to shed light on the factors that shape and influence health and health behaviour. As well as investigating health indicators, questions on family, school and peer settings, and the socio-economic environment in which young people grow up are included. In addition, the international aspect of HBSC helps us to exchange successful strategies and practices with other countries.

**Q. How will the results of this study be used?**

**A.** HBSC data have been widely published (see [www.hbsc.org](http://www.hbsc.org)). The WHO, the EU, the European Commission and the UN have used the findings to help develop policy to improve children's lives. In Ireland the data collected have helped to inform national health policy and health services planning, and have been included as indicators of child well-being by the Department of Children and Youth Affairs. The new data will be relevant to everyone working with and for children, be they policy makers, planners, educators, teachers, parents, care givers and young people themselves.

**Q. Who supports this survey?**

**A.** The Department of Children and Youth Affairs supports and recognises its importance. We have also fully informed the organisations representing school management, teachers and parents. HBSC Ireland is funded by the Department of Health. Approval to conduct the HBSC survey was obtained from NUI, Galway Research Ethics Committee.

**Q. How were schools selected?**

**A.** A sample of schools was selected randomly in a way that ensures equal representation of children and adolescents in education in Ireland. All types of schools have been selected, right around the country.

**Q. What if schools or students do not choose to participate?**

**A.** Participation in the 2014 HBSC is completely voluntary. Parents and students can also choose whether they want to participate. However, in order to fulfil the aims and objectives of the study, participation rates must be high.

**Q. Is parental consent required?**

**A.** The school principal can choose whether 'opt-in' or 'opt-out' parental consent is most appropriate for their school. 'Opt-in' consent requires parents to return a signed consent form before their child can participate. This maximises parental rights and ensures that no child is involved when their parents do not wish them to be, but children may forget to bring in their consent forms. 'Opt-out' consent means that parents are only required to respond when they DO NOT want their child to participate. This tends to improve participation rates, is more representative and less onerous in terms of organisation, but there is no guarantee that information on the study has been seen by parents. Whichever you choose for your school, all letters and forms will be supplied by the research centre.

**Q. Is student participation anonymous?**

**A.** Survey administration procedures are designed to protect student privacy and allow for anonymous participation. No personal identifiers are used on any of the materials. Reports will not include names of participating schools, classes or students.

**Q. Are students tracked over time to see how their behaviour changes?**

**A.** No. Participating students cannot be tracked because no identifying information is ever connected to their completed questionnaire.

**Q. How many students will be surveyed altogether?**

**A.** HBSC Ireland aims to involve at least 15,000 students.

**Q. What grades are included?**

**A.** In Ireland, HBSC 2014 will be administered to students in primary (3<sup>rd</sup> to 6<sup>th</sup> class) and in post-primary schools (excluding Leaving Certificate year).

**Q. How many students will be surveyed in each selected school?**

**A.** This depends on the size of the classes. One class will be selected at each grade level.

**Q. What kinds of questions are asked in the HBSC survey?**

**A.** An advisory group has assisted us in choosing the questions for HBSC 2014. To understand the factors that shape and influence health and health behaviour, the survey asks questions about nutrition and dietary practices, physical activity, injuries, relationships with family and friends, perceptions of school as a supportive environment, alcohol and tobacco use, drug use, and the communities in which the students live. The survey includes questions on sexual health for pupils aged 15 years and older. Students are free to choose which questions they answer.

**Q. Who administers the survey to the students?**

**A.** Teachers that have been nominated by the Principal will administer the survey. Guidelines for the ideal conditions, (i.e., an exam setting), will be provided. Students will seal their questionnaires in blank envelopes provided prior to collection; this assures the anonymity of students.

**Q. How long does it take to fill out the questionnaire?**

**A.** Approximately 30 minutes. Children in 3<sup>rd</sup> and 4<sup>th</sup> class receive a shorter questionnaire than older children. No physical test or examination is involved.

**Q. When will the data be collected?**

**A.** Data collection will be scheduled from March 2014. The research staff at NUI, Galway will work closely with the school Principal or their nominee to set a time convenient for the school. The research team is available to answer any questions or deal with any problems in the interim.

**Q. How can we get a copy of the survey results?**

**A.** All factsheets and reports are publicly available on our website [www.nuigalway.ie/hbsc](http://www.nuigalway.ie/hbsc) and are sent to participating schools. Further details, on items of particular interest to your school, can also be requested by emailing: [hbcs@nuigalway.ie](mailto:hbcs@nuigalway.ie) or by contacting one of the team at NUIG.

**Q. Where can additional information be obtained?**

**A.** For additional information please contact:

Dr Saoirse Nic Gabhainn  
Principal Investigator, HBSC Ireland  
Health Promotion Research Centre  
National University of Ireland, Galway  
E mail: [hbcs@nuigalway.ie](mailto:hbcs@nuigalway.ie)  
Local phone number: 1890 253122

## Appendix 9: Letter to Parents - (HBSC Pilot) – Phase 2



Dear Parent,

### **2013 Pilot *Health Behaviour in School-aged Children* (HBSC) Survey**

I am writing to ask for your permission for your child to take part in the pilot survey for the 2013 HBSC survey in school. The aim of the pilot survey is to find out whether the children understand the questions, if they are relevant for their age group and what changes might be required to the questionnaire as we would like to resolve any practical issues that could arise before the main survey. The pilot questionnaire asks about a range of health issues including life satisfaction, happiness, injuries and accidents, smoking, drinking and drugs, relationships with others and romantic/sexual behavior, bullying, disability, who students live with; and whether they provide care for a friend or family member experiencing health problems.

The HBSC survey is being conducted by the Health Promotion Research Centre, National University of Ireland, Galway and is funded by the Health Promotion Policy Unit of the Department of Health. It is part of a bigger study being supported by the World Health Organisation and involving children from 43 countries.

If you would like more information, please get in touch with us on Locall 1890 253122 or at [hbsc@nuigalway.ie](mailto:hbsc@nuigalway.ie) . We also have a website which may be accessed at [www.nuigalway.ie/hbsc](http://www.nuigalway.ie/hbsc).

Please could you sign the attached consent form indicating whether or not you would like your child to take part and ask your child to bring it into school tomorrow. You can decline your child's participation without giving reasons. Your decision will not affect your rights in any way. You can withdraw your consent, without giving a reason, by contacting the school before the survey.

We hope that you will be happy for your child to take part in this pilot survey for the 2013 Health Behaviour in School-aged Children survey. If you have any queries about this study please do not hesitate to contact us. Thank you for your time.

Yours sincerely,

**Dr Colette Kelly**

Senior Researcher

Health Promotion Research Centre

National University of Ireland, Galway

Email: [Colette.kelly@nuigalway.ie](mailto:Colette.kelly@nuigalway.ie)

**Appendix 10: Parental Consent forms (Active and Passive; HBSC Pilot) Phase 2**



**World Health Organisation**

**Pilot Health Behaviour in School-aged Children Survey 2013**

**CONSENT FORM**

I have read the information sheet, understand what is involved and have had time to think about whether my child will take part in this survey. I understand that taking part is voluntary (it is his or her choice) and that we are free to withdraw from the research at any time without giving a reason.

Name of Pupil:
Class:
Name of Parent/ Guardian:

My child **DOES** have my permission to participate in the WHO Health Behaviour in School-aged Children pilot Survey 2013.

**Signature of Parent/Guardian:**

**Date:**

**OR**

My child **DOES NOT** have my permission to participate in the WHO Health Behaviour in School-aged Children pilot Survey 2013.

