"That's how we play": An Ethnographic Investigation of the Physical Activity Play, Recreation and Spaces of Children and Young People in Ireland

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Declaration

I hereby certify that this material, which I now submit for assessment on the programme of study leading to the award of Doctor of Philosophy is entirely my own work, and that I have exercised reasonable care to ensure that the work is original, and does not to the best of my knowledge breach any law of copyright, and has not been taken from the work of others save and to the extent that such work has been cited and acknowledged within the text of my work.

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Acknowledgement

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List of Abbreviations

BMI   Body Mass Index

COSI   Childhood Obesity Surveillance Initiative

CSO   Central Statistics Office

DCU   Dublin City University

DCYA   Department of Children and Youth Affairs

EU   European Union

GAA   Gaelic Athletic Association

GPS   Global Positioning System

GUI   Growing Up in Ireland (Study)

IOTF   International Obesity Task Force

NCO   National Children's Office

OECD   Organisation for Economic Cooperation and Development

PE   Physical Education

ROI   Republic of Ireland

SNA   Special Needs Assistant

UK   United Kingdom

UN   United Nations

UNCRC   United National Convention on the Rights of the Child

USA   United States of America

WHO   World Health Organisation

WWF   World Wrestling Federation

Definitions

Recurring Term	Definition
Adolescence	Adolescence is the developmental period occurring between childhood and adulthood and is commonly defined as the period between 10 and 19 years (Sawyer et al., 2012; WHO, 2015).
Anthropometry	Anthropometry is the study of human body measurements. This study is specifically concerned with body weight and height measurements to determine the percentage of children and young people who are overweight or obese.
Break-time	Break-time is the non-curricular break within the school day which typically involves access to outdoor space, when weather and space permit, and provides children opportunities for play, recreation and socialisation with peers (Baines & Blatchford, 2019).
Children	Children are defined as from birth up to 18 years.
Children's independent mobility	Children's independent mobility is commonly defined as the freedom of children to travel or move about and play in neighbourhoods without adult supervision (Shaw et al., 2013).
Middle childhood	Middle childhood, usually defined as the ages of 7 to 11 years, is an important period of childhood focused on developing competencies, interests, and confidence of mastery and control (Eccles, 1999).

Physical activity play	Physical activity play, specifically, may involve symbolic activity or games with rules; the activity may be social or solitary, but the distinguishing behavioural features are playful context combined with ... moderate to vigorous physical activity, such that metabolic activity is well above resting metabolic rate (Pellegrini & Smith, 1998, p.577). Examples include running, climbing, chasing, play fighting and bike riding.
Physical activity	Physical activity refers to any voluntary bodily movement produced by skeletal muscles that requires energy expenditure. Examples include walking, cycling, sports, active recreation and play (WHO, 2020).
Physical inactivity	Physical inactivity is generally understood as an insufficient physical activity level to meet current physical activity guidelines (WHO, 2020).
Play	Play is freely chosen, personally directed, intrinsically motivated behaviour that actively engages the child (NCO, 2004).
Recreation	Recreation comprises all positive activities in which a person may choose to take part that will make his or her leisure time more interesting, more enjoyable and personally satisfying, including, inter alia, reading, recreational sport, art, music in a group, 'hanging out', camping, surfing the Net (OMCYA, 2007).
Rough and tumble play	Rough and tumble is a specific form of physical play, characterised by aggressive behaviours such as wrestling, grappling, kicking, tumbling and chasing, in a play context (Pellegrini & Smith, 1998).

Rural	The OECD (2011) categorises an area as being rural if the population density is below 150 persons per square kilometre (population per km2).
Sedentary behaviour	Any waking behaviour characterised by an energy expenditure ≤1.5 metabolic equivalents, while in a sitting, reclining or lying posture (Tremblay et al., 2017). Examples include the use of electronic devices (e.g. television, computer, tablet, phone) while sitting, reclining or lying; reading or writing.
Space and place	The term 'space' is used to describe the types of settings for interactions, while 'place' refers to the specific meaning associated with those spaces (Philo, 2000).
Urban	The OECD categorises an area as being urban if the population density is at least 300 persons per square kilometre, and a minimum population of 5,000 (Brezzi et al., 2012).
Young people	The term 'young people' is used in this study to differentiate from primary school-age children and refer to young people in secondary school between the ages of 12 – 16 years old.

Abstract

Karinda Tolland

"That's how we play": An Ethnographic Investigation of the Physical Activity Play, Recreation and Spaces of Children and Young People in Ireland

There are many different types of children's play which vary according to age, gender and setting. Most analyses ignore some of the most common forms of play, such as physical activity play, especially during middle childhood and adolescence. The aim of this study was to identify the specific forms of physical activity play that children and young people (8 – 16 years) engage in across differing spaces in urban and rural settings in Ireland using an ethnographic approach. Physical activity play is a major contributor to children's overall physical activity. This is important in the context of the progressive trends towards sedentary lifestyles, physical inactivity and childhood obesity, and the myriad health risks associated with these conditions.

Fieldwork was conducted over a twelve-month period across four co-educational schools; a primary and a secondary school from both an urban and rural setting. Child-centred participatory, as well as quantitative methods, have been employed including child-based photography, child-directed walking interviews and anthropometry. Participatory methods empowered children as social actors and facilitated deep insights into a significant aspect of children's lives.

There is a complex interplay of factors shaping children's physical activity play. The findings describe children's perspectives on play and recreation in a variety of spaces including the home, school, neighbourhoods and the wider built environment. The study identifies 'traditional' forms of physical activity play that are continuously modified and influenced by the social context and the physical features of play space. Findings also relate to the wider sociocultural processes that impact children's physical activity play including age, gender, seasonality and geographic location.

Recommendations have been put forward in relation to how physical activity play can be used to reduce sedentary behaviour, and in the prevention and treatment of childhood overweight and obesity. A recalibration of attitudes and policies is required to enhance children's opportunities for physical activity play in all settings.

Chapter 1.   Introduction

1.1.   Introduction

The aim of this study is to present an examination of the physical activity play and recreational activities of children and young people across differing spaces in urban and rural settings in the Republic of Ireland (ROI). The study is shaped by the views of the children and young people who participated in the construction of deeper understandings about their physical activity play, recreational activities and play spaces. This ethnography took place across four schools in Ireland over a phased twelve-month period commencing in September 2013 and concluding in June 2015.

This chapter provides background information that situates the research in a broad context. It begins with an overview of the phenomena of play including definitions, theories and ambiguities. Children's physical activity play is contextualised from an Irish perspective and in relation to international and national policy developments. This is important for providing a national and global frame of reference for children's play. This discussion is followed by introducing the research question, aims and objectives pertaining to this study. Finally, a summary of the thesis structure and contents is presented to guide the reader.

1.2.   Play – Definitions and Ambiguity

The scholarly literature pertaining to play is wide-ranging and truly multidisciplinary, from anthropology, sociology, geography, psychology, education, history and folklore; to biology, ethology, psychopathology and beyond. There has been much academic debate and general lack of agreement regarding the overarching definition of play. Many, but not all, have concluded that play is undefinable and cannot be 'adequately explained in agreeable scientific terms' (Sutton-Smith, 2005, p. xiii) or 'contained within a systematic scholarly treatise' (Spariosu, 1989, p. ix). This is, in part, because play can be many things at the same time – it has great variability. Rather than offer a strict definition most play theorists are inclined to offer a list of essential qualities, characteristics, or traits (Henricks, 2015). Huizinga, a Dutch cultural historian and a prominent figure in play theory, proposed formal characteristics that play must have. First, and above all else, play is a free or

voluntary activity in which players set the terms and timing of their own involvement – 'it is never a task' (Huizinga, 1955, p.7). Second, play is not 'ordinary' or 'real' life. It is 'stepping out of "real" life into a temporary sphere of activity with a disposition all of its own' (Huizinga, 1955, p.8). In other words, play features voluntarism and constitutes a separate and independent sphere of human activity, characteristics of which are commonly recognised by play theorists today.

Drawing inspiration from other prominent play scholars (Vygotsky, 1978; Rubin, Fein & Vandenberg, 1983; Garvey, 1990), play can be described in terms of a confluence of several characteristics. For instance, (i) play is intrinsically motivated behaviour, an activity in which means are more valued than ends; (ii) play must be pleasurable and guided by mental rules; (iii) play is imaginative, a characteristic that Huizinga (1955) foremost emphasised; (iv) play is nonliteral (involves pretence); and (v) play is actively engaged in by the player. The aforementioned characteristics of play accord with the definition used by the Irish National Play Policy (2004), which is also the definition adhered to within this study: 'Play is freely chosen, personally directed, intrinsically motivated behaviour that actively engages the child' (National Children's Office (NCO), 2004, p.11). Put more simply, 'play is what children do when no-one else is telling them what to do' (Ibid). Similar definitions of play have been used in many other policy documents around the world (e.g. Play England, 2009).

Play, recreation and leisure are often interchangeable concepts however, the terms have distinctly different meanings. Like play, there are no universally agreed definitions for either recreation or leisure. A useful definition of recreation is provided in the National Recreation Policy as 'comprising all positive activities in which a person may choose to take part that will make his or her leisure time more interesting, more enjoyable and personally satisfying', including, inter alia, 'reading, recreational sport, art, music in a group, 'hanging out', camping, surfing the Net' (Office of the Minister for Children and Youth Affairs (OMCYA), 2007, p.10). It is important to reiterate that while many recreational activities may be organised and managed by adults, recreation, like play, should be a voluntary activity. To clarify, recreation is understood as the engagement in activity or experience, and differs from many of the characteristics of play, as mentioned above (e.g. intrinsically motivated, guided by rules, actively engaged in).

Leisure can best be explained as the time in which play, or recreation can take place. It is defined as 'free or unobligated time that does not involve formal education, work, home responsibilities, performance of other life-sustaining functions or engaging in activity directed from outside the individual. In other words, it is largely discretionary time to be used as the child chooses' (UNCRC, 2013). The terms play and recreation are more commonly used in Ireland in relation to children and young people, as opposed to the language of leisure. For this reason, these are also the terms used in this study.

1.2.1. Perspectives on play

There are also many theoretical perspectives on the value drawn from the process of playing. Lester and Russell (2008), in a comprehensive review, grouped these perspectives into those which are utilitarian or instrumental (viewing play as a mechanism for learning and healthy child development) and those which are intrinsic or autotelic (viewing play as important for its own sake). Many play scholars have questioned this utilitarian/instrumental view, while also emphasising the intrinsic value of play (Sutton-Smith, 2003; Meire, 2007). However, it is the utilitarian/instrumental perspective, where play has a purported role in the overall child development project, that has dominated policy and practice discussions. The strongest message from Lester and Russell's (2008) review is the need to move away from an utilitarian/instrumental view of play and to recognise that the value of play 'accrue(s) from its characteristics of unpredictability, spontaneity, goallessness and personal control, rather than directly from its content' (Lester & Russell, 2008, pp.12 -13). Furthermore, the dominant discourse in the study of children's play has almost exclusively been located in the fields of early child development and early childhood. This however runs the risk of locking play into a largely developmental discourse and undervaluing the role that play may have in middle childhood and adolescence (Marsh & Richards, 2013). For instance, Howard et al., (2017) reported on the importance of play in middle childhood, with children associating play with strong positive emotions, and not being able to play with negative emotions and anxiety. There is also evidence to show that play in middle childhood facilitates skilled social interaction, emotional regulation, higher cognitive processing, imagination and creativity (Reed & Brown, 2000; Bergen & Fromberg, 2009).

In the wider view, play has been observed in all cultures studied to date (Roopnarine, 2012). Historians have verified that play was a central feature of childhood in ancient societies (Wiedemann, 1989; Golden, 1993), with many contemporary views on children's play discerned from ancient Greece and Rome. Plato (427 – 347 BC), for example, advocated the use of free play and other forms of recreational activities as a means of developing skills for adult life, and supporting health and physical development (Whitebread et al., 2012). The study of play through time and across cultures has demonstrated that play is ubiquitous, although its form, function, prevalence and significance may vary cross-culturally. From an anthropological perspective, 'all play is cultural…an understanding of play, its meaning and relevance, must come in the larger context of the culture in which play is found' (Anderson, 1997, pp.51 – 52). The variations in play reflect cultural attitudes concerning the nature of childhood and the value of play (Whitebread et al., 2012).