**Signature of Parent/Guardian:**

**Date:**

## Appendix 11: Guidelines for HBSC questionnaire administration for Schools – Phase 2 and 3



### **Guidelines for teachers carrying out the HBSC survey in the classroom**

*Thank you for your help in conducting this survey. It is part of a larger World Health Organization collaborative study that will be conducted in 43 countries during this school year. HBSC was initiated in 1982 and is conducted every 4 years. Ireland has been involved since 1998. The study is looking at health behaviours, lifestyles and their contexts amongst young people and how these may change over time. The survey is being conducted by the Health Promotion Research Centre, NUI Galway and funded by the Department of Health. The Department of Children and Youth Affairs also supports the study. Ethical approval has been obtained from NUI, Galway Research Ethics Committee. The following guidelines have been drawn up as part of a common procedure to be used by all participants in the survey. Please read them carefully before administering the questionnaire. Thank you.*

#### **Conditions in classroom**

*It is vital that students are not rushed, as this will affect the validity of their answers. Ideally the questionnaire should be completed in a normal classroom environment but under exam conditions, i.e. **students should not be allowed to talk or be able to see each other's answers**. The time it takes for students to complete the questionnaire will vary. Following pilot studies, we estimate 30 minutes for mixed ability groups, depending on age. It is important that students requiring less time do not disturb other students who have not yet finished and so instructions should be given to carry on with other work after completing the questionnaire. Similarly, if some pupils are not participating in the survey, they should be given something else to do.*

#### **Giving help**

*The questionnaire is self-explanatory but students may still have problems completing it for one reason or another. Help should only be given if the problem is a straightforward practical one, e.g. whether to place a tick or a number in a box. If the request for help would mean interpreting a question or suggesting an answer for the student, then the student should be instructed to answer as best as he/she can or to answer the question as he/she understands it. If a student does not understand a question at all, they should enter the 'don't know' response if there is one, or write 'I don't understand' next to the question.*

#### **Information on the class**

Please complete the attached classroom information form giving details of the number of students present, the number absent and the reasons for absence where known.

### **Instructions to students**

Students need to be assured of **confidentiality and anonymity**. They should seal the questionnaires themselves in the envelopes provided once they have finished. You may find the following text useful to read out at the beginning of the class. However you choose to explain the procedure, please stress the points in bold type.

Our school is taking part in a study about the ways that young people live in Ireland.

You will be asked to fill in a questionnaire, mostly by ticking the box that best fits your answer. **Nobody at the school, including me, or at home will see your answers. Don't write your name on the questionnaire. When you have filled it in, put the questionnaire in the envelope and seal it.** The questionnaires will then be sent back to the researchers at NUI, Galway.

**The same questions are being asked of young people from many different countries with different ways of life, so some of the questions may seem a bit unusual to you.**

**Before you start, read the instructions on the first page carefully. Answer the questions as honestly as you can** but don't spend too much time on each question. **You should not talk to each other until everyone has finished.** Remember that it is your own opinion that is of interest and not that of anyone else. Although there will be no talking, **the questionnaire is not a test and there are no right or wrong answers.** When you have finished, please read a book or get on with your own work quietly. You can start now.

When all pupils have finished and have sealed their blank envelopes, the envelopes need to be collected and placed into the large *freepost* envelope(s), along with the classroom information forms and any unused questionnaires. These should be given back to the school co-ordinator for return to NUI, Galway.

### **Additional information for students:**

Please can you remind students that a list of useful contacts and websites on health issues can be found on the information sheet that was given to them before the day of the survey.

THANK YOU FOR YOUR HELP!

## Appendix 12: Thank you letters to schools (HBSC Pilot) – Phase 2



Dear Sir/Madam,

*RE: Health Behaviour in School-aged Children (HBSC) Survey - Pilot*

Thank you very much for taking part in the 2014 Health Behaviour in School-aged Children (HBSC) pilot survey. We really appreciate the time and effort that you, the teachers and the students have put into the survey.

We will continue to work with schools to pilot questions in preparation for the 2014 survey. In the meantime, we continue to use the data collected from school children in 2010 and you can keep up to date with the 2010 Irish HBSC survey by logging onto our website ([www.nuigalway.ie/hbsc](http://www.nuigalway.ie/hbsc)) and also with the international HBSC study by logging onto [www.hbsc.org](http://www.hbsc.org).

Once again, thank you for taking part in the pilot phase of the 2014 HBSC survey and please find enclosed a certificate of thanks from the HBSC Ireland team.

Yours sincerely,

Dr Colette Kelly

Senior Researcher

Health Promotion Research Centre

National University of Ireland, Galway

Ph (091) 493186

E mail: [colette.kelly@nuigalway.ie](mailto:colette.kelly@nuigalway.ie)

## Appendix 13: Information sheet – 2013/14 HBSC Study – Phase 2 and Phase 3

### INFORMATION SHEET

The World Health Organization *Health Behaviour in School-aged Children* (HBSC) study aims to find out about children's health. HBSC is an international survey involving more than 200,000 children from 43 countries. This will be the fifth time that Ireland is involved.

#### **Q. Why is the survey being done?**

**A.** The results will help us to measure and understand the behaviours that influence young people's health. The results will also help with future development of health-related policy and practice, creating better opportunities for young people's health.

#### **Q. How was my child picked to be in the survey?**

**A.** Students from 200 schools across the country are being invited to take part. In each school classes in each year/grade were picked randomly.

#### **Q. What is involved in this research study?**

**A.** Your child will be invited to complete a questionnaire in class. All information collected is **totally confidential** and it will not be possible to identify the responses from any individual child. Pupils will not be contacted again for follow-up.

#### **Q. What kinds of questions are asked on the HBSC?**

**A.** The survey includes questions on diet, physical activity, injuries, relationships with family and others, perceptions of school as a supportive environment, alcohol and tobacco use, drug use, and the communities in which the students live. The survey includes questions on sexual health for those aged 15 years and older. Children are free to choose which questions they answer.

#### **Q. How long does it take to fill out the survey?**

**A.** The survey takes about 30 minutes to complete. Children in 3<sup>rd</sup> and 4<sup>th</sup> class receive the shortest questionnaire. The survey does *not* include a physical test or an exam.

#### **Q. Will students' names be used or linked to the surveys?**

**A.** The questionnaire is confidential and students do not put their names on the survey. No information on any individual child will ever be made public. Reports will not include names of participating schools or students.

**Q. What if schools or students don't want to take part?**

**A.** The decision to take part is completely voluntary, but we hope that as many people as possible will agree to help with this research.

**Q. Who will benefit from the study?**

**A.** The results of this study will be relevant to everyone working with and for children; policy makers, teachers, parents, care-givers and young people themselves. For example, results from previous surveys have been used in developing health-related policies, including the National Health Promotion Strategy and The National Children's Strategy.

**If you have any further questions** please do not hesitate to contact us on Locall: 1890 253122 or at [hbsc@nuigalway.ie](mailto:hbsc@nuigalway.ie). You can also look on the internet at [www.nuigalway.ie/hbsc](http://www.nuigalway.ie/hbsc).

## Appendix 14: Letter to parents – 2013/14 HBSC study – Phase 2 and Phase 3



Dear Parent,

### **2014 Health Behaviour in School-aged Children (HBSC) Survey**

I am writing to ask for your permission for your child to take part in a survey in school. The survey will help us to find out about children's health. It is part of a bigger study being supported by the World Health Organization and involving children from 43 countries.

This survey is being conducted by the Health Promotion Research Centre, National University of Ireland, Galway and is funded by the Department of Health. The Department of Children and Youth Affairs is also aware and supportive of the study. Your child's school is one of over 200 schools across the country that is being invited to take part.

The purpose of the research and what is involved for your child is described in the information sheet enclosed. If there is anything that is not clear or if you would like more information, please get in touch with us on the numbers below or look on the internet at [www.nuigalway.ie/hbcs](http://www.nuigalway.ie/hbcs). If you would like a copy of the questionnaire please contact either of us on Locall 1890 253122 or at [hbcs@nuigalway.ie](mailto:hbcs@nuigalway.ie).

Please could you sign the attached consent form indicating whether or not you would like your child to take part and ask your child to bring it into school tomorrow. You can decline your child's participation without giving reasons. Your decision will not affect your rights in any way. You can withdraw your consent, without giving a reason, by contacting the school before the survey.

We hope that you will be happy for your child to take part in this 2014 Health Behaviour in School-aged Children survey. If you have any queries about this study please do not hesitate to contact either of us. Thank you for your time.

Yours sincerely,

Dr Colette Kelly  
Senior Researcher  
Áras na Coiribe,  
Health Promotion Research  
Centre,  
NUI Galway.  
Ph (091) 493186  
[colette.kelly@nuigalway.ie](mailto:colette.kelly@nuigalway.ie)

Dr Saoirse Nic Gabhainn  
Principal Investigator, HBSC Ireland  
Health Promotion Research Centre  
National University of Ireland,  
Ph (091)493093  
Email:[saoirse.nicgabhainn@nuigalway.ie](mailto:saoirse.nicgabhainn@nuigalway.ie)

## Appendix 15: Participant information – 2013/14 HBSC study – Phase 2 and Phase 3



### *2014 Health Behaviour in School-aged Children (HBSC) study in Ireland*

A WORLD HEALTH ORGANISATION CROSS-NATIONAL STUDY



#### **INFORMATION FOR PUPILS**

##### **Who is running the study?**

The study is being done by researchers from the Health Promotion Research Centre, National University of Ireland, Galway. About 10,000 pupils from 200 schools all across Ireland are taking part in the study. Your school is one of those that have been chosen to take part.

##### **What is the study about?**

The aim of our study is to find out about health behaviours of young people.

##### **What have I got to do?**

We will ask you to fill in a questionnaire about all different types of health behaviours like smoking and physical activity. **This questionnaire will only be seen by the research team, not by anyone you know, and it will not have your name on it.** You don't have to answer any question if you don't want to. Please just write beneath the question that you did not want to answer it.

##### **Will anyone know what I write?**

Keeping your answers private is very important so don't put your name anywhere on the questionnaire. Your parents, teachers and friends will not see the answers you write. The only people who will see the answers you write will be the people on the research team and they will not have your name.

### **Do I have to take part in this?**

Your school has already agreed to take part in the study. Your parents have also been sent a letter and they have been asked to say if they do not wish you to take part.

**But you do not have to take part if you do not want to. Remember that all of the information that you give us will only be seen by the research team and will not have your name on it. No information that you give us about your experiences will be given to parents, teachers or friends.**

We do hope that as many pupils as possible will agree to take part because the information you give us is very important.

### **What if I've got some questions?**

If you have any questions about the study you can ring the research centre on Locall: 1890 253122. You can also e-mail [hbsc@nuigalway.ie](mailto:hbsc@nuigalway.ie).

You can also look at our website: <http://www.nuigalway.ie/hbsc/> and you will also find information on <http://www.hbsc.org>.

### **What if I've got some questions on health topics that were included in the questionnaire?**

We have provided a list of websites and helplines below that you should find useful in answering some of your questions.

#### **Websites:**

Alcohol Awareness – [www.yourdrinking.ie](http://www.yourdrinking.ie)

Alcohol related issues – [www.drinkhelp.ie](http://www.drinkhelp.ie)

Aware – Helping to Defeat Depression – [www.aware.ie](http://www.aware.ie)

B4 U Decide - [www.b4udecide.ie/B4-U-Decide.html](http://www.b4udecide.ie/B4-U-Decide.html)

Barnardos – Ireland's Leading Children's Charity - [www.barnardos.ie](http://www.barnardos.ie)

Bodywhys – The Eating Disorders Association of Ireland – [www.bodywhys.ie](http://www.bodywhys.ie)

CARI – Children at Risk in Ireland – [www.cari.ie](http://www.cari.ie)

Childline – Listening to Children - [www.childline.ie](http://www.childline.ie)

Children’s Rights Alliance – Securing the rights and needs of Children in Ireland – [www.childrensrights.ie](http://www.childrensrights.ie)

Crisis Pregnancy Agency – [www.crisispregnancy.ie](http://www.crisispregnancy.ie)

Dental Health Foundation – [www.dentalhealth.ie](http://www.dentalhealth.ie)

Drugs Awareness Programme – [www.drugs.ie](http://www.drugs.ie)

Foróige – Empowering Youth - [www.foroige.ie](http://www.foroige.ie)

Health Promotion Unit – [www.healthpromotion.ie](http://www.healthpromotion.ie)

Irish Society for the Prevention of Cruelty to Children – [www.ispcc.ie](http://www.ispcc.ie)

Irish Youth Federation – [www.iyf.ie/](http://www.iyf.ie/)

Mental Health Ireland – Supporting Positive Mental Health – [www.mentalhealthireland.ie](http://www.mentalhealthireland.ie)

National Youth Council of Ireland – [www.youth.ie/](http://www.youth.ie/)

Positive Options Crisis Pregnancy Service – [www.positiveoptions.ie](http://www.positiveoptions.ie)

Samaritans – 24 hour emotional support – [www.samaritans.org](http://www.samaritans.org)

Scoilnet, Portal for Irish Education – [www.scoilnet.ie](http://www.scoilnet.ie)

Spunout – Advice on young people’s health issues – [www.spunout.ie](http://www.spunout.ie)

Teen-line Ireland – Listening service for teenagers – [www.teenline.ie](http://www.teenline.ie)

**Helplines:**

Bodywhys – 1890 200 444

Childline – 1800 66 66 66

Drugs Helpline – 1800 459 459

Samaritans – 1850 609 090

**Thank You.**

## Health Behaviour in School-aged Children

A World Health Organisation Study

2014

*This questionnaire is intended for 2nd – 5th year students.*

This is a survey about health and the way in which young people live. We hope you will help us to find out more about young people's health by answering the questions in this survey. The same questions are being used in surveys in 42 other countries.

Your answers will be looked at by the survey team and by no-one else. They will not be seen by your parents or teachers. You should not write your name on the questionnaire. After you have filled it in, you can put it in the envelope provided and seal it.

Because the questions are being asked of young people up to 18 years of age, and from different countries and cultures, some of them may seem a bit unusual to you. Please take your time to read each question carefully and answer it as honestly as you can. Remember that we are only interested in your opinion; there are no right or wrong answers.

### Things you need to know:

- If you do not want to take part, just give the questionnaire back to your teacher.
- You do not have to answer any of the questions if you do not want to.
- For most questions you will be asked to tick the box that best fits your answer.

Example:

#### 1. Is Michael D Higgins President of Ireland?

Yes  No

If it is difficult to choose just one answer, please think about what is **true most of the time**.

We hope you enjoy filling it in, thank you for helping us with this survey.

## 1. ABOUT YOU

### 1. Are you a boy or a girl?

Boy  Girl

### 2. What Class are you in?

5th class   
6th class   
1st year   
2nd year   
3rd year   
4th year   
Transition year   
5th year

### 3. What month were you born?

Jan Feb Mar Apr May June July Aug Sept Oct Nov Dec

### 4. What year were you born?

1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005

### 5. In which country were you born?

Ireland  
 England  
 Poland  
 USA  
 Nigeria  
 Another country (fill out): .....  
 Don't know

**6. In which country was your mother born?**

- Ireland
- England
- Poland
- USA
- Nigeria
- Another country (fill out): .....
- Don't know

**7. In which country was your father born?**

- Ireland
- England
- Poland
- USA
- Nigeria
- Another country (fill out): .....
- Don't know

**8. Are you a member of the Travelling community?**

- Yes  No

**2. EATING AND DIETING**

**1. How often do you usually have breakfast (more than a glass of milk or fruit juice)?**

Please tick one box for weekdays and one box for weekend.