1.2.2. Play theories

Play theories are divided into two categories comprising the classical theories of the 19th and early 20th century, and the contemporary theories developed after 1920. In a detailed review of the modern history of studying play, Burghardt (2005) acknowledged that the 'footprints' established by the classical theorists laid the foundations for almost the entire body of modern play research. The classical theories, like theories of every era, are closely aligned with intellectual currents of their times (Henricks, 2015). The classical theories identify the basic dimensions of play and provide alternate models of its causes and consequences. Some scholars (e.g. Ellis, 1973) posit that the classical theories are inadequate and lack the current theoretical knowledge of energy, instincts, evolution and development (Johnson, Christie & Wardle, 2005). On the other hand, Levy (1978) 'strongly contends that these theories offer great promise for future empirical research on play behaviour' (Levy, 1978, p.92). The classical theories however remain pertinent because they confront issues that are significant for play studies today. It is for this reason that the surplus energy theory and the recreation or relaxation theory, from the classical theories of play, are included in this introduction. The discussion will not be exhaustive. The theorists had broader interests in play, and made more complicated

interpretations of it, than is emphasised here. Rather, the theories help to situate the current study in a broader context and draw attention to the physical aspects of play.

Friedrich Schiller, an 18th century German poet-philosopher, proposed one of the earliest classical theories of play known as the surplus energy theory. Schiller suggested that play was essentially 'the aimless expenditure of surplus energy' (Rubin, Fin & Vandenberg, 1983, p.694). For Schiller, play was a result of the superfluous energy that remained after the primary needs of work and survival were satisfied. Young animals and children are not responsible for their own survival and therefore have a greater amount of energy to expend. According to Schiller, this explains the physical nature of play, and why young animals and children play more than adults. The surplus energy theory owes much of its development and extension to Herbert Spencer (1873), a British philosopher and sociologist. Like Schiller, Spencer also considered play as the way in which animals and humans discharged surplus energy through physical activity (Evans & Pellegrini, 1997). For Spencer however, 'surplus energy' accumulated while the body was resting. Animals higher on the phylogenetic scale are not wholly absorbed in providing for needs directly related to survival and therefore had more time and energy for other activities. The surplus energy was discharged through play during childhood.

The surplus energy theory has largely been criticised for failing to explain why we play even when we are tired and appear to have no surplus energy, or why some categories of people or cultures are more playful than others (Gaskins, Haight & Lancy, 2007). The theory is also solely focused on physical play and ignores the many other forms of play. Nevertheless, the influence of the surplus energy theory endures, as outdoor play for children is commonly associated with children's need to engage in physical activity (e.g. jumping, running) in order to 'let off steam', a concept underpinning break-times in many school settings today (Evans & Pellegrini, 1997; Blatchford & Sumpner, 1998).

The recreation (or relaxation) theory of play was first put forward by the German philosopher Moritz Lazurus (1883), and later updated and advanced by American philosopher George Patrick (1916). Play is viewed as a recreational endeavour (Lazurus, 1883) or behaviour that occurs when individuals need to relax (Patrick, 1916). According to this theory, play stems from the need for mental and physical

recuperation from the stressful nature of work. Play is therefore an act of regeneration and restoration and a juxtaposition to the seriousness of work. To use a modern and relevant example, break-time may be viewed as a requirement for hard-working school children (Henricks, 2015). In one way, the recreation perspective is the opposite to the surplus energy theory, in that play is an activity resulting from a deficit of energy. A major criticism of the recreation theory is it fails to consider why children, with no serious work functions to perform, need to recuperate through play. There are also many examples of play leading to mental and physical exhaustion rather than recuperation. Like the surplus energy theory, this approach also emphasises physical play, while other forms are underrepresented.

The Ambiguity of Play (Sutton-Smith,1997) is widely regarded as 'the best book-length treatment of play's many qualities and implications' (Henricks, 2015, p.38). The contemporary play theory of Brian Sutton-Smith is included here to illustrate the complexity that has surrounded play scholarship throughout history. Sutton-Smith examined hundreds of play studies across the natural sciences, social sciences, and humanities and concluded that play theories, for the most part, could be organised into one of seven explanatory frameworks, or rhetorics. The rhetorics of play range from the familiar concept that play is essential for human development (progress), to games of chance (fate), to sports and contests (power), to festivals and celebrations (identity), to flexibility and creativity (imaginary), to solitary activities and hobbies (self), and to the most inconsequential (frivolity). Via these seven rhetorics, Sutton-Smith points to the ambiguity of play; that is, the lack of precision surrounding the theoretical statements about what play is. The ambiguity is underlain in the considerable diversity of play forms and experiences, the diversity of players (e.g. infant, preschool, childhood and adult players), and the diversity of play scholarship and academic perspectives. Sutton-Smith, in an attempt to offer a universal rhetoric, defines play as a 'facsimilization of the struggle for survival' (Sutton-Smith, 1997, p.231). Essentially, play exists because it helps creatures survive. Some scholars have criticised Sutton-Smith's rhetorics as leading to a deterministic definition of play (Harker, 2005; Woodyer, 2012). As Harker (2005) remarked 'playing is, irreducibly, a practice. It is these lived, experiential aspects of play that are constantly exceeding the confines of discourse' (Harker, 2005, p.51).

The seven rhetorics remain a stark reminder that no academic perspective is adequate to identify play's variable expressions and multiple meanings.

Play is a substantive topic and continues to be debated across disciplines. The diverse paradigms and discourses surrounding play bring with it 'an appreciation of the implausibility of one single truth to explain a phenomenon as complex, multi-layered and diverse as playing' (Lester & Russell, 2008, p.12). Adding to this complexity is the fact that prevailing scholarship is often influenced by adult perspectives on what play is, instead of a child-centred notion of play (Thomson & Philo, 2004; Murnaghan, 2019). This study specifically draws on children and young people's perspectives of play which tend more towards the intrinsic value drawn from the process of playing for its own sake. At the same time, the study also acknowledges that play is essential for child development, health and well-being, which is interwoven with the play-as-progress rhetoric.

1.3. Physical Activity Play

We know that play is a complex and multi-faceted phenomenon which has been notoriously difficult to define, in part because there are many different types of play, which vary according to age and setting (Sutton-Smith, 1997). While many definitions share the common idea of play being enjoyable and carried out for its own sake, most analyses ignore some of the most common forms of play, such as physical activity play (Pellegrini & Smith, 1998). This study specifically focuses on the physical activity play of children and young people and uses the well-known definition provided by Pellegrini and Smith (1998):

> *Physical activity play, specifically, may involve symbolic activity or games with rules; the activity may be social or solitary, but the distinguishing behavioural features are playful context combined with ... moderate to vigorous physical activity, such that metabolic activity is well above resting metabolic rate (Pellegrini & Smith, 1998, p.577).*

Physical activity play tends to evolve in outdoor settings in a child's free time (Veitch et al., 2006). Some examples of physical activity play include running, climbing, chasing, play fighting and bike riding (Pellegrini & Smith, 1998). Pellegrini and Smith (1998) propose that rough and tumble play is the end point on the development

continuum of physical activity play which begins with stereotypic and rhythmic movements (peaks in infancy), moves to exercise play (peaks during the preschool period), and finally the more socially demanding rough and tumble play (peaks in middle childhood), which continues through to adolescence and adulthood. Rough and tumble play is the most extensively researched aspect of physical activity play which includes chasing, grappling, kicking, wrestling and rolling on the ground (Whitebread et al., 2012).

Pellegrini and Smith (1998) and Smith (2010) previously criticised the neglect of physical activity play of children in research, however this appears to be changing across a range of academic disciplines. Nevertheless, there has been an inconsistent use of terminology, along with varying definitions, across the literature and policy documents. As such, the physical activity play of children has been referred to as 'active play' (Veitch et al., 2006; Brockman, Fox & Jago, 2010; Harrington, et al., 2014; Tremblay et al., 2014), 'active free play' or 'self-directed outdoor activity' (Cairney et al., 2015; Holt et al., 2015; Lee et al., 2015; Shannon et al., 2019), 'active outdoor play' (Tremblay et al., 2015; Clark & Dumas, 2020), and, 'out-of-home unstructured play' (Goodman, Paskins & Mackett, 2012). Furthermore, most of the research on physical activity play has focused on younger children as opposed to those in middle childhood and adolescence. The middle childhood and adolescence developmental periods will be explored further in the literature review.

It is important to note that the term 'children' is typically defined as from birth up to 18 years of age, however, in this study, the term 'children' generally refers to those in primary school between the ages of 8 – 11 years old. The term 'young people' is used in this study to differentiate from primary school-age children and refer to young people in secondary school between the ages of 12 – 16 years old.

1.3.1. The national context

Growing up in Ireland (GUI) is the national longitudinal study of children and young people. This study has provided large data sets on the lives of children, young people and families in Ireland since 2006. To date, children's physical activity play has not been specifically reported. Rather, most of the data in relation to physical activity has focused on children's exercise or sports participation, and how many

days of the week a child is physically active (Department of Children and Youth Affairs (DCYA), 2016). One of the studies, as part of GUI, explored children's perceptions of their neighbourhoods in urban and rural settings. In this study, Harris, Doyle & Green (2011) reported that nine-year-olds enjoyed spending a lot of their time outdoors in the neighbourhood and their favourite places to play included green spaces such as parks, playing fields and the green areas of housing estates. Some children living in urban settings expressed the desire to have more space to play in their neighbourhoods, particularly in housing estates. Many of the children also described how some places in their neighbourhood were badly maintained (e.g. litter, neglected repairs to facilities, graffiti).

More recently, another GUI study, reported on children's 'favourite way to spend their free time', and it is this study in which children's play and activities are given some consideration. McNamara et al., (2021) reported that nine-year-olds' favourite activities were football (including both soccer and Gaelic football) and using computers, tablets or laptops to play on the internet (both 27%). These were followed by interacting with friends in a non-sport situation (23%) and reading or writing (23%). Girls and boys differed in their opinions of 'favourite activities' – football was cited much more by boys than girls, whereas reading or writing was favoured more prominently by girls than boys (31% vs 16%).

The physical activity play of children in Ireland has specifically been reported in one other Irish study (Barron, 2013). Mostly, play pertaining to children and young people has been reported in the wider context or in consultation surveys with children about their lives (e.g. Lodge, 2005; Fanning, 2010; Coyne, Dempsey & Comiskey, 2012; Bourke, 2014; Kilkelly et al., 2016; Barron, 2020, Lynch et al., 2020). Some of these studies are examined, while others are referenced throughout this thesis where appropriate, to provide Irish context to this study. However, collectively, it appears that for children and young people involved in these Irish studies having friends, siblings, and/or pets to play with is significantly associated with physical activity play; and that being outdoors, having access to green and natural space, and places in which to hang out in a safe environment is rated highly.

1.4. Urban-Rural Difference in Physical Activity Play

Urban and rural settings provide different spaces and places through which the presence or absence of specific features and characteristics influence children's opportunities for physical activity play (Lamb et al., 2012). For instance, urban settings have been considered more playable/walkable, partly because of the greater availability of pathways/footpaths, and the distance to and design of play space (e.g. park, playground) (Davison & Lawson, 2006). In contrast, rural settings may present better opportunities for physical activity play due to greater availability of natural space (and contact with nature) (Hayball & Pawlowski, 2018). Borrowing from Philo (2000), the term 'space' is referred to throughout this study as the types of settings for interactions, while 'place' refers to the specific meaning associated with those spaces. The spaces and places for children's play will be explored in further detail in Chapter Two. The following discussion focuses on the overarching urban-rural differences that impact on children's lived experiences, and therefore their play worlds. This is important for context as it links directly to the research aim and objectives, and also to the fieldwork settings in which this study was conducted.

Globally, more people live in urban than in rural settings, with 55% of the world's population living in urban settings in 2018, a proportion that is expected to increase to 68% by 2050, with the majority under the age of 18 years old (UN, 2018). Overall, one in eight people live in 33 megacities worldwide, typically with a population of more than 10 million people, while close to half of the world's urban residents live in much smaller settlements with fewer than 500,000 inhabitants (UN, 2018). In contrast to increasing urbanisation globally, the global rural population is expected to decline from 3.4 billion to 3.1 billion by 2050 (UN, 2018).

Urban settings and cities can be exciting and vibrant places to grow up (ARUP, 2017), however there are also certain risks and barriers associated with the outdoor physical activity play of children and young people. The core challenges vary internationally, however common examples include traffic and pollution, high-rise living and urban sprawl, crime, social fears and risk aversion, isolation and intolerance, inadequate and unequal access to the city and disconnection from nature – all of which lead to increasing sedentary lifestyles and declining opportunities for physical activity play (UNICEF, 2012; ARUP, 2017). In some high-

income countries, life expectancy is beginning to fall as a result of urbanisation, with children predicted to live shorter and less healthy lives than their parents (Murphy et al., 2018; Office of National Statistics, 2018).