<b>Weekdays</b>	<b>Weekend</b>
I never have breakfast during weekdays <input type="checkbox"/>	I never have breakfast during the weekend <input type="checkbox"/>
One day <input type="checkbox"/>	I usually have breakfast on only one day of the weekend (Saturday OR Sunday) <input type="checkbox"/>
Two days <input type="checkbox"/>	I usually have breakfast on both weekend days (Saturday AND Sunday) <input type="checkbox"/>
Three days <input type="checkbox"/>	
Four days <input type="checkbox"/>	
Five days <input type="checkbox"/>	

**2. How many days a week do you usually eat or drink...?**

Please tick one box for each line.

	Never	Less than once a week	Once a week	2-4 days a week	5-6 days a week	Once a day, every day	Every day more than once
Fruits	<input type="checkbox"/>						
Vegetables	<input type="checkbox"/>						
Sweets (candy or chocolate)	<input type="checkbox"/>						
Coke or other soft drinks that contain sugar	<input type="checkbox"/>						
Diet coke or diet soft drinks	<input type="checkbox"/>						
Crisps	<input type="checkbox"/>						
Chips/fried potatoes	<input type="checkbox"/>						
Fish	<input type="checkbox"/>						

**3. How often do you.....?**

Please tick one box for each line.

	Never	Less than once a week	1-2 days a week	3-4 days a week	5-6 days a week	Every day
Have breakfast together with your mother or father?	<input type="checkbox"/>					
Have an evening meal together with your mother or father?	<input type="checkbox"/>					
Watch TV while having a meal?	<input type="checkbox"/>					

**4. Here are some statements about eating meals at home. Please say how much you agree or disagree with each one.**

	Strongly agree	Agree	Disagree	Strongly disagree
In my family there are rules at meal times that we are expected to follow.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
In my family it is ok for a child to have something else to eat if he/she doesn't like the food being served.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
In my family, a child should eat all the food served even if he/she doesn't like it.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
In my family, manners are important at the dinner table.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
In my family, we don't have to eat all meals at the kitchen or dining room table	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**5. Where do you usually eat your lunch on schooldays?**

(If there are two places you may tick 2 boxes)

- At school
- At home
- At someone else's house
- In a snack-bar, fast food restaurant, cafe
- Somewhere else. Please write down where: .....
- I never eat a midday meal

**6. Some young people go to school or to bed hungry because there is not enough food at home. How often does this happen to you?**

- Always
- Often
- Sometimes
- Never

**7. How often do you brush your teeth?**

- More than once a day
- Once a day
- At least once a week but not daily
- Less than once a week
- Never

**8. At present are you on a diet or doing something else to lose weight?**

- No, my weight is fine
- No, but I should lose some weight
- No, because I need to put on weight
- Yes

**3. PHYSICAL ACTIVITY**

Physical activity is any activity that increases your heart rate and makes you get out of breath some of the time. Physical activity can be done in sports, school activities, playing with friends, or walking to school. Some examples of physical activity are running, brisk walking, rollerblading, biking, dancing, skateboarding, swimming, soccer, basketball, football, & surfing.

**1. Over the past 7 days, on how many days were you physically active for a total of at least 60 minutes per day?**

Please add up all the time you spent in physical activity each day.

- |                          |                          |                          |                          |                          |                          |                          |                          |
|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| 0 days                   | 1                        | 2                        | 3                        | 4                        | 5                        | 6                        | 7 days                   |
| <input type="checkbox"/> |

**4. TOBACCO, ALCOHOL AND DRUGS**

**1. On how many days (if any) have you smoked cigarettes?**

Please tick one box for each line

- |                     | Never                    | 1-2 days                 | 3-5 days                 | 6-9 days                 | 10-19 days               | 20-29 days               | 30 days (or more)        |
|---------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| In your lifetime    | <input type="checkbox"/> |
| In the last 30 days | <input type="checkbox"/> |

**2. How frequently have you smoked cigarettes during the last 30 days?**

- Not at all
- Less than 1 cigarette per week
- Less than 1 cigarette per day
- 1-5 cigarettes per day
- 6-10 cigarettes per day
- 11-20 cigarettes per day
- More than 20 cigarettes per day

**3. How often do you smoke tobacco at present?**

- Every day
- At least once a week, but not every day
- Less than once a week
- I do not smoke

**4. On how many days (if any) have you drunk alcohol?**

Please tick one box for each line

	Never	1-2 days	3-5 days	6-9 days	10-19 days	20-29 days	30 days (or more)
In your lifetime	<input type="checkbox"/>						
In the last 30 days	<input type="checkbox"/>						

**5. At present, how often do you drink anything alcoholic, such as beer, wine or spirits?**

**Try to include even those times when you only drink a small amount.**

Please tick one box for each line

	Every day	Every week	Every month	Rarely	Never
Beer (Guinness, lager)	<input type="checkbox"/>				
Wine	<input type="checkbox"/>				
Spirits / Liquor (e.g. vodka, whiskey, shots, brandy, etc.)	<input type="checkbox"/>				
Alcopops (e.g. Bacardi Breezer, Smirnoff Ice)	<input type="checkbox"/>				
Cider (Bulmers, Scrumpy)	<input type="checkbox"/>				
Any other drink that contains alcohol	<input type="checkbox"/>				

**6. How many drinks containing alcohol do you have on a typical day when you are drinking?**

Examples of standard drinks:



- I never drink alcohol
- Less than one drink
- 1 drink
- 2 drinks
- 3 drinks
- 4 drinks
- 5 or more drinks

**7. Have you ever had so much alcohol that you were really drunk?**

Please tick one box for each line

	Never	Yes, once	Yes, 2-3 times	Yes, 4-10 times	Yes, more than 10 times
In your lifetime	<input type="checkbox"/>				
In the last 30 days	<input type="checkbox"/>				

**8. Have you ever taken cannabis (hashish, grass, pot)?**

Please tick one box for each line.

	Never	1-2 days	3-5 days	6-9 days	10-19 days	20-29 days	30 days (or more)
In your life	<input type="checkbox"/>						
In the last 12 months	<input type="checkbox"/>						
In the last 30 days	<input type="checkbox"/>						

**9. At what age did you first do the following things?**

If there is something you have not done, choose the 'never' category.

	Never	11 years old or less	12 years old	13 years old	14 years old	15 years old	16 years or older
Drink alcohol (more than a small amount)	<input type="checkbox"/>						
Get drunk	<input type="checkbox"/>						
Smoke a cigarette (more than a puff)	<input type="checkbox"/>						
Take cannabis	<input type="checkbox"/>						

**10. What are the rules or restrictions, if any, on cigarette smoking when you are in the family car?**

- No one is allowed to smoke
- Smoking is allowed as long as the window is down
- There are no rules or restrictions
- I never drive in cars with people who smoke
- Don't know

**11. What are the rules or restrictions on smoking cigarettes in your house?**

- No one is allowed to smoke inside or outside the house
- No one is allowed to smoke inside, but outside is OK
- Adults are allowed to smoke anywhere in the house
- Adults are allowed to smoke in some rooms
- There are no rules or restrictions on smoking
- Something else (please state) .....

**THE NEXT QUESTIONS ARE ABOUT CIGARETTE PACKS.**

**12. When was the last time you saw or looked at a cigarette pack?**

Tick only one box.

- In the last 6 months.....Go to *QUESTION 13*
- More than 6 months ago.....Go to *QUESTION 15*
- Never.....Go to *QUESTION 16*

**13. How often in the last 6 months have you:**

Please tick one box for each line

	Never	Once or twice	Sometimes	Often	Every time I see them
Read the warnings on a cigarette pack?	<input type="checkbox"/>				
Talked about the warnings on a cigarette pack with others?	<input type="checkbox"/>				
Not had a cigarette because of the warnings on a cigarette pack?	<input type="checkbox"/>				

If you have not had a cigarette in the last 12 months go to *QUESTION 15*

**14. How often in the last 6 months have you:**

	Never	Once or twice	Sometimes	Often	Every time I see them
Thought about quitting or not smoking again because of the warnings on a cigarette pack?	<input type="checkbox"/>				

**15. Thinking about cigarette packs, do you agree or disagree that they:**

	Strongly agree	Agree	Not sure	Disagree	Strongly disagree	Cannot comment
Look cool	<input type="checkbox"/>					
Look disgusting	<input type="checkbox"/>					
Look boring	<input type="checkbox"/>					

**16 At most shops in the area where you live and go to school, how easy or difficult would it be:**

Tick only one box for each line.

	Very easy	Easy	Neither easy nor difficult	Difficult	Very difficult
For you to buy cigarettes?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
For you to get someone else to buy cigarettes for you?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**16. Out of 100 people your age, how many do you think...**

Please write your answer in the space provided.

Smoke cigarettes regularly ..... out of 100

**17. Here are some things that people have said about smoking. We would like to know if you agree or disagree with them.**

	Strongly agree	Agree	Disagree	Strongly disagree	Don't know
Smoking causes lung cancer	<input type="checkbox"/>				
Smoking increases the risk of having a heart attack	<input type="checkbox"/>				
Smoking is addictive	<input type="checkbox"/>				
Tobacco smoke is toxic	<input type="checkbox"/>				
Smoking is a leading cause of death	<input type="checkbox"/>				
Smoking clogs your arteries	<input type="checkbox"/>				
Smoking doubles your risk of stroke	<input type="checkbox"/>				
Smoking causes wrinkling and early aging of the skin	<input type="checkbox"/>				
Smoking can cause a slow painful death	<input type="checkbox"/>				
Smokers die younger	<input type="checkbox"/>				

**5. ABOUT SCHOOL**

**1. In your opinion, what does your class teacher(s) think about your school performance compared to your classmates?**

- Very good
- Good
- Average
- Below average

**2. How do you feel about school at present?**

- I like it a lot
- I like it a bit
- I don't like it very much
- I don't like it at all

**3. Here are some statements about the students in your class(es). Please show how much you agree or disagree with each one.**

Please tick one box for each line.

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
The students in my class(es) enjoy being together	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Most of the students in my class(es) are kind and helpful	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other students accept me as I am	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Students get involved in organising school events	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**4. How pressured do you feel by the schoolwork you have to do?**

- Not at all
- A little
- Some
- A lot

**5. Here are some statements about your school. Please show how much you agree or disagree with each one.**

Please tick one box for each line.

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
In our school the students take part in making the rules	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The rules in this school are fair	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I feel safe at this school	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**6. Here are some statements about your teacher(s). Please show how much you agree or disagree with each one.**

Please tick one box for each line.

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
I am encouraged to express my own views in my class(es)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I feel that my teachers accept me as I am	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I feel that my teachers care about me as a person	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I feel a lot of trust in my teachers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**6. YOU, YOUR HEALTH AND HOW YOU FEEL**

**1. Would you say your health is...?**

- Excellent
- Good
- Fair
- Poor

**2. In general how do you feel about your life at present?**

- I feel very happy
- I feel quite happy
- I don't feel very happy
- I'm not happy at all

**3. How much do you weigh without clothes? .....**

If you don't know write "don't know"

**4. How tall are you without shoes? .....**

If you don't know write "don't know"

**5. Here is a picture of a ladder:**

The top of the ladder '10' is the best possible life for you and the bottom '0' is the worst possible life for you.

**In general, where on the ladder do you feel you stand at the moment?**

Tick next to the number that best describes where you stand.

	10	Best possible life
	9	
	8	
	7	
	6	
	5	
	4	
	3	
	2	
	1	
	0	Worst possible life

**6. In the last 6 months: how often have you had the following...?**

Please tick one box for each line.

	About every day	More than once a week	About every week	About every month	Rarely or never
Headache	<input type="checkbox"/>				
Stomach-ache	<input type="checkbox"/>				
Back ache	<input type="checkbox"/>				
Feeling low	<input type="checkbox"/>				
Irritability or bad temper	<input type="checkbox"/>				
Feeling nervous	<input type="checkbox"/>				
Difficulties in getting to sleep	<input type="checkbox"/>				
Feeling dizzy	<input type="checkbox"/>				

**7. Thinking about the last week.....**

**Have you been happy with the way you are?**

- Never
- Seldom
- Quite often
- Very often
- Always

**8. Do you have a long-term illness, disability, or medical condition (like diabetes, asthma, allergy or cerebral palsy) that has been diagnosed by a doctor?**

Yes   
No

**9. Do you take medicine for your long-term illness, disability or medical condition?**

I do not have a long-term illness, disability or medical condition   
Yes   
No

**10. Does your long-term illness, disability or medical condition affect your attendance and participation at school?**

I do not have a long-term illness, disability or medical condition   
Yes   
No

**11. Do you think your body is....?**

Much too thin   
A bit too thin   
About the right size   
A bit too fat   
Much too fat

**12. What influences how you feel about your body image?**

.....  
.....  
.....

During puberty everyone's body changes in size and shape although this can happen at different ages for different people. The next questions are about physical development that may be happening to you during puberty.

**13. GIRLS ONLY answer here**

**Do you think your physical development is any earlier or later than most other girls your age?**

- Much earlier
- A bit earlier
- About the same
- A bit later
- Much later

**Have you begun to menstruate (have periods)?**

- No, I have not yet begun to menstruate
- Yes, I began at the age of ..... years and ..... months

**BOYS ONLY answer here**

**Do you think your physical development is any earlier or later than most other boys your age?**

- Much earlier
- A bit earlier
- About the same
- A bit later
- Much later

**Have you begun to grow hair on your face?**

- Not yet started
- Barely started
- Definitely underway
- Seems completed

**14. Are you self confident?**

- Always
- Often
- Sometimes
- Never

## 7. BULLYING

Here are some questions about bullying. We say a student is BEING BULLIED when another student, or a group of students, say or do nasty and unpleasant things to him or her. It is also bullying when a student is teased repeatedly in a way he or she does not like or when he or she is deliberately left out of things. But it is NOT BULLYING when two students of about the same strength or power argue or fight. It is also not bullying when a student is teased in a friendly and playful way.