Urban population growth has propelled urban planning to the forefront of global challenges. In responding to these challenges, the needs, experiences and views of children should be sought and incorporated, as this approach is vital in creating inclusive cities that work better for everyone (Gill, 2017; ARUP, 2017). Child-friendly urban planning is an emerging field. It advocates an approach to planning and designing cities that improves children's physical activity play opportunities, moving well beyond simply providing playgrounds. It recognises the fundamental importance of independence and physical activity play and the built environment as a whole in helping to shape children's overall healthy development and prospects, and hence their adult lives (ARUP, 2017).

This research uses the Organisation for Economic Cooperation and Development (OECD) definition of 'urban' defined as an area with a population density with at least 300 persons per square kilometre, and a minimum population of 5,000 (Brezzi et al., 2012). This definition and how it is calculated in relation to the urban context in this study will be explored further in Chapter Three.

There has been significant growth in research studies focusing on the lives and experiences of children in rural settings throughout the world over the past two decades. Much of the research has questioned the traditional perspectives and romantic notions of the countryside as a 'rural idyll' – as an idealised, utopian place for children to live and grow up (Aitken, 1994; Matthews & Tucker, 2006; MacDougall, Schiller & Darbyshire, 2009). The notion of children's freedom and outdoor physical activity play is central to rural idyllic visions of childhood (Powell, Taylor & Smith, 2013). However, research findings have contested this in several ways. Of particular relevance to this study is that children in rural settings encounter barriers to engaging in physical activity play that differ from their urban counterparts. For instance, it may be difficult for children to engage in spontaneous group activity due to low residential density (Walia & Liepert, 2012). Children in rural settings lack recreational space and activities and are restricted and/or dependent on their parents for providing transport (Valentine & McKendrick, 1997; Matthew et

al., 2000; Tucker & Matthews, 2001; Powell, Taylor & Smith, 2013). It is also worth noting that children generally view rural settings as good places to grow up, but satisfaction starts to decrease for young people (Glendinning et al., 2003). This is evident for young people living in rural settings in Ireland, who experience difficulties in accessing recreational facilities and activities. The reasons for this are primarily associated with limited public transport, which hinders contact with others, impedes access to services available in urban settings and reinforces a sense of social isolation (McAleer, 2019).

Rural settings have changed significantly over the past few decades with their differences from urban areas decreasing (Matthews et al., 2000; Woods, 2007). Today, what is considered as rural and urban is open to debate; 'shaped by geography and cultural discourse, with particular meanings and varying with time and place' (Nairn, Panelli & McCormack, 2003, p.11). In an OECD-wide context, ''rural' cannot automatically be considered as in decline, poor, agriculture-based or peripheral' (Hill & Karlsson, 2007, p.47). At the same time, there is a prevailing narrative around the decline of rural areas in Ireland, associated with a decrease in the agricultural sector, urbanisation, and the decline of opportunities in rural areas (e.g. lack of employment, service provision and local infrastructure) (Kelly, Keaveney & Markey, 2021).

This research uses the OECD (2011) definition of 'rural' defined as an area with a population density below 150 persons per square kilometre. This definition will be applied to the rural context in this study and will be developed further in Chapter Three.

1.5.   Children's Right to Play

The importance of play and recreation in children's lives has long been recognised internationally, as evidenced by the United Nations (UN) Declaration of the Rights of the Child (1959): 'The child shall have full opportunity for play and recreation […]; society and the public authorities shall endeavour to promote the enjoyment of this right' (Article 7). This proclamation has been bolstered in recent years, most notably in Article 31 of the United Nations Convention on the Rights of the Child (UNCRC, 1989) and the UN Committee on the Rights of the Child General Comment No. 17

on Article 31 of the UNCRC (2013). This is especially important given the significance of the UNCRC as 'the most complete statement of children's rights ever produced and is the most widely ratified international human rights treaty in history' (UNICEF, 2016). Almost every country in the world has ratified the Convention, with the exception of the USA. Ireland ratified the Convention in 1992. This means that the Irish State is bound by international law to promote, protect and fulfil the rights of children, as outlined in the UNCRC. Article 31 of the UNCRC states that:

> *States Parties recognise the right of the child to rest and leisure,*
> *to engage in play and recreational activities appropriate to the age*
> *of the child and to participate freely in cultural life and the arts.*

Article 31 of the UNCRC has been widely cited and used to promote play in children's lives. This is evident through the work of organisations such as the International Play Association: Promoting the Child's Rights to Play, Child in the City, and Right to Play International, amongst others.

1.5.1. General Comment No. 17 to Article 31

General Comment No. 17 to Article 31 was developed 24 years after the launch of the UNCRC. A General Comment is a quasi-legal document providing guidance on the actions required by governments to ensure implementation of an Article relating to the UNCRC. The UN provided fresh impetus to strengthen the play imperative in children's lives and acknowledged the threats to the volume and nature of children's play (such as the rise in urban populations, the commercialisation of play provision, persistence of child labour, growth of crisis situations, and increasing educational demands). General Comment No. 17 recognised that children seek out opportunities to play regardless of whether the environment is favourable or not. Nevertheless, certain conditions need to be assured, in accordance with children's evolving capacities, if the right to play is to be realised to the optimum extent. These conditions, as outlined in the Committee on the Rights of the Child (2013), broadly cover: social context (e.g. freedom from social exclusion), environmental conditions, accessible space and time for play, opportunities to play in natural environments, and wider societal recognition of the value of the rights provided for in Article 31. Many of these conditions are founded on the principle that play, while supported by

adults when necessary, should be initiated, controlled and structured by children themselves (McKendrick, Loebach & Casey, 2018).

Children face significant barriers in realising their Article 31 rights. Although the barriers differ across regions, collectively they constitute a global threat to play. The UN General Comment No. 17 identifies the following barriers to children's play: lack of recognition of the importance of play and recreation to and for children; unsafe and hazardous environments; resistance to children's use of public spaces; balancing risk and safety; lack of access to nature; pressure for educational achievement; overly structured and programmed schedules; neglect of Article 31 in development programs; lack of investment in cultural and artistic opportunities for children; growing role of electronic media; and the commercialisation of play. There are also certain groups at particular risk of experiencing constraints in their play opportunities including girls, especially in adolescence; children living in poverty; children with disabilities; children in institutions; children from indigenous and minority communities; children in situations of conflict, humanitarian and natural disasters (UNCRC, 2013).

1.5.2. Children's right to be listened to and taken seriously

Article 12 of the UNCRC also has particular relevance for the current study as it pertains to the provision that children have the right to have their views given due weight in all matters affecting them. Article 12 of the UNCRC states that:

> *States Parties shall assure to the child who is capable of forming his or her own views the right to express those views freely in all matters affecting the child, the views of the child being given due weight in accordance with the age and maturity of the child.*

The Committee on the Rights of the Child (2009), underlines the importance of providing opportunities for children to contribute to the development of legislation, policies, strategies and design of services to ensure the implementation of right to play. For example, children could be involved in consultations regarding the development of parks and the design of child-friendly environments, and feedback could be sought on opportunities for play and recreation within the school and the wider community.

Article 12 has been broadly conceptualised as 'participation' and is frequently cited in relation to children's participation in research processes. This is most evident in publications produced by government and non-governmental organisations affirming the rights and needs of children. For example, national guidelines produced by the DCYA (2012) note that, 'children have a right to be involved in many aspects of the research process and their participation can enhance the quality of the research' (Shaw, Brady & Davey, 2011; Williams, 2011). Moreover, Article 12 of the UNCRC has been translated into Irish law through Article 42A of the Irish Constitution (2015), which recognises 'the natural and imprescriptible rights of all children', and through the development of two national policy documents. Better Outcomes, Brighter Futures: The National Policy Framework for Children and Young People, 2014 – 2020 (DCYA, 2014) is a cross-government and interagency collaboration to achieve better outcomes for children's lives and well-being including play and recreation. The National Strategy on Children and Young People's Participation in Decision-making, 2015 – 2020 (DCYA, 2015) was established to ensure children's rights and agency are advanced. A fundamental of this strategy is the recognition that children and young people are not 'beings in becoming', but rather are 'citizens of today' with the right to be respected and heard during childhood and in their transition to adulthood.

Article 12 is also cited widely across academic disciplines. For example, a key feature of the new sociology of childhood (to be discussed in Chapter Three) is the commitment to viewing children as active agents in their own lives and as 'worthy of study in their own right' (James & Prout, 1990, p.8). Thus, Article 12 has been used to help foster the shift in conducting research 'with' rather than 'on' children (Alderson, 1995). This study has been undertaken in the spirit of Article 12 of the UNCRC. The use of a child-centred ethnographic approach and methods give emphasis to the perspectives and insights of children and young people regarding their play and recreation experiences. The child-centred participatory methods used in this study are discussed in Chapter Three.

1.6.   Physical Activity Play in Ireland

For contextual purposes, some background information will first be provided before exploring two significant national policy documents relating to children's play and

recreation. The population of the ROI is 4.98 million (CSO, 2020). Although the population is steadily getting older, Ireland is one of the most 'youthful' nations across the EU, with approximately 27% of the Irish population in the 0 – 19 years age group. Just over three-in-ten people in Ireland (31.4%) live in a rural area, one of the highest levels among EU states. Almost 65% of Ireland's total population live in urban areas and cities, with 44% of the urban population living in the capital of Dublin (CSO, 2019a). The urban population peaks at age 36 reflecting the migration of young adults moving to work and study in urban towns and cities. In rural areas, the peak is at age 45, and also at age 8, reflecting a more family oriented population structure (CSO, 2016a). In general, the more urbanised areas have shorter distances to everyday services including transport options and hospitals and/or emergency departments. The average disposable income and property values are higher in urban areas, while the unemployment rate tends to be higher in rural areas (CSO, 2019a). Almost 60% of people in Ireland describe their health as 'very good'. This self-reported figure is higher in rural areas at 64%, in comparison to urban areas at 55% (CSO, 2019a).

The climate in Ireland is mild and temperate with summer temperatures commonly reaching the high 20s °C and the winter temperature typically hovering around 5.0 °C. There is abundant rainfall with some parts of the country receiving an average 225 wet days per year. During the summer months of June, July and August it can stay light until as late as 11.00pm but by mid-December it can be dark by 4.00pm. The unpredictability of the Irish weather and seasonality has an impact on outdoor activities and play of Irish children, often keeping them indoors and less physically active.

1.6.1. National play and recreation policy

The impetus for the development of Ready, Steady, Play! A National Play Policy (NCO, 2004) and Teenspace National Recreation Policy for Young People (OMCYA, 2007) came from children and young people themselves during a consultation process for the development of the first National Children's Strategy (NCO, 2000) – a ten-year plan of action for children underpinned by the UNCRC. The consultation with children highlighted items for the national policy agenda that had not previously been a priority, including play and recreation (Children's Rights

Alliance, 2011). The National Play Policy (NCO, 2004) provided a framework for the development of public play facilities and considered various issues including guiding principles; a partnership approach between statutory, community, voluntary and private sectors; developing a play infrastructure; safety and public liability insurance; and funding arrangements. The policy was aimed at children of primary-school-age (approximately 4 – 12 years) and was published with a four-year life span from 2004 – 2008. The National Play Policy has therefore long expired. During that time, the Government focused on the visible aspects of children's play, and almost exclusively the development of fixed equipment public playgrounds. The importance of play in children's lives, however, cannot be adequately represented or resourced through playgrounds. This point was specifically reflected in the Children's Rights Alliance Annual Report Card (Children's Rights Alliance, 2009) which advised immediate action in developing a follow-up second Play Policy to begin in 2009 and in which national-level funding 'should have a wider focus than simply providing playgrounds' (Children's Rights Alliance, 2009, p.38).

The National Recreation Policy (OMCYA, 2007) detailed a strategic framework to the parties interested in developing recreational opportunities for young people between the ages of 12 and 18 years (e.g. Government departments, local authorities, City and County Development Boards). The policy objectives were broadly concerned with developing youth-friendly and youth-safe environments, underpinned by the voice of young people in designing and implementing local recreation policies and facilities. An independent review of the National Children's Strategy, by the Children's Rights Alliance in 2011, reported that the implementation of play and recreation policies had 'made a positive difference to children's lives' (Children's Rights Alliance, 2011, p.18). In 2015 the Children's Rights Alliance submitted a progress report to the UN Committee on the Rights of the Child and stated that the play and recreation policies included 'no national oversight mechanism or guidance; this led to patchy implementation, often dependent on the initiative of individuals at local level' (Gunning & Good, 2008 cited in Children's Rights Alliance, 2015, p.93).

A review specifically assessing public policy on play and recreation in Ireland was commissioned in 2016, with attention given to the implementation of the objectives of the National Play Policy (NCO, 2004) and the National Recreation Policy

(OMCYA, 2007). Despite numerous requests and parliamentary questions submitted to the Minister for Children and Youth Affairs since 2016, the review of the public policy on play and recreation remains unpublished, and presently there is no indication of moving forward with the development of a new play and recreation policy. Rather, play and recreation for children and young people, it would appear, has been subsumed into other Government strategies and policies including, for example, Better Outcomes, Brighter Futures: The National Policy Framework for Children and Young People, 2014 – 2020, and Healthy Ireland: The National Physical Activity Plan (Department of Health, 2016). These policies, while briefly referencing play, strongly emphasise, and draw on data pertaining to, children's exercise, sports participation and structured organised activities. At present, there is a lack of data available to guide policy in relation to the play needs and preferences of children and young people. As a result, we have policy and national action plans to increase physical activity in childhood, via exercise and sports participation, instead of increasing play opportunities (Lynch, Moore & Prellwitz, 2018). However, it is imperative to understand that not all children participate, or are interested in participating, in organised sports activities. More importantly, children in Ireland have consistently cited play as one of the most important aspects of their lives (NCO, 2000; Department of Health, 2016; Kilkelly et al., 2016). Current policies therefore largely disregard the explicit views of children and what is important to them, as well as neglecting the rights and needs of children as outlined in Article 31 of the UNCRC.

1.6.2. *How active are children and young people in Ireland?*

Physical activity has been defined as 'any voluntary bodily movement produced by skeletal muscles that requires energy expenditure' (World Health Organisation (WHO), 2020). This WHO definition incorporates popular ways to be physically active, which can be done at any level of skill and for enjoyment including walking, cycling, wheeling, sports, active recreation and play. Physical inactivity is generally understood as an insufficient physical activity level to meet current physical activity guidelines (WHO, 2020). It is important to note that physical inactivity differs from sedentary behaviour which is defined as 'any waking behaviour characterised by an energy expenditure ≤1.5 metabolic equivalents, while in a sitting, reclining or lying posture (Tremblay et al., 2017). Common sedentary activities for children and young

people include the use of electronic devices (e.g. television, computer, tablet, phone) while sitting, reclining or lying; reading, writing, drawing or completing homework while sitting; sitting at school or in a car, bus or train.

National and global physical activity guidelines for health recommend that children and young people (2 – 18 years) engage in at least 60 minutes of moderate to vigorous physical activity every day (Department of Health & Children, & the Health Service Executive, 2009; WHO, 2010). This should include muscle-strengthening, flexibility and bone-strengthening exercises three times a week such as swinging on playground equipment or bars, running, skipping and jumping. Despite this only 13% of children in Ireland meet the National Physical Activity Guidelines (17% primary school-age, 10% secondary school-age) (Woods et al., 2018). Girls are less likely than boys to meet the guidelines, with the likelihood of meeting the guidelines decreasing with increasing age (Ibid). Those who do meet the guidelines have the best health profile of all children, including healthy weight status (Ibid). These findings mirror international trends that report the proportion of children around the world meeting the global physical activity guidelines is alarmingly low and appears to be declining (Hallal et al., 2012; Tremblay et al., 2014).

Ireland's Report Card on Physical Activity for Children and Young People provides a framework for continued surveillance of indicators related to physical activity in children and young people living on the island of Ireland (Harrington et al., 2014, 2016). A key component of the Report Card are the grades for the different forms of physical activity which include ten indicators.[1] The grading process for each form of physical activity starts with a benchmark of what a child should achieve to promote health or that the settings should have in place to support physical activity. One only has to consider the results from Ireland's Report Card (Harrington et al., 2014, 2016) to see the substantial lack of research, policies or recommendations aimed at physical activity play. Report Cards on physical activity for children and young people have also been developed internationally. In 2014, 15 countries produced Report Cards, resulting in consolidated findings in the form of a 'Global Matrix of Grades' pertaining to the common indicators of physical activity (Tremblay et al.,

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[1] The ten indicators of physical activity include: Overall Physical Activity; Sedentary Behaviour; Organised Sport Participation; Physical Education (PE); Physical Activity Play; Active Transportation; School; Community and the Built Environment; Home (Family); and Government (Harrington et al., 2014, 2016).

2014). This cross-country comparison model was repeated in 2016 with 38 countries (Tremblay et al., 2016). Most of the countries involved in the Global Matrix of Grades were graded 'inconclusive' (i.e. incomplete data) for the indicator of 'physical activity play', Ireland included. This points to a national and global gap in the data regarding children's physical activity play.

1.6.3. Break-time. Play, recreation and socialisation

There are 567,772 children enrolled in first level education (primary) and 395,611 young people enrolled in second level schools (secondary) in Ireland (CSO, 2019b). The Department of Education, under the control of the Minister for Education, is in overall control of policy, funding and direction of the whole education system in Ireland. All schools are governed by the rules laid down centrally by the Department of Education and Skills, which cover most aspects of school operations. There are no formal play policies for schools in Ireland, however, of relevance for play is the guidance to schools regarding time allocation in the curriculum. Under these rules, there is a recommendation that schools allow a break of 30 minutes for children's play and recreation. Mid-morning and afternoon breaks of five minutes each are allowed, but where breaks are longer in duration, the length of the school day must be extended accordingly.

Break-time is therefore a non-curricular break within the school day which typically involves access to outdoor space, when weather and space permit, and provides children opportunities for play, recreation and socialisation with peers (Baines & Blatchford, 2019). In Ireland, break-time is an established part of the day and typically consists of two separate breaks; a short morning break and a longer afternoon/lunch break. The length of break-time varies considerably worldwide and according to age/education phase and the type of school. It is estimated that school break-time typically accounts for 16% – 22% of the school day in the UK, which represents a significant reduction in the length of break-time over the past two decades (Baines & Blatchford, 2019). In Ireland the figure is lower with break-time accounting for approximately 12% – 14% of the school day (based on own calculation).

There are increasing concerns over the reduction in the length of break-time which have occurred alongside ever-increasing curricular pressure in schools (Pellegrini, 2008; Powell & Wellard, 2008). In a review of break-time-specific literature, Ramstetter, Murray and Garner (2010) reported that break-time is a child's personal time, offering academic, cognitive, emotional, physical, and social benefits, and should not be diminished for whatever reason. Against this backdrop, there is also evidence that children's physical activity play during break-time is increasingly restricted with specific activities such as running, chasing, climbing and ball games banned or curtailed due to fears of injury and litigation (NCO, 2004). The lack of physical space available for children's play in school settings is also a notable barrier to physical activity play.

There are no funding programmes specifically designed to support play in schools in Ireland. However, the Department of Education provides primary schools with a Minor Works grant for small scale works on buildings and facilities. Every primary school in Ireland receives a flat rate grant worth €5,500 with an additional €18.50 for every child in mainstream class and €74 for every child with special needs who is attending a special school or special class. The spending of this grant is at the discretion of each school and may be used to improve the physical infrastructure of the school (e.g. play space) or to purchase play equipment. It is less clear how play and recreation at secondary schools in Ireland might be supported through funding programmes. A report produced by the Economic and Social Research Institute (Darmody & Smyth, 2013) has noted that 'smaller maintenance work' comes from the overall school budget and is the responsibility of school management.

1.7. Research Question, Study Aim and Objectives

This introduction has identified the importance of physical activity play, the context in Ireland and the need for research particularly in middle childhood and adolescence. It has also highlighted urban-rural differences in physical activity play and the need to address children's play in both urban and rural settings. The literature review, Chapter Two, will further clarify the importance of this study. The research question, study aim, and objectives are as follows.

Research question

What physical activity play and recreational activities do children in middle childhood and adolescence engage in, and in which physical spaces?

Aim

The overall aim of this study was to conduct ethnographic research to identify specific forms of physical activity play that children and young people aged 8 – 16 years engage in across differing spaces in urban and rural settings in Ireland.

Objectives

1. To establish current forms of physical activity play that children in middle childhood and adolescence like to engage in.
2. To ascertain any differences in physical activity play behaviours between gender and ages.
3. To identify differences and similarities in play spaces between schools and neighbourhoods in urban and rural settings, and forms of physical activity play engaged in.
4. To ascertain barriers and enablers, from the participants' perspective, to physical activity play in the school, local neighbourhoods and the wider built environment.
5. To determine the prevalence of overweight and obesity in this population.

1.8. Thesis Outline

The thesis is composed of six distinct chapters chiefly concerned with exploring the physical activity play of children and young people.

Chapter One is the introduction. This chapter provides contextual information pertaining to children's play. It includes some of the key terms and definitions used in this study and has also outlined the research question, aims and objectives. Chapter Two explores and critiques the literature pertaining to physical activity play of children and young people. It draws on extant literature from a range of academic disciplines and multidisciplinary fields. The chapter also clarifies some of the key

terms and concepts that are important to the study. Chapter Three details the fieldwork settings and the methodological aspects of the study. Ethnography and the appropriateness of its application in this study are addressed. The ethical considerations for the research are also discussed.

The findings of the study are presented in Chapters Four and Five. Chapter Four presents the findings derived from ethnographic fieldwork carried out over a twelve-month period across four schools in Ireland. The examination is largely focussed on physical activity play observed in primary and secondary schools during break-times. Gender-differentiated modes of play and some of the barriers and enablers to physical activity play in schools are also identified. This chapter also reports the results from the quantitative anthropometric measurements of children and young people. The data contributes to understanding the weight status of Irish children and how their weight changes as they mature. Chapter Five reports the findings from the child-based photography and also the child-directed walking interviews. The chapter primarily concentrates on children's physical play spaces in home, local neighbourhoods and the wider built environment. The analysis examines some of the wider sociocultural processes and determinants which shape children's play experiences (e.g. age, gender, seasonality).

Chapter Six is the final chapter. A discussion of the findings will be presented which supports deeper understandings about the physical activity play, recreation and play spaces of children and young people. The chapter concludes with the strengths and limitations of the study, policy considerations and recommendations for future research.

1.9.   Researcher Position

This PhD was funded by the School of Nursing, Psychotherapy and Community Health, Faculty of Science and Health, Dublin City University (DCU).

Academically, I completed a BA in Anthropology at the National University of Ireland, Maynooth, and had received two awards for my undergraduate work including the highest overall mark in Anthropology, and best undergraduate thesis. At that time, I was successful in securing a place on a university research programme, which

bolstered my ethnographic fieldwork experience, as well as deepening my understanding of anthropological and sociological theories and concepts.

On a personal level, the lived experiences of children and children's play is an area that I was drawn to and felt was crucially important considering the key juncture in ever-evolving public policy around play and the rights of children at a domestic and international level. I have a genuine interest and understanding of research concerned with body and self-representation, health and illness and fundamental rights. Health and well-being are also core to my personal values and lifestyle. This thesis is therefore both a personal and professional journey of exploration to understand children and young people within their everyday physical, geographical, social and cultural worlds.

1.10. Summary

This introduction has provided background information for contextualisation purposes. The discussion has included key definitions used in this study as well as theories and ambiguities surrounding the phenomena of children's play. The introductory chapter has provided evidence of the lack of research, policies or recommendations specifically aimed at children's physical activity play (Harrington et al., 2014, 2016; Tremblay et al., 2014, 2016). Children's physical activity play and recreation has been examined from an Irish perspective and also in relation to international and national policy developments. The chapter has also detailed the research question, aims and objectives pertaining to this study.

Chapter 2.   Literature Review

2.1.   Introduction

The following chapter explores and critiques the literature pertaining to the physical activity play of children and young people. Play studies do not constitute an academic discipline but rather an inter-discipline or multi-discipline (Henricks, 2015). For this reason, the review draws on extant literature from a range of relevant academic disciplines such as anthropology, sociology, geography, psychology, recreation and leisure and health promotion and physical activity. Firstly, as this study is specifically concerned with physical activity play, a brief discussion on the benefits of this particular play form will be provided. Following on, an examination of age and physical activity play will explore some of the developmental, social and cultural factors associated with middle childhood and adolescence. This will provide context regarding the children and young people in this study. The discussion here will also synthesise specific studies pertaining to the physical activity play of children and young people internationally.