### 1. How often have you been bullied at school in the past couple of months?

- I have not been bullied at school in the past couple of months
- It has only happened once or twice
- 2 or three times a month
- About once a week
- Several times a week

### 2. How often have you taken part in bullying another student(s) at school in the past couple of months?

- I have not bullied another student(s) at school in the past couple of months
- It has only happened once or twice
- 2 or three times a month
- About once a week
- Several times a week

### 3. How often have you been bullied in the following ways?

	I have not been bullied in this way in the past couple of months	Only once or twice	2 or 3 times a month	About once a week	Several times a week
Someone sent mean instant messages, wall postings, emails and text messages, or created a website that made fun of me.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Someone took unflattering or inappropriate pictures of me without permission and posted them online.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**4. In the last couple of months, what did you do when you saw bullying?**

- I didn't see bullying in the last couple of months
- I did nothing, I stepped away
- I did nothing, I just watched
- I helped the victim
- I encouraged the attacker(s)
- I called an adult
- I did something else

**8. VIOLENCE & INJURIES**

**1. During the past 12 months, how many times were you in a physical fight?**

- I have not been in a physical fight in the past 12 months
- 1 time
- 2 times
- 3 times
- 4 times or more

Many young people get hurt or injured from activities such as playing sports or fighting with others at different places such as the street or home. Injuries can include being poisoned or burned. Injuries do not include illnesses such as Measles or the Flu. The following questions are about injuries you may have had during the past 12 months.

**2. During the past 12 months, how many times were you injured and had to be treated by a doctor or nurse?**

- I was not injured in the past 12 months
- 1 time
- 2 times
- 3 times
- 4 times or more

3. If you had more than one injury, think only about the one most serious injury (the injury that took the most time to get better) that you had during the past 12 months.

**Where were you when this one most serious injury happened?**

Tick one box that best describes where you were.

- I was not injured in the past 12 months
- At home/in yard (yours or someone else's)
- School, including school grounds, during school hours
- School, including school grounds, after school hours
- At a sports facility or field (not at school)
- In the street/road/car park
- Other location

4. **What were you doing when this one most serious injury happened?**

Tick one box that best describes what you were doing.

- I was not injured in the past 12 months
- Biking/cycling
- Playing or training for sports/recreational activity
- Skating (including roller blades, skateboards, ice skating)
- Walking/running (not for a sports team or exercise)
- Riding/driving in a car or other motor vehicle
- Fighting
- Paid or unpaid work
- Other activity

5. **Did this one most serious injury need medical treatment such as the placement of a cast, stitches, surgery, or staying in a hospital overnight?**

I was not injured in the past 12 months

Yes  No

6. **How often do you use a seatbelt when you sit in a car?**

- Always
- Often
- Sometimes
- Rarely or never
- Usually there is no seatbelt where I sit
- Never travel by car

## 9. ABOUT YOU AND YOUR FAMILY

### 1. How easy is it for you to talk to the following persons about things that really bother you?

Please tick one box for each line.

	Very Easy	Easy	Difficult	Very Difficult	Don't have or see this person
Father	<input type="checkbox"/>				
Stepfather (or mother's boyfriend)	<input type="checkbox"/>				
Mother	<input type="checkbox"/>				
Stepmother (or father's girlfriend)	<input type="checkbox"/>				
Best Friend	<input type="checkbox"/>				
Friends of the same sex	<input type="checkbox"/>				
Friends of the opposite sex	<input type="checkbox"/>				

### 2. In my family:

	Strongly agree	Agree	Neither agree or disagree	Disagree	Strongly disagree
I think the important things are talked about	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
When I speak someone listens to what I say	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
We ask questions when we don't understand each other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
When there is a misunderstanding we talk it over until it's clear	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### 3. We are interested in how you feel about the following statements.

Read each statement carefully. Indicate how you feel about each statement.

	Very strongly disagree 1	2	3	4	5	6	Very strongly agree 7
My family really tries to help me	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I get the emotional help and support I need from my family	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I can talk about my problems with my family	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
My family is willing to help me make decisions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

All families are different (for example, not everyone lives with both their parents, sometimes people live with just one parent, or they have two homes or live with two families) and we would like to know about yours.

**4. Please answer this question for the home where you live all or most of the time and tick the people who live there.**

**Adults**

- Mother
- Father
- Stepmother (or father's girlfriend)
- Stepfather (or mother's boyfriend)
- Grandmother
- Grandfather
- I live in a foster home or children's home
- Someone or somewhere else   
(please write it down).  
.....

**Children**

Please say how many brothers and sisters live here (including half, step or foster brothers and sisters).  
Please write in the number or write 0 (zero) if there are none.  
Please do not count yourself.

How many brothers? .....

How many sisters? .....

**5. Do you have another home or another family, such as the case when your parents are separated or divorced?**

- Yes
- No

**6. Do you provide regular unpaid personal help for a family member with a long-term illness, health problem or disability? (Includes problems which are due to old age. Personal help includes help with basic tasks such as feeding or dressing).**

- Yes If yes, for how many hours per week ? .....
- No

**7. How well off do you think your family is?**

- Very well off
- Quite well off
- Average
- Not very well off
- Not at all well off

This question is about your parents' jobs. Please answer in both columns.

**8. FATHER**

**Does your father have a job?**

- Yes
- No
- Don't know
- Don't have or don't see father

**If YES, please say in what place he works:**

(for example hospital, bank, restaurant)

.....

**Please write down exactly what job he does there:**

(for example: teacher, bus driver)

.....

**If NO, why does your father not have a job?**

Please tick the box that best describes the situation

- He is sick, or retired or a student
- He is looking for a job
- He takes care of others, or is full-time in the home
- I don't know

**MOTHER**

**Does your mother have a job?**

- Yes
- No
- Don't know
- Don't have or don't see mother

**If YES, please say in what place she works:**

(for example hospital, bank, restaurant)

.....

**Please write down exactly what job she does there:**

(for example: teacher, bus driver)

.....

**If NO, why does your mother not have a job?**

Please tick the box that best describes the situation

- She is sick, or retired or a student
- She is looking for a job
- She takes care of others, or is full-time in the home
- I don't know

## 10. YOUR LOCAL AREA

### 1. Where do you live?

Please tick one option

City

Town

Village

Country

### 2. Generally speaking, I feel safe in the area where I live...

Always

Most of the time

Sometimes

Rarely or never

### 3. Do you think the area in which you live is a good place to live?

Yes, it's really good

Yes, it's good

It's OK

It's not very good

No, it's not at all good

### 4. Please say how you feel about these statements about the area where you live.

Please tick one box for each line.

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
There are good places to spend your free time (e.g. leisure centre, parks, shops)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I could ask for help or a favour from neighbours	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## 11. ABOUT YOU AND YOUR FRIENDS

### 1. At present, how many close male and female friends do you have?

Please tick one box for each column.

#### Male Friends

None   
 One   
 Two   
 Three or more

#### Female Friends

None   
 One   
 Two   
 Three or more

### 2. We are interested in how you feel about the following statements.

Read each statement carefully. Indicate how you feel about each statement.

	Very strongly disagree 1	2	3	4	5	6	Very strongly agree 7
My friends really try to help me	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I can count on my friends when things go wrong	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I have friends with whom I can share my joys and sorrows	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I can talk about my problems with my friends	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### 3. Do you feel comfortable being yourself while with your friends?

Always   
 Often   
 Sometimes   
 Never

### 4. How many days a week do you usually spend time with friends right after school?

0 days    1    2    3    4    5 days  
                   

### 5. How many evenings per week do you usually spend out with your friends?

0    1    2    3    4    5    6    7  
 evenings    evenings

**6. How often do you...**

	Hardly ever or never	Less than weekly	Weekly	Daily
Talk to your friends on the phone or internet-based programmes such as FaceTime or Skype?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Contact your friends using texting/SMS?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Contact your friends using email?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Actively contact your friends using instant messaging (e.g. BBM, Facebook chat)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Contact your friends using other social media, such as Facebook (posting on wall, not chat), My Space, Twitter, Apps (e.g. Instagram), games (e.g. Xbox), YouTube, etc?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**7. Do you feel social networking sites are safe?**

- A lot
- Some
- A little
- Not very much
- Not at all

**12. LEISURE AND OTHER ACTIVITIES IN YOUR FREE TIME**

**1. How many hours a day, in your free time, do you usually spend watching TV, videos (including YouTube or similar services), DVDs and other entertainment on a screen?**

Please tick one box for weekdays and one box for weekend.

	Weekdays	Weekend
None at all	<input type="checkbox"/>	<input type="checkbox"/>
About half an hour a day	<input type="checkbox"/>	<input type="checkbox"/>
About 1 hour a day	<input type="checkbox"/>	<input type="checkbox"/>
About 2 hours a day	<input type="checkbox"/>	<input type="checkbox"/>
About 3 hours a day	<input type="checkbox"/>	<input type="checkbox"/>
About 4 hours a day	<input type="checkbox"/>	<input type="checkbox"/>
About 5 hours a day	<input type="checkbox"/>	<input type="checkbox"/>
About 6 hours a day	<input type="checkbox"/>	<input type="checkbox"/>
About 7 or more hours a day	<input type="checkbox"/>	<input type="checkbox"/>

**2. How many hours a day, in your free time, do you usually spend playing games on a computer, games console, tablet (like iPad), smartphone or other electronic device (not including moving or fitness games)?**

Please tick one box for weekdays and one box for weekend.

	Weekdays	Weekend
None at all	<input type="checkbox"/>	<input type="checkbox"/>
About half an hour a day	<input type="checkbox"/>	<input type="checkbox"/>
About 1 hour a day	<input type="checkbox"/>	<input type="checkbox"/>
About 2 hours a day	<input type="checkbox"/>	<input type="checkbox"/>
About 3 hours a day	<input type="checkbox"/>	<input type="checkbox"/>
About 4 hours a day	<input type="checkbox"/>	<input type="checkbox"/>
About 5 hours a day	<input type="checkbox"/>	<input type="checkbox"/>
About 6 hours a day	<input type="checkbox"/>	<input type="checkbox"/>
About 7 or more hours a day	<input type="checkbox"/>	<input type="checkbox"/>

**3. How many hours a day, in your free time, do you usually spend using electronic devices such as computers, tablets (like iPad) or smartphone for other purposes, for example, homework, emailing, tweeting, facebook, chatting, surfing the internet?**

Please tick one box for weekdays and one box for weekend.

	Weekdays	Weekend
None at all	<input type="checkbox"/>	<input type="checkbox"/>
About half an hour a day	<input type="checkbox"/>	<input type="checkbox"/>
About 1 hour a day	<input type="checkbox"/>	<input type="checkbox"/>
About 2 hours a day	<input type="checkbox"/>	<input type="checkbox"/>
About 3 hours a day	<input type="checkbox"/>	<input type="checkbox"/>
About 4 hours a day	<input type="checkbox"/>	<input type="checkbox"/>
About 5 hours a day	<input type="checkbox"/>	<input type="checkbox"/>
About 6 hours a day	<input type="checkbox"/>	<input type="checkbox"/>
About 7 or more hours a day	<input type="checkbox"/>	<input type="checkbox"/>

### 13. MORE ABOUT YOU AND YOUR FAMILY

1. How many computers does your family own (including laptops and tablets, not game consoles and smartphones)?

- None   
One   
Two   
More than two

2. Does your family own a car, van or truck?

- No   
Yes, one   
Yes, two or more

3. Do you have your own bedroom for yourself?

- Yes   
No

4. Does your family have a dishwasher at home?

- Yes   
No

5. How many bathrooms (room with a bath/shower or both) are in your home?

- None   
One   
Two   
More than two

6. How many times did you and your family travel out of Ireland for a holiday last year?

- Not at all   
Once   
Twice   
More than twice

**7. Do you have an animal/pet?**

- Yes, of my own
- Yes, in our family
- No, but I spend time with animals regularly
- No

**8. At what age should young people be allowed to work? .....**

**9. The voting age is 18. What age do you think it should be? .....**

**10. OUTSIDE SCHOOL HOURS: How often do you usually exercise in your free time so much that you get out of breath or sweat?**

- Every day
- 4 to 6 times a week
- 2 to 3 times a week
- Once a week
- Once a month
- Less than once a month
- Never

**11. OUTSIDE SCHOOL HOURS: How many hours a week do you usually exercise in your free time so much that you get out of breath or sweat?**

- None
- About half an hour
- About 1 hour
- About 2 to 3 hours
- About 4 to 6 hours
- 7 hours or more

## 14. SEXUAL BEHAVIOUR – FOR 15 YEAR OLDS & OLDER

### 1. Are you comfortable talking about your sexuality?

- Yes   
No   
Don't know

### 2. Where did you learn most about sex?

- From my parents   
From friends   
In school   
From the internet   
From TV   
From other printed sources (leaflets, books, etc.)   
Other

### 3. Have you ever had sexual intercourse?

(Sometimes this is called “making love”, “having sex” or “going all the way”).

- Yes   
No  Please go to *QUESTION 15*

### 4. How old were you when you had sexual intercourse for the first time?

- 11 years old or younger   
12 years old   
13 years old   
14 years old   
15 years old   
16 years old   
17 years old or older

### 5. The last time you had sexual intercourse, did you or your partner use a condom?

- Yes   
No   
Don't know

6. The last time you had sexual intercourse, did you or your partner use birth control pills?

- Yes
- No
- Don't know

7. The last time you had sexual intercourse, did you or your partner use any other method(s)?

- Yes
- No
- Don't know

8. How old was your partner when you had sexual intercourse for the first time?

.....years old

I don't know

9. How many times have you had sexual intercourse?

- Once (please go to *QUESTION 13*)
- Twice or more times

10. The first time you had sexual intercourse, did you or your partner use a condom?

- Yes
- No
- Don't know

11. The first time you had sexual intercourse, did you or your partner use birth control pills?

- Yes
- No
- Don't know

12. The first time you had sexual intercourse, did you or your partner use any other method(s)?

- Yes
- No
- Don't know

**13. When you first had sexual intercourse, would you personally say:**

- You wanted it to happen earlier
- You wanted it to happen at that time
- You would rather have had it later
- You did not really want to have intercourse
- You did not ask yourself that

**14. Did you drink alcohol or use drugs before you had sexual intercourse the first time?**

- Yes
- No
- I do not remember

**15. At what age do you think most people in Ireland have their first sexual intercourse?**

At the age of .....

**Thank you again for answering these questions.**

**If any issues have been raised while answering these questions you may find useful website addresses and contact details on the information sheet provided.**

*This study is funded by the Department of Health and is being conducted by the Health Promotion Research Centre, National University of Ireland, Galway.*

## Appendix 17: Body image Measures

### *Body Investment Scale (BIS)*

The BIS (Orbach & Mikulincer, 1998) is a 24-item scale assessing adolescents' emotional investment in the body through four subscales: feelings and attitudes towards the body (e.g., "I am satisfied with my appearance), comfort with physical touch (e.g., "I enjoy physical contact with other people"), body care (e.g., "I like to pamper by body"), and body protection (e.g., "I'm not afraid to engage in dangerous activities"). Each of the four subscales consists of six items, responded to with a 5-point Likert scale ranging from strongly disagree to strongly agree. Scores for each subscale are obtained by averaging item responses within each subscale and higher scores indicate more positive feelings about and investment in the body. Research with the BIS has provided evidence of adequate reliability and validity with clinical and non-clinical adolescent samples (Orbach & Mikulincer, 1998). Orbach & Mikulincer, (1998) reported that the scale demonstrated good internal consistency among adolescents (ranging from .75 to .92), whilst, Osman and colleagues (2010) reported that the scale reliability of each BIS subscale was moderately high: Body Feelings,  $p = .87$  (95% CI = .84-.91); Body Touch,  $p = .70$  (95% CI = .65-.78); Body Care,  $p = .77$  (95% CI = .71-.83); and Body Protection,  $p = .73$  (95% CI = .66-.81).