Girls and boys have distinct play repertoires. To create a complete account of children's physical activity play, consideration is given to the gender differences and dynamics. This study is specifically concerned with children's play spaces. This review will address the conceptual difference of 'space' and 'place'. It will also examine the differences of children and young people's lives in urban and rural settings including the key barriers to physical activity play. This is followed by a discussion on the various play spaces utilised in children's lives including the home and neighbourhood, school playground, local parks and public playground. The examination also highlights characteristics of play space which influence children's participation in physical activity play. The lack of physical activity play contributes to childhood overweight and obesity (Janssen, 2014). For this reason, childhood overweight and obesity and the myriad health ramifications associated with obesity related conditions will be addressed. Lastly, some of the changes that have occurred in children's play over time are explored as they have impacted on the experiences of contemporary childhood in fundamental ways. Throughout the review

considerable attention has been given to the themes associated with the research question, study aim and objectives, as presented in Chapter One.

2.1.1. Search methods

A narrative literature review was adopted as this approach is commonly used in ethnography and best suited to address the focus of the research. The search methods were broadly aimed at identifying the relevant literature on the physical activity play of children and young people (8 – 16 years).

Due to the interdisciplinary scope of the topic, multiple electronic databases were searched: Academic Search Complete, JSTOR, ProQuest, PsycInfo (EBSCO) and PubMED. The key words used in the searches were 'physical activity play' (unstructured play, free play, outdoor play, active play, outdoor/active recreation) and 'play spaces' (schools, neighbourhoods, built environment, urban, rural, private, public, playground), along with key words associated with children of 8 – 16 years of age (children, middle childhood, adolescent, adolescence, young people, youth, teenager, teen). Additional searches included Boolean combinations of the multiple terms covering 'physical activity play' and children of 8 – 16 years of age, along with body mass index (BMI), overweight and obesity. International reports and publications such as those from the WHO and the OECD were accessed via their respective websites. National policy frameworks on children and young people (e.g. Better Outcomes, Brighter Futures: The National Policy Framework for Children and Young People, 2014 – 2020, and Healthy Ireland: The National Physical Activity Plan) were accessed via relevant governmental websites. Publications from national research groups (e.g. The Children's Sport Participation and Physical Activity Study) were accessed in the same way.

The inclusion criteria favoured peer reviewed literature involving exploratory, observational, quasi-experimental or experimental studies over the preceding ten years. Older publications of methodological or theoretical relevance were also included. The literature review is specifically structured to reflect the key words and concepts as outlined in the research question, study aim and objectives.

2.2. Benefits of Physical Activity Play

The importance of physical activity play is supported by the fact that evidence-informed health promotion position statements have been developed in relation to it. The recent Position Statement on physical activity play for children (3 – 12 years), developed in Canada in conjunction with a diverse, cross-sectoral group of partners, stakeholders and researchers from around the world, states:

> *Access to active play in nature and outdoors – with its risks – is essential for healthy child development. We recommend increasing children's opportunities for self-directed play outdoors in all settings – at home, at school, in child care, the community and nature (Tremblay et al., 2015, p.6476).*

Many studies support the premise of the value and benefits of physical activity play for children's development, health and well-being. Systematic reviews of the literature show physical activity play to be associated with motor, visual and cognitive development, socio-emotional learning and mental health (Brussoni et al., 2015; Gibson, Cornell & Gill, 2017). It has been purported that physical activity play develops creativity and imagination in children (Bowers et al., 2014). It is also implicated in many areas of learning and academic attainment (Barker et al., 2014; Tomporowski, McCullick & Pesce, 2015), including improved classroom behaviour (Ridgers, Stratton & Fairclough, 2006). Additionally, researchers have claimed that many of the benefits derived from physical activity play are 'unique' and may not necessarily be obtained from more structured forms of physical activity (e.g. organised sports, team practices), including resolving conflicts, and developing self-advocacy skills (Pellegrini & Smith, 1998; Bailey, 2006; Bohn-Gettler & Pellegrini, 2014).

Children playing outside are more physically active and less sedentary than when indoors (Ferreira et al., 2007; Gray et al., 2015). Borghese and Janssen (2019), in a measurement study of children (10 – 13 years) in Canada, found that time spent in physical activity play contributed 36 min/day to physical activity, versus 40 min/day for organised sports, 17 min/day for active travel and 26 min/day for curriculum-based physical activity. Physical activity play is therefore a major contributor to children's overall physical activity (Clark, Spence & Holt, 2011; Schaefer et al., 2014; Gray et al., 2015).

2.3. Age and Physical Activity Play

Age is an ever-present factor in studies on children's play, with children of different ages having different play repertoires and play styles (Meire, 2007). Despite this, much play research has had a strong focus on early childhood. Although this appears to be changing across different disciplines, the concentration of research still remains with the younger child, especially in psychology and education. The following section will highlight some of the developmental, social and cultural factors associated with middle childhood and adolescence, which will provide context to the children and young people in this research. The studies that have specifically addressed the physical activity play of children and young people are also synthesised. This will classify current research efforts and identify gaps in the current literature.

2.3.1. Children in middle childhood

Middle childhood, usually defined as the ages of 7 to 11 years, is an important period of childhood focused on developing competencies, interests, and confidence of mastery and control (Eccles, 1999). Across diverse cultures this period has been regarded as the beginning of the 'age of reason' (Rogoff et al., 1975). Children are assumed to develop new capabilities at this age and are assigned roles and responsibilities. Other associations with the transition to middle childhood include the increased awareness of gender differences and segregation by gender, and the emergence of rule-governed play. In contrast to early childhood and adolescence, both recognised as established fields of study, the period of middle childhood has received less attention from researchers (Eccles, 1999; Mah & Ford-Jones, 2012). One of the most notable deficiencies in play research is the lack of exploration of play beyond seven years of age (Howard et al., 2017). This further demonstrates that our understanding of play, and especially physical activity play, during middle childhood and adolescence is limited (Pellegrini & Smith, 1998). This study works to address this research gap by contributing a deeper understanding of physical activity play in middle childhood and adolescence.

Developmental psychology scholarship has primarily focused on the development stages children go through in their play. For Piaget (1951), play in middle childhood

reflects the development of operational thought (i.e. logical reasoning, problem solving, and the ability to think about abstract representation), which enables rule-based games. However, cross-cultural research points to the importance of *context* in which developmental changes and adaptations take place (Dasen, 1994). Erikson's (1950) theory of psychosocial development (which built upon Freud's (1905) theory of psychosexual development) views play in middle childhood as a period of mastery and confidence. Erickson, unlike Piaget, recognised the significance of social and cultural experiences for ensuring healthy development throughout childhood and beyond. These theories specifically draw attention to psychological and psychosocial developments in middle childhood. However, they are chiefly concerned with what children in middle childhood become able to do, rather than what they actually do (Howard et al., 2017). For example, theories of play (Piaget & Erikson included) have claimed that sociodramatic play is confined to early childhood (see also Fein, 1981, Sutton-Smith, 1997; Cook & Cook, 2005); however, there is also evidence that sociodramatic play persists and evolves in middle childhood (Dunn, 2006; Smith & Lillard, 2012; Willet et al., 2013).

2.3.2. Adolescence

The WHO defines adolescence as period between 10 and 19 years (WHO, 2015). As noted in the introductory chapter, the term 'young people' is used in this study when specifically referring to children in secondary school between the ages of 12 – 16 years old. The significance of relationships with peers plays a critical role in the development of young people, and the peer group is important for emotional support, friendship development, and the facilitation of social interactions (Brown, Eicher & Petrie, 1986; Brown, 2004). Although little is currently known about the physical activity play of young people, we do know that physical activity habits track from adolescence into adulthood (Telama et al., 2014) and often decline during adolescence (O'Donovan et al., 2010; Woods et al., 2018).

A considerable amount of literature has been published on the problem behaviours associated with the adolescence period. These studies indicate that young people engage in behaviours that risk their health and well-being which include, but are not limited to, a lack of physical activity and an increase in sedentary activities (Sawyer et al., 2012). At the same time, the accompanying psychosocial adjustment to

pubescent changes evokes a preoccupation with body image (Radzik, Sherer & Neinstein, 2002). Adolescence is also a time of increasing incidence of psychiatric illnesses. A recent study into mental health and well-being in Ireland found there has been a significant rise in the number of young people (12 – 19 years) suffering anxiety, with 22% reporting severe anxiety, a figure that has doubled since 2012 (Dooley et al., 2019). Emerging research in Ireland has also shown that young people have experienced the greatest increase in mental health difficulties in the wake of the global Covid-19 pandemic and associated restrictions (Darmody, Smyth & Russell, 2020). Gray (2011a) hypothesized a direct link between generational increases in measures of psychopathology in children and young people (e.g. anxiety, depression, feelings of helplessness, and narcissism) with the decline in children's physical activity play. Play deprivation is interlinked with a reduced sense of personal control, reduced ability to regulate emotions, increased social isolation and loneliness, and low levels of happiness (Gray, 2011a).

2.3.3. *Physical activity play in middle childhood and adolescence*

Studies of physical activity play in middle childhood and adolescence have encompassed numerous research methodologies and data collection techniques and have largely been concerned with break-time in schools (Ridgers et al., 2011; Stanley et al., 2012; Knowles et al., 2013; Willet et al., 2013; Hyndman & Chancellor, 2017; Baines & Blatchford, 2019). Studies of school playgrounds have considered the role of greenery and playground design for physical activity play (Lucas & Dyment, 2010; Mårtensson et al., 2014). Other studies have considered how children and young people use public outdoor spaces for physical activity play (Boone-Heinonen et al., 2010; Brockman, Jago & Fox, 2011; Chaudhury et al., 2019); along with the significance of nature in neighbourhoods/built environment for children's play (Piccininni et al., 2018). These studies contrast the considerable research on the disappearance of children playing in streets and the decrease of children playing outdoors generally (Gill, 2007a; Kinoshita, 2008; Singer et al., 2009).

Many studies about play rely on parents' reports of their children's play activities (Valentine & McKendrick, 1997; Veitch et al., 2006; Bringolf-Isler et al., 2010), which may not be as reliable as children's own perspectives on play. We know that children

emphasise different aspects of play than adults (Van Gils, 2007). These studies fail to consider children's views, experiences and preferences regarding play. The current study recognises the voice of the child and aims to ensure that children's perspectives in regard to their play experiences are heard, as laid down in Article 12 of the UNCRC.

2.4. Gender Differences and Dynamics of Physical Activity Play

Like children of differing age groups and developmental stages, girls and boys also have differing play repertoires. Gender is also a prominent research subject in children's play and must be given consideration if we are to create a complete account of children's physical activity play. To date, most of the research concerning gender and children's play has been conducted in playgrounds. The current study seeks to contribute knowledge of gender and physical activity play across differing school and neighbourhood spaces in urban and rural settings.

Previous research has established the differences between the play of girls and boys in school playgrounds and in other outdoor spaces (Karsten, 2003; Lodge, 2005; Brockman, Fox & Jago, 2011; Ridgers et al., 2011; Bourke, 2014; Barron, 2013; Reimers et al., 2018). Whilst there are contextual and cultural differences in many of the studies looking at gender and children's play, the magnitude of these differences remains relatively constant across middle childhood. Overall, boys tend to play more vigorous, competitive and rule-based group games (e.g. soccer, basketball); while girls are more likely to interact in smaller groups and engage in a wider range of play activities than boys (e.g. skipping and clapping games, singing and dancing, gymnastics).

Rough and tumble is a specific form of physical activity play, characterised by aggressive behaviours such as wrestling, grappling, kicking, tumbling and chasing, in a play context (Pellegrini & Smith, 1998). The majority of research concerning rough and tumble play has focused on the physical aspects of boys' rough and tumble play (Pellegrini, 1994, 1995, 2002), noting that boys, of all cultures, participate in rough and tumble more frequently than girls. Perpetuating these gender differences is the tendency for boys and girls to be socialised into different, and often segregated, worlds (Maccoby, 1998; Lindsey & Mize, 2001). For example,

studies have found fathers are more likely to engage in more rough and tumble play with their sons than with their daughters (Jacklin, DiPietro & Maccoby, 1984; McIntyre & Edwards, 2009; Mascaro et al., 2017), whereas mothers encourage their daughters' sociodramatic play more than their sons (Tamis-LeMonda & Bornstein, 1991; Richards, 2020). The literature has also highlighted that girls, compared to boys, are more closely supervised by adults (Fagot, 1994; Stace & Rocker, 2004), which is likely to discourage rough forms of play (Maccoby, 1998). Moreover, the physical vigour and roughness typically associated with boys' play appear to contribute to girls segregating themselves from boys' play groups (Maccoby, 1986). A consistent finding in the literature is that girls generally play with other girls in middle childhood, and boys with other boys (Thorne, 1993; Snow et al., 2019).

Gender has been found to be the most common demographic variable associated with children's physical activity play on school playgrounds (Ridgers et al., 2012; Stanley et al., 2014). A recent national survey of primary and secondary schools in the UK found girls are increasingly likely with age to say that they were rarely physically active during break-time (Baines & Blatchford, 2019). However, these views are not universal and have been contested in a number of studies. Willet et al., (2013), in an ethnographic study of primary school playgrounds in the UK, reported that girls dominated play activities like skipping, hula hoops, clapping games, singing and dancing, whereas boys dominated ball games like soccer and basketball, as well as rough and tumble play.

These findings are broadly consistent with Ridgers et al., (2011), who observed similar gender differences in a longitudinal study investigating children's play at break-time across primary schools in the UK. Researchers here report that girls do spend proportionally more time than boys standing and engaged in small groups, and in sedentary activities; however, they were also more likely than boys to engage in playground games (e.g. dancing, skipping), locomotion and pro-social physical behaviours. Boys, on the other hand, spend more time engaged in walking and vigorous activity, large groups, sporting games (e.g. soccer) and antisocial behaviours. Ridgers et al., (2011) link the small proportion of incidents of antisocial behaviour by boys to the competitive nature of the games they played, such as soccer.

Soccer is widely acknowledged as being dominated by boys on school playgrounds, and therefore the available playground space required for the game (Swain, 2005; Pawlowski et al., 2016; Martínez-Andrés et al., 2017; Dudley et al., 2018). This leads to the marginalisation of (the majority of) girls (and some boys) to small groups situated on the periphery of the playground (Swain, 2000; Paechter & Clark, 2007), which can result in dissent and discontent (Knowles et al., 2013). Research findings however have been inconsistent and suggest that girls prefer smaller secluded (and periphery) playground spaces (Boyle, Marshall & Robeson, 2003; Pawlowski et al., 2018). Boys are also more likely to disrupt girls' activities on the playground than vice versa (Thorne, 1993; Blatchford, Pellegrini & Baines, 2016).

Thorne (1993), in her ethnographic study of gender dynamics in primary schools in the US, draws on the concept of 'borderwork' (borrowed from Frederick Barth (1969) and his work on ethnic boundaries), to refer to cross-gender play that affirms gender boundaries, such as 'girls against boys' play (e.g. chasing/catch-and-kiss). The process of 'invasions' where boys, in particular, invade girls' playground activities are referred to as an asymmetric form of 'borderwork', concerned with the power and dominance of boys over girls (Thorne, 1993). Thorne (1993) however also acknowledged that borderwork does create a space where girls and boys in middle childhood can come together to experiment and reflect on how to relate to one another. This view is largely supported by Pellegrini (2003), who examined intersexual rough and tumble play (e.g. chasing games) of young people, suggesting that this type of play may be used as a gambit to establish heterosexual contact.

Karsten (2003), in her observational study of children's play in eight public playgrounds in Amsterdam, reported that girls engaged in specific 'girl' activities in small groups with much variation in their daily play (gymnastics, hopscotch, playing on swings); while boys predominantly played soccer. As a consequence, boys tended to play in larger groups and control much larger spaces than girls did, as has already been mentioned. These results are similar to those of Reimers et al., (2018), who reported significant gender differences in relation to the play types of children and young people, in their observational study of ten neighbourhood playgrounds in Germany. Again, boys were more likely than girls to engage in active games (e.g. ball games, chasing games), while girls were more likely than boys to be

walking/running, on playground equipment, or sedentary. Reimers et al., (2018) however concluded that girls' physical activity play was suppressed when boys were present in the playground, suggesting that girls could have been distracted or bullied by boys who were also playing in the playgrounds.

2.5. Spaces and Places for Physical Activity Play

Play does not take place in a vacuum; it appears in the cultural, social and physical spaces of everyday life (Meire, 2007). This section first examines the conceptual difference of 'space' and 'place'. The various play spaces utilised by children and young people are then identified including how the characteristics of space influence their participation in physical activity play.

2.5.1. Understanding space and place

The terms 'space' and 'place' are often used interchangeably across various academic disciplines. Although the conceptual debate is ongoing, there is consensus that space is a more abstract concept than place – something that is more 'conceptual' than 'real' (Cresswell, 2015). In its simplest sense space may be thought of as a location – a geographical point on the earth's surface. Space is not an independent, neutral entity, but rather something that is always under (social) construction; 'always in the process of being made – never finished, never closed' (Massey, 2005, p.9).

Definitions of place have focused on the combination of location (the definable point in space) and meaning. Place is therefore a location that people have made meaningful or have attached to in some way (Agnew, 1987; Creswell, 2008). A 'sense of place' is a social phenomenon – fulfilling place's necessity 'to have some relationship to humans and the human capacity to produce and consume meaning' (Agnew, 1987, p.7). Hence, place gives us a way of understanding the world. Place and space are not mutually exclusive concepts; rather, they are inextricably linked, forming a spectrum with place at one end and space at the other, which is 'simultaneously a continuum linking experience to abstraction' (Cresswell, 2004, p. 21). The distinction of space and place in this study is treated similarly, in that the

concepts are very much linked, yet there is particularity in place (specific, real) that does not apply to space (general).

2.5.2. Children can play almost anywhere and everywhere

Social scientists have contributed to the substantive studies illuminating the various spaces of childhood. Many studies have identified differences in children's and adults' viewpoints concerning spaces and places for play (Veitch, Salmon & Ball, 2008; Jansson, 2010; Brockman, Fox & Jago, 2011; Nicholson et al., 2014). Extensive research has provided evidence that children can play almost anywhere and everywhere, including places that are not designed specifically for the purpose, such as streets, alleyways, car parks, shopping areas, vacant plots, derelict sites and natural/wild environments (Tranter & Doyle, 1996; Tandy, 1999; Matthews et al., 2000; Glenn et al., 2013; Kearns et al., 2015; Rupprecht, Byrne & Lo, 2016). Adults however tend to have a much more constrained view of play, which is frequently at odds with children's desires (Gearin & Kahle, 2006; Tucker, Gilliland & Irwin, 2007). Understanding the spaces and places for play from children's perspectives is not only important for deconstructing (discredited) adult assumptions about play, but also for uncovering how space is used and the value and meaning for children (Thomson & Philo, 2004).

The classic works of Colin Ward (1978), Roger Hart (1979) and Robin Moore (1986) were among the first to explore children's playful encounters in their local environments. These evocative studies had considerable impact on the methods and concepts regarding children's everyday encounters in outdoor and natural spaces. It is useful however to consider more recent studies if we are to understand the specific spaces and places that children and young people in contemporary societies use in their daily play experiences. For this we turn to children's geographies and the wider social sciences, which have produced research eliciting children and young people's perspectives on the differing play and recreation spaces utilised in their lives (Jansson, 2008; Abbott-Chapman & Robertson, 2009; Loebach & Gilliland, 2016a, 2019; Chaudhury et al., 2019; Snow et al., 2019).

It should be pointed out that most research to date has focused on play in either urban or suburban areas. A recent meta-study of qualitative research examining

determinants of children's physical activity play recognised the need for more analysis of play in rural settings (Lee et al., 2015). The current study is specifically concerned with physical spaces. It seeks to contribute to knowledge by ascertaining the barriers and enablers, from the children's perspective, to physical activity play across differing spaces in both urban and rural settings.

Guided by the literature, the key spaces where children and young people play, in both urban and rural settings, include the home and neighbourhood areas (e.g. streets, green spaces, fields), child-specific institutions (e.g. school playgrounds), and public open spaces (e.g. parks, playgrounds), which will be the focus of the ensuing discussion.

2.5.3. The home and neighbourhood

Children have reduced independent mobility in the neighbourhood compared to previous generations (Witten et al., 2013; Schoeppe et al., 2016). Children's independent mobility is defined herein as the freedom of children to travel or move about and play in neighbourhoods without adult supervision (Shaw et al., 2013). Children are therefore spending more time in the private home space, most of which is reported to be indoors (Karsten, 2005; Loebach & Gilliland, 2016a). Many scholars hold the view that 'private' space cannot be viewed in simple binary opposition to 'public' space – one being 'inside' and one being 'outside' (Livingstone, 2007; Abbott-Chapman and Robertson, 2009; Lincoln, 2012). For Lincoln (2012), private space is essential to the overall life-worlds of children and is adapted by them accordingly. For the purpose of this study, and borrowing from Maitland et al., (2019), the home physical environment is defined as all physical spaces and equipment within the boundary of the residential block. This includes private spaces inside the home (e.g. bedroom, living room) and private and semi-private spaces outside the home (e.g. back/front garden). Children's play inside the home is generally distinct from physical activity play and includes sedentary pursuits, such as reading and screen-based activities (e.g. watching television, electronic game, computer or mobile phone use) (Delmas, 2007; Jago et al., 2008; Ramirez et al., 2011; Te Velde et al., 2011).

Veitch, Salmon & Ball (2008), in a behavioural mapping study with children (8 – 12 years) across urban areas in Australia, reported that the most frequented play space was the domestic garden. The other places where children were most likely to play included their own street, and nearby streets and friend's houses. These results are similar to those reported by Barron (2013), in an ethnographic study of physical activity play with children (7 – 13 years) in suburban housing estates in Ireland. In this study, children play in the back garden more than any other outdoor space, which is followed by the roads and paths in the children's housing estate. Barron (2013) concluded that the back garden had become the 'new private, personalised playground for children, moving from the shared 'public space' of the neighbourhood to the 'private space' of the back garden' (Barron, 2013, p.224). These studies recognise the importance of private gardens and nearby neighbourhood spaces for children's physical activity play.

The rise in domestic play environments has received relatively little attention in the literature. However, Salmon et al., (2013), in their longitudinal cohort study of children's physical activity and sedentary behaviour reported significant differences in screen time and play equipment in the home space of children (5 – 12 years) living in urban and rural areas of Australia. Urban children had more screen time than rural children (verified in other studies e.g. Bruner et al., 2008; Hume et al., 2012). Rural children, on the other hand, had significantly more play equipment available to them in the home space (e.g. trampolines, swings, balls, bikes, skipping ropes) compared to those in urban locations. These findings may be linked with Davison et al., (2012), who reported that 'social capital', the valued resources that one can access through social connections (Kawachi, Subramanian, & Kim, 2008), was associated with physical activity play among young people in rural settings in upstate New York, which was partially mediated by parental support of physically active lifestyles. As argued by others (Barron, 2013; Witten et al., 2013; Loebach & Gilliland, 2016a), it is reasonable to expect that the upsurge of play equipment in domestic play environments and the rapid development of children's indoor media cultures constrain children's independent ability to play and travel through public space.

The accessibility and proximity of play spaces to the family home are known to influence children's participation in physical activity play (Veitch, Salmon & Ball,

2007; Jansson, 2010; Brockman, Jago & Fox, 2011; Barron, 2013). Strongly associated with this are the social aspects of play. Play spaces where there are strong possibilities of interaction with other children are popular choices for children's play. Kilkelly et al., (2016), in a report commissioned by the Heritage Council of Ireland, found that the outdoor play spaces available to children (5 – 12 years) varied considerably between urban/city, suburban and rural settings. Using mixed methods together with qualitative participatory techniques, the study reported that children in urban/city and suburban areas predominantly played with friends in public green spaces close to home, or around nearby roads and in domestic gardens. The children in rural settings however made little or no mention of playing with friends and were more likely to play with pets, siblings and cousins in gardens and nearby fields. Evident among the rural children in the study was the geographic isolation from friends, with the lack of company the most cited reason for staying indoors.

With the exception of research in children's geographies, the research on 'street play' is surprisingly lacking in the literature on children's play. Biddulph (2011), in an observational study of ten housing developments across the UK, reported the following factors as influential in the popularity and duration of children's play in neighbourhoods: proximity to the home; social contact; accessibility of key destinations; the range of play opportunities; and, traffic. The study specified that children's natural sociability drew them away from quieter streets, such as those with cul-de-sacs, to busier places where they were more likely to meet their friends.

These findings are comparable to those reported by Brockman, Jago & Fox (2011) in a qualitative study of physical activity play with children (10 – 11 years) in inner-city and suburban areas of the UK. The data presented in Brockman, Jago & Fox (2011) show that children are motivated to engage in physical activity play for several reasons including socialising, preventing boredom, a desire to feel healthy and, for the sense of freedom it provides from adult control, rules and structure. The study also reported features of the physical environment that facilitated children's physical activity play including the presence of easily accessible green spaces and cul-de-sacs. The value of cul-de-sacs for children's play has been debated in the literature. Biddulph (2011) observed relatively low levels of play in cul-de-sacs and questioned the view that the cul-de-sac layout resulted in more play. Biddulph

(2011) also recognised that permission to play is more likely to be granted as parents feel cul-de-sacs are safe, however this does not necessarily mean that children wish to play there.

2.5.4. The school playground

School playgrounds offer an ideal setting for researching children's play because 'contemporary childhoods are literally played out in the spaces of school playgrounds' (Marsh & Richards, 2013, p.8). Much of the literature concerning school playgrounds examines gender differences in children's play. As gender differences have been addressed elsewhere in this review, they will not be repeated in detail here.

There is a large volume of published studies describing school playground spaces as overburdened with adult prescription, rules and regulations (Thomson, 2014; Hyndman, Benson & Telford, 2016). In an ethnographic study on children's play in urban, suburban and rural primary schools in the UK, Thomson (2005) explored how adults control the spatial area of the playground and the spatial range of children during break-time. Each of the playgrounds in Thomson's study had 'off limit' areas and rules (e.g. access to grass sports fields adjacent to the tarmac playground was permitted only in summer) and were segregated by children's class/age, both of which are also commonly found in primary schools in Ireland. Each playground in the study also had 'prescriptive spaces', those demarcated by markings and designated for specific activities (e.g. soccer, hopscotch). Thomson (2005) asserted that the school playground has always been, in one form or another, a territory of adult surveillance and intervention, in which 'children have less free range of movement and fewer areas to extend their physicality' (Thomson, 2005, p.77). Thomson's view is supported by the work of Blatchford (1998) and Baines & Blatchford (2019) who warn that the increased interventionist stance (of adults) at break-time risks overrunning children's freedom in the playground.

Children living in urban areas may find it difficult to spend time in nature. This is because urban neighbourhoods may have little nature nearby to interact with, or children may not be allowed to travel on their own to reach natural or wild spaces (Freeman & Tranter, 2011; Freeman et al., 2015; Lekies & Bresinger, 2017). As

such, the school playground may be one of the few places where children can play outdoors in the natural environment with their peers (Tranter & Malone, 2004). School playgrounds vary greatly in design, size and presentation. Some are bleak and barren, while others are full of colour and exciting play equipment (Thomson, 2005). A number of studies have examined the relationship between school playground design and physical activity play (Dyment, Bell & Lucas, 2009; Lucas & Dyment, 2010; Hyndman & Chancellor, 2017). Natural features on school playgrounds (e.g. trees, flowers, grass, shrubbery, boulders, hills) are increasingly recognised as important for stimulating children's diverse play interests and abilities across all ages (Tranter & Malone, 2004; Dyment & Bell, 2007, 2008; Hyndman, Benson & Telford, 2016).

In the same vein, Mårtensson et al., (2014), in a field study examining the role of greenery for physical activity play across two primary schools in Sweden, reported that extensive green areas belonged to children's favourite places, but were little used. Rather, settings with a mix of green and built elements in proximity to school buildings were well-used favourites. Mårtensson et al., (2014) concluded that greenery on school playgrounds were important for girls and boys during middle childhood, and possible into adolescence, if located in ways that supported peer interaction and physical activity play. Specifically, Mårtensson et al., (2014) draw attention to how socialising in this way can be far from sedentary.

2.5.5. Public playgrounds and parks

Public playgrounds are purpose-built designated spaces for children's play and social interaction. Local parks certainly have a broader purpose than just 'children's spaces' however many studies concerning children's use of public playgrounds frequently overlap with their use of parks (Wridt, 2004; Veitch, Salmon & Ball, 2007; Jansson, 2008; Chaudhury et al., 2019). Public playgrounds and parks are both recognised as important settings for children to engage in physical activity play and independent mobility (Ding et al., 2011; Qazi, 2011; Carroll et al., 2015; Chaudhury et al., 2016; Van Hecke et al., 2018). Despite this, longitudinal evidence indicates that these spaces, particularly public playgrounds, are becoming less common for children to visit independently due to the decline in children's independent mobility (Tandy, 1999; Karsten, 2005; Loebach & Gilliland, 2016a).

Jansson (2008), in a qualitative study of public playgrounds in urban areas in Sweden, reported that children (6 – 11 years) appreciated them for being fun, and for the physical games and challenges provided by the playground. Trees and natural surroundings were viewed as part of the playground and were sometimes appreciated more than the play equipment. A common critique from the older children in the study was that playgrounds were inadequate and mostly designed to satisfy younger children's play needs, or that the playgrounds were not sufficiently clean-looking. Similarly, Chaudhury et al., (2019), in a qualitative study exploring physical activity play in urban and suburban neighbourhoods in New Zealand, reported that playing on playground equipment or facilities (e.g. slides, swing, flying fox/cableway and monkey bars) was popular for a large number of children (9 – 13 years) in the study. However, some also spoke about playgrounds no longer being age-appropriate – "more for younger kids", not "extreme enough for older kids". There is also recent evidence in Ireland that playgrounds designed for children up to 12 years are not always playable for this age cohort due to the lack of challenge, and the need for higher swings, and faster slides, which would require the design of larger playground components (Lynch et al., 2020).

Fear of injury and avoidance of litigation are commonly cited reasons for the safety measures which have contributed to playgrounds that do not meet the needs of all children (Herrington & Nicholls, 2007; Woolley & Lowe, 2013; Brussoni et al., 2015; Lynch et al., 2020). The debate on playground safety and standards is polarised and ongoing. On one hand, it is argued that we have become an excessively risk-averse society which in turn has led to the reduction of children's freedom to play and has created significant barriers to their health and well-being (Spiegal et al., 2014; Brussoni et al., 2015). Others point to the fact that safety guidelines such as playground standards have led to positive health related outcomes for children through injury prevention and decreased exposure to harm (Molcho & Pickett, 2011; Rivara, 2011; Pless, 2012). However, perceptions of risk are not universal and very much subject to cultural interpretation, and the risk aversion known to prevail in countries such as Australia, the UK and USA are less apparent in some of the European and Scandinavian countries (Wyver et al., 2010; Little, Sandseter & Wyver, 2012).

Children and young people commonly engage in both active and passive activities during park visits (e.g. walking, physical activity, socialising) (Veitch et al., 2016). However, little is known about the specific characteristics that influence children and young people to use particular parks (Veitch et al., 2021). A review of qualitative research reported park users' perceptions of attributes including safety, aesthetics, amenities, in addition to proximity, were important for encouraging park use (McCormack et al., 2010). Rivera et al., (2021), in a recent qualitative study in Australia, reported that young people (13 – 18 years) are attracted to parks equipped with a variety of features such as nature, open space, activity-supportive features (e.g. playgrounds, sports courts, paths) and supportive amenities (e.g. picnic areas, toilets). These authors also reported that young people wanted parks that were well maintained, aesthetically appealing, and located close to home and other destinations.

The results reported in Rivera et al., (2021) are broadly consistent with previous research in Australia where young people's (12 – 15 years) park use was associated with a variety of 'attractive' features including; presence of a skate park, walking paths, picnic table, public access toilets, lighting around courts and equipment and number of trees (Edwards et al., 2015). The aforementioned studies also acknowledge the inextricable link between physical park characteristics and social elements for park use. Van Hecke et al., (2016), in a qualitative study in Brussels, provided evidence that young people may be willing to compromise for less attractive physical park features if their peers are present. Van Hecke et al., (2016) also reported park features that were unsupportive of young people to visit parks and engage in physical activity play including the presence of undesirable users (drug users, gangs and homeless people), the behaviour of other users and the cleanliness of the park. Overall, easily accessible parks with high quality features are likely to attract more children and young people, which will provide more opportunities for physical activity play and peer interaction.

2.6. Childhood Overweight and Obesity

The WHO (2020) calls for a multisectoral, multidisciplinary and culturally relevant approach toward the prevention and treatment of childhood overweight and obesity. An objective of this research is to determine the prevalence of overweight and

obesity of the study population. This will provide policy developers with evidence on how the forms of physical activity through play which children and young people engage in may inform policies for the prevention and treatment of childhood overweight and obesity. The following section therefore briefly examines the global epidemic of childhood overweight and obesity and the myriad health ramifications associated with obesity related conditions.

As discussed in the aforementioned section, physical activity play is associated with a number of benefits including healthier body weight and increased overall physical activity (Schaefer et al., 2014; Gray et al., 2015; Woods et al., 2018). Despite this, physical activity play has largely been ignored in relation to studies of physical activity in children in the prevention and treatment of childhood overweight and obesity (Barron, 2013). Janssen (2014), in a survey study of Canadian children (6 – 11 years), reported that physical activity play is the form of physical activity where children expend the most calories. These results substantiate that a lack of physical activity play contributes to the childhood obesity crisis. Physical activity play is therefore considered an important physical activity strategy in the fight against childhood overweight and obesity (Janssen, 2014).

The development of childhood overweight and obesity is attributable to several factors including increased dietary energy density, decreased physical activity levels and increased sedentary behaviour (WHO, 2020). These factors are moderated by others such as age, gender, family characteristics, parenting styles and lifestyles, combined with environmental factors, such as school policies, demographics, and parents' work-related demands (Davison & Birch, 2001). Childhood obesity is a global epidemic and has become a major public health challenge of the 21st century (Janssen et al., 2005; Wang & Lobstein, 2006; Wang et al., 2008).

Over the past 40 years the number of school-age children (5 – 17 years) classified as obese worldwide has risen dramatically, from 11 million to 124 million, with an estimated further 216 million classified as overweight (O'Reilly & Non-Communicable Disease Risk Factor Collaboration, 2017). The rising trends in children's mean BMI have plateaued in many high-income countries, including Ireland, albeit at high levels. In Ireland, seven-year-old girls and boys are ranked as having the third and fifth highest BMI respectively within the European region (girls

20.4%, boys 13.2%) (Bel-Serrat et al., 2017). Additionally, 26% of 13-year-olds in Ireland are considered overweight or obese (girls 30%, boys 23%) (Williams et al., 2018). At least one in five children (6 – 13 years) in Ireland are overweight or obese, with girls more likely than boys to be overweight or obese across all ages (Bel-Serrat et al., 2017). The available data for overweight and obesity among 15-year-olds in Ireland is self-reported and stands at 15.5% (OECD, 2017).

There is increasing evidence that childhood overweight and obesity is linked to numerous health and medical conditions. Overweight and obese children are more likely to maintain their status into adulthood and to develop noncommunicable illnesses, such as diabetes and cardiovascular diseases at a younger age, however the risks for this depend partly on the age of onset and the duration of obesity. Other significant medical conditions of childhood overweight and obesity include, but are not limited to, musculoskeletal disorders, especially osteoarthritis, certain types of cancer (endometrial, breast and colon) (WHO, 2020), menstrual abnormalities and infertility (Kulie et al., 2011), gout (Aune, Norat & Vatten et al., 2014), Alzheimer's disease (Beydoun, Beydoun & Want, 2008), hepatic steatosis (fatty liver disease) (Schwimmer, Burwinkle & Varni, 2003) and sleep-associated breathing disorders (Mallory, Fiser & Jackson, 1989), such as obstructive sleep apnoea syndrome (Erler & Paditz, 2004). Until recently many of these medical conditions had only been found in adults, however they are now increasingly prevalent in obese children.

2.7. Changes in Children's Play. A Barrier to Physical Activity Play

To adequately address the research question and study objectives, it is useful to consider some of the social and cultural changes that have occurred in children's play over time. The decline in children's independent mobility and new classifications of childhood play experience, such as 'indoor' and 'backseat' childhood are the focus of the following discussion.

There has been a downward global trend in children's independent mobility. The largest study on children's independent mobility to date included survey data from 16 countries (Shaw et al., 2015). The international comparison found significant restrictions are placed on children's independent mobility in nearly all the countries studied. Shaw et al., (2015) reported that children (7 – 15 years) in Finland had the

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highest levels of independent mobility. Ireland ranked 12th out of the 16 countries which took part in the study for low levels of independent mobility (Shaw et al., 2015). There is consistency in the rationale given for this decrease in independent mobility internationally, namely parental concerns about road safety, fear of stranger abduction and other forms of criminality (Carver et al., 2010; O'Keeffe & O'Beirne, 2015; Francis et al., 2017), greater complexity in family schedules (Crawford et al., 2017), less walkable neighbourhoods (Blinkert, 2004; Villanueva et al., 2012), considerable increases in the use of cars to escort children to school or other destinations (Fyhri et al., 2011; Witten et al., 2013) and, longer distances from school and leisure activities (Fyhri & Hjorthol, 2009).

Children's independent mobility increases with chronological age, often coinciding with the transition from primary to secondary school. This is in response to parents recognising increasing physical and cognitive capabilities as children age (Prezza et al., 2001; Carver et al., 2010; Villanueva et al. 2012; Shaw et al., 2015). For instance, by age 11, a majority of children in each of the countries examined in Shaw et al., (2015) were allowed to cross main roads; and by age 15, a majority of children exercised high levels of independent mobility, except for the ability to go out alone after dark. Going out alone after dark is the most withheld independent mobility for Irish children (Shaw et al., 2015). Numerous studies have highlighted the gendered nature of independent mobility, with boys reported to have a larger spatial range and fewer parental restrictions than girls of a similar age (Hart, 1979; Hillman, Adams & Whitelegg, 1990; Prezza et al., 2001; Tucker & Matthews, 2001; Brown et al., 2008; Veitch, Salmon & Ball, 2008).

In contrast to these findings, Loebach and Gilliland (2016b), in a study of neighbourhood activity and mobility in Canada with children (9 – 13 years), reported gender was not a significant factor with respect to independent mobility. The authors suggest that the lack of gender related differences may reflect a diminishing gap between girls' and boys' levels of independent mobility; however, it may also reflect a decrease in mobility for all children, rather than increases in freedom awarded to girls (Loebach & Gilliland, 2016b). These results are similar to those reported in Shaw et al., (2015) who found no significant differences between girls' and boys' levels of independent mobility in nine of the 16 countries in the study (including Australia, England, Finland, Germany, Ireland, Israel, Portugal, South Africa and

Sweden). Despite this, parental anxieties concerning children's independent mobility in Ireland do exist, regardless of age, gender or geographical location (O'Keeffe & O'Beirne, 2015). Notably, there has been a decrease in children's participation in physical activity via mobility (e.g. walking, cycling) in Ireland, particularly for children in more rural areas, which may be linked to greater distance to travel, than for those in urban areas (Harrington et al., 2014).

Over the past century and a half, there has been a gradual, long-term shift in the 'spaces of childhood', from outdoors to indoors and commercial play sites, with a subsequent decline in wholly unsupervised, free, unstructured play and an increase in indoor solitary play with the use of technologies. Karsten (2005), in a historical study about the changing nature of children's daily lives in Amsterdam, suggests that contemporary childhood has changed so considerably from previous generations as to necessitate new classifications of childhood play experience. Karsten (2005) classified many of the children in her study as having an 'indoor' or 'backseat' childhood due to the vast amount of time spent indoors (e.g. watching television) or being driven to extracurricular activities (e.g. sports lessons, music classes). These two new types of contemporary childhood are characterised by a decrease in playing outdoors and an increase in adult supervision.

Karsten (2005) results echo recent intergenerational studies of physical activity play, conducted in both urban and rural settings, which have shown that time spent outdoors has declined, children experience more parental rules and restrictions than in the past, are more likely to be driven to school and other destinations, and spend more time participating in structured, supervised, and indoor activities (Witten et al., 2013; Holt et al., 2016). The changes that have occurred in children's play over time have impacted on the experiences of childhood in fundamental ways and have resulted in major barriers for children's engagement in physical activity play today.

2.8. Summary

The purpose of this review was to evaluate the current state of the literature concerning the physical activity play of children and young people in middle childhood and adolescence. The significance of the value of physical activity play cannot be understated. Physical activity play is important for children's

development, health and well-being, and has been associated with increased overall physical activity and healthier body weight. Despite this, physical activity play has largely been ignored as a physical activity strategy in the fight against the global epidemic of childhood overweight and obesity (Barron, 2013; Janssen, 2014).

The most notable deficiency in play research is the lack of exploration of play beyond seven years of age (Howard et al., 2017). Additionally, a recent meta-study examining children's physical activity play recognised the need for more analysis of play in rural settings (Lee et al., 2015). Understanding the spaces and places for play from children's perspectives can guide practice and policy to improve the quality of provision. The decline in children's independent mobility and the shift from time spent outdoors to the increased time spent indoors has resulted in major barriers for children's participation in physical activity play.

This chapter has focused on the extant literature pertaining to the physical activity play of children and young people. The following chapter, Chapter Three, will address the fieldwork settings and research methods of this study.

Chapter 3. Methodology

3.1. Introduction

This chapter details the methodological aspects of the study and the fieldwork settings in which the research was situated. Ethnography and the appropriateness of its application in this research are first considered. This is followed by a brief overview of Ireland including the structure of the Irish education system, as well as a description of the urban and rural fieldwork settings and the towns in which they are located. These descriptions are necessary to place this ethnographic research in context. Additional child-centred participatory and quantitative methods have been employed in the research. The background and rationale for the use of the various methods are presented, as is the form of data analysis adopted for each. The chapter concludes with a discussion on the ethical considerations for the study.

3.2. Ethnography. A Child-Centred Methodology

Ethnography is a qualitative research methodology with origins rooted in the field of social and cultural anthropology. It is most recognised as the systematic and holistic study of people and cultures and thus seeks to explore and describe emic or etic knowledge about specific cultural phenomena (LeFrançois, 2014; Hammersley & Atkinson, 2019). Ethnography has been described as 'a way of looking and a way of seeing' (Wolcott, 2008, p.41) and refers to both a process and product of the study of human culture (Geertz, 1973). The doing of 'ethnography' has been defined as an interpretative act of 'thick description' (Geertz, 1973), in which the researcher provides a detailed account of field experiences, makes explicit the patterns of cultural and social relationships and puts them in context (Holloway, Brown & Shipway, 2010). This interpretative understanding evolves slowly over a lengthy period of time and across a variety of social contexts – and specifically relies on 'first-hand, personal involvement in the lives of people being studied' (Eisenhart, 2001, p.18).

In the last decades of the 20th century a reconceptualisation of children and childhood took place. The work of the new sociology of childhood (or the new social studies of childhood) confronted adult-centred perspectives that marginalised and discredited children's experience and focused attention on the child as a social actor, and childhood as a social construct (Qvortrup, Corsaro & Honig, 2009). A key feature of the new sociology of childhood (described as an 'emergent' paradigm) is therefore the commitment to children's social relationships and cultures as 'worthy of study in their own right' (James & Prout, 1990, p.8), and that children should be recognised as social beings capable of making sense of, and affecting their societies (Matthews, 2007).

Ethnographic approaches have played a central role in the development of the new sociology of childhood, for what ethnography permits is a view of children as competent interpreters of the social world (James, 2001). This has fostered a shift from seeing children as simply the raw and uninitiated recruits of the social world and has steered researchers from doing work 'with' rather than 'on' children' (Alderson, 1995). Alongside the changes influenced by the new sociology of childhood are political and policy concerns with respect to children's rights and their participation in the public sphere – such as the UNCRC (1989) and in Ireland, the Children's Act (2001) and Children First Act (2015) – which represent broad societal shifts to the status and position of children (James, 2001; Graham, 2011).

It was fundamental that the methodology used in this study empowered children as social actors and facilitated an in-depth and contextual understanding of a specific aspect of children's lives. Ethnography is considered a 'natural choice' when conducting research with children and young people (James & Prout, 1990). The reasoning here is that 'it allows children a more direct voice and participation in the production of sociological data than is usually possible through experimental or survey styles of research' (James & Prout, 1990, p.5). In this vein, ethnography 'is an approach to childhood research which can employ children's own accounts centrally within the analysis' (James, 2001, p.250), as the 'experts in their own worlds' (Thomson, 2008; Tickle, 2017). The key strength of ethnography lies in the ways in which it has 'unmuted' children's voices and enabled their views to be prioritised in decisions affecting them (James, 2001). This study embraces the

changes that have occurred in the social study of childhood and is committed to the framework encompassing children's rights.

Ethnography can be employed across a wide range of social sciences and embraces a variety of methods and data collection techniques depending on the aims and objectives of the research and the methodological positioning of the researcher (Crowley-Henry, 2009). On commencing this study, other methodologies were considered; however, the use of ethnographic methodology has a long history in the study of children's play and is useful for understanding the complex context of school settings. Crucially, the underlying feature of ethnography is its commitment to an interpretive approach, to a theoretically comprehensive and sociocultural understanding of human behaviour, and to methods of investigation based on that commitment.

Ethnography is about the 'artistry of seeing' (Hammersley & Atkinson, 2019). Ethnography was therefore used in this study as a way of 'seeing' – a way of learning the explicit and tacit aspects of children's play culture from the 'inside', from the experts themselves. This was achieved through active and prolonged immersion in children's worlds and bolstered by employing a number of child-centred data collection methods, which will be discussed in further detail in the following chapter. The nature of ethnographic research, that is, the immersion in the real world context and the detailed analysis process, enabled me to uncover, interpret and describe the complexities and cultural nuances of the social world of children. Ethnography has thus provided a holistic understanding of the historical and cultural influences that affect the experiences of contemporary childhood. The use of detailed descriptions and direct quotations in this study provides an accurate, valid, and rich illustration of children's own explanations of their lives.

3.2.1. Access to fieldwork sites

I was aware that access negotiations to schools, which are embedded in larger bureaucracies, might take a long time (Delamont, 2016). Negotiating access took between three and seven months for all of the four schools involved in this study.

The schools were provided with carefully prepared information in the form of a 'school pack' containing the following documentation: School Principal Note (Appendix A); Governing Body Information Letter (Appendix B); Letter of Support from Supervisor/Dublin City University (Appendix C); Garda Clearance (Appendix D); Child Protection Statement (Appendix E); Counselling Service for Children (Appendix F); and Protocol for Dealing with Distressed Students (Appendix G). Upon receiving approval from the School Board, letters were distributed to other adults within the school (i.e. teaching and administrative staff) outlining the research (Appendix H). Overall, I felt the research was welcomed as teaching and administrative staff were receptive and friendly toward me. This feeling remained throughout fieldwork when teachers would often enquire about the research and whether I was getting everything that I required to complete the study.

3.3. Research Setting and Population

The research for this thesis is situated in Ireland. The predominant religion in Ireland is Christianity, with 78.3% of the population identifying themselves as Roman Catholic (CSO, 2016b). The majority of children in Ireland attend schools whose heritage or patronage is still associated with religious orders.

The vast majority of all Irish children attend non fee-paying publicly funded primary (also referred to as national schools) for a period of eight years. This is followed by second-level or post-primary education that consists of a junior and a senior cycle and lasts for a period of five or six years. A large majority of Irish children enrolled in post-primary schools attend publicly funded secondary, vocational comprehensive or community schools.

To recap, the fieldwork for this ethnographic study takes place across four schools in Ireland, including a primary and secondary school in an urban location, and a primary and secondary school in a rural location. The four schools were first selected based on location and whether they fit the OECD definition of 'urban' (Brezzi et al., 2012) or 'rural' (OECD, 2011), and whether they were commutable from where I reside in Dublin. Co-educational schools with large school populations were also criteria for choosing fieldwork sites. Schools who fit the criteria were first identified via the Department of Education and then sent a letter of introduction by

myself, which was followed up with a phone call to ensure communication had been received; however, in most cases my letter or email was unanswered. In the end, three of the schools were recruited via direct referral to a gatekeeper within the school. One of the secondary schools was recruited directly via the school principal, and as a result of my follow-up phone call and emails. In this instance, it helped that the school principal had a child who had recently commenced a degree qualification with DCU. It should be noted from the outset that the rural setting comprises a small local town and the surrounding hinterland, which will be discussed in further detail shortly.

3.4.   The Urban Context

It is important to understand the spaces and places within the urban fieldwork setting as they impact directly on the physical activity play opportunities for children.

Killamany is the pseudonym for the urban town in which the fieldwork took place. Killamany is situated in County Kildare which borders the capital of Dublin on its western border and is approximately 48 kilometres south west of Dublin city centre. Kildare is one of the fastest growing counties in Ireland with a population of 222,504 in 2016 (CSO, 2016c). Killamany has a substantial resident population of 22,742 persons (CSO, 2016c), representing a 43% increase since 2006. This includes a relatively young population that is above the national average for the 25 – 44 and 0 – 14 age group cohorts.

This research adopts the OECD methodology for calculating urban areas based on population density of at least 300 persons per square kilometre, with a minimum total population of 5,000 (Brezzi et al., 2012). Killamany has a geographical area of 6.26 square kilometres (CSO, 2016c), so is classified as urban with a population density of 3,632 persons per square kilometre. While the schools are situated in an urban setting, it should also be noted that some children travel from nearby rural areas to attend school in Killamany.

Killamany is a busy and vibrant commercial town and one of the largest urban