### *The Feelings and Attitudes towards the Body Scale*

The feelings and Attitudes towards the Body scale, is a subscale of the Body Investment Scale, previously described above. The scale comprises of six statements: (i) I am satisfied with my physical appearance; (ii) I feel comfortable with my body; (iii) I am frustrated with my appearance; (iv) I hate my body; (v) I feel anger toward my body; and (vi) I like my appearance in spite of its imperfections. Participants rate each statement on a 5-item scale, ranging from absolutely disagree to absolutely agree. Scale scores are obtained by summarising the items, with items (i), (iii) and (v) reversed scored. The scale range is from 6–30; a higher score indicating a better body image. The scale has been tested with adolescents, and has shown excellent (item 1: ICC = .77; 95% CI = .70–.82) to acceptable (item 6: ICC = .68; 95% CI = .59–.75) test-retest stability (Ojala, Tynjälä, Välimaa, Villberg & Kannas, 2012).

Furthermore, in a more recent study with adolescents, Kantanista, Osiński, Borowiec, Tomczak, & Król-Zielińska (2015), reported that the scale's internal consistency, established with the Cronbach's alpha test, was .91.

### *Body Esteem Scale for Adolescents and Adults (BESAA)*

The BESAA is a 23-item scale assessing the affective evaluations of one's body, using a five-point Likert scale ranging from 0 (never) to 4 (always), with higher scores indicating greater body esteem (Mendelson, Mendelson, & White, 2001). The BESAA has three subscales: general feelings about one's appearance (appearance), satisfaction with one's weight (weight) and evaluations attributed to others about one's appearance (attribution). The appearance subscale has 10 items (e.g., "I like what I see when I look in the mirror"), the weight subscale has 8 items (e.g., "I really like what I weigh"), and the attribution subscale has 5 items (e.g., "People my own age like my looks"). The total subscale score is derived by calculating the mean rating for the subscale items. Mendelson and colleagues (2001) reported high internal consistency and 3-month test-retest reliability for the subscales in adolescents and adults (Cronbach's alphas were .93, .95, and .81, respectively). In addition, the BE-Appearance (Cronbach's  $\alpha = .85$ ) and the BE-Weight (Cronbach's  $\alpha = .85$ ) subscales in particular, had good internal consistency in a more recent study with adolescents (Flament, Hill, Buchholz, Henderson, Tasca & Goldfield, 2012); whilst Wängqvist & Frisé (2013) reported that internal reliabilities for each of the subscales were  $\alpha = .92$  for appearance,  $\alpha = .93$  for weight, and  $\alpha = .78$  for attribution.

### *Figure Rating Scale*

The Figure Rating Scale is used to assess participants' perceived and ideal body size, (Collins, 1991). This scale utilizes seven gender-specific figure drawings, ranging from very thin to obese. Participants are asked to identify which figure most resembles them, and the chosen body represents the participant's "actual" body size. Then, the participants are asked to identify which body shape they "wish" to resemble, which represents the participant's "ideal" body size. The difference between the two body sizes represents the actual-ideal body size discrepancy and is used as a measure of body dissatisfaction. A positive score reveals that the participant desires a thinner figure. A score of zero indicates no desire for a different

body shape than the supposed actual. A negative score reveals that the participant desires a body shape that is larger than his/her supposed actual body shape. Higher scores indicate greater levels of body dissatisfaction due to a desire for a thinner body shape. According to Collins (1991), the Figure Rating Scale has good test-retest reliability for the figure selected as most likely to represent oneself ( $r = .71$ ) and sound reliability for selected ideal figure ( $r = .59$ ). In addition, Collins (1991) reported a significant correlation between figure size of self and BMI ( $r = .37$ ).

### *Body Shape Satisfaction Scale*

The Body Shape Satisfaction scale assesses an individuals' degree of satisfaction with 10 specific body parts or attributes, including height, weight, body shape, waist, hips, thighs, stomach, face, body build and shoulders. Items are rated on a 5-point Likert scale from 1 (very satisfied) to 5 (very dissatisfied) and item responses are summed (higher scores reflecting higher dissatisfaction). Paxton and colleagues (2006) have reported that the scale has demonstrated discriminant, convergent, and predictive validity with adolescent samples. In their study, principal components analyses confirmed the unitary structure of the body dissatisfaction construct for both girls and boys. The items were approximately equally weighted, making the sum a suitable summary. The single factor explained 59% and 61% of the variance in girls and boys, respectively; whilst all other eigenvalues were less than 1. Cronbach's alpha was .92 and .91 in the early- and mid-adolescent girls, respectively, and .93 in both cohorts of boys.

## Appendix 18: DISSEMINATION OF STUDY FINDINGS

### 2016

- Kenny, U., Sullivan, L., Callaghan, M., Molcho, M. and Kelly, C (2016). *The relationship between cyberbullying and peer support on adolescent body image: A cross-sectional study*. Oral presentation at the European Association for Research on Adolescence, La Barrosa, Cadiz, Spain, Sept 2016.
- Kenny, U., Molcho, M. and Kelly, C (2016). *A conceptual model of peer influences on adolescent body image: Where do we go from here?* (2016). Oral presentation at the European Association for Research on Adolescence, La Barrosa, Cadiz, Spain, Sept 2016.
- Kenny, U., Molcho, M. and Kelly, C (2016). *The mechanisms through which peers influence adolescent body image: A conceptual model*. Oral presentation at the Appearance Matters Conference, The Royal College of Surgeons, London, England, June 2016.
- Kenny, U., Sullivan, L., Callaghan, M., Molcho, M. and Kelly, C (2016). *Examining the impact of cyberbullying and peer support on adolescent body image*. Poster presentation at the Health Promotion Research Annual Conference, NUI Galway, June 2016.
- Kenny, U., Molcho, M. and Kelly, C (2016). *Capturing the mechanisms through which peers impact adolescent body image through the lens of a newly developed conceptual model*. Oral presentation at the Psychology Health and Medicine Conference, University College Cork, May 2016.
- Kenny, U., Molcho, M. and Kelly, C (2016). *Young people's perspectives in developing a survey item on factors that influence body image*. Oral presentation at the Postgraduate Conference, University of Limerick, May 2016.

### 2015

- Kenny, U., Molcho, M. & Kelly, C (2015). *Unveiling the reality of adolescent peer cultures: Impact on body image perception*. Poster presentation at the International Society of Behavioural Nutrition and Physical Activity Conference, Edinburgh, Scotland, June 2015.
- Kenny, U., Molcho, M. & Kelly, C (2015). *Adolescent involvement in the development of a body image question for use in the HBSC 2013/14 Ireland survey*. Poster presentation at the International Society of Behavioural Nutrition and Physical Activity Conference, Edinburgh, Scotland, June 2015.

### 2014

- Kenny, U. & Kelly, C. (2014). *Peer Influences on adolescent body image in Ireland*. Oral presentation at the Postgraduate Nutrition Society meeting, Dublin, Feb 2014.

- Kenny, U., Molcho, M. & Kelly, C. (2014). *Body image perceptions and health among adolescents in Ireland*. Oral presentation at the Sociological Association of Ireland Conference, NUI Galway, March 2014.
- Kenny, U., Molcho, M. & Kelly, C. (2014). *Factors influencing adolescent body image in Ireland*. Poster presentation at the Health Promotion Research Annual Conference, NUI Galway, June 2014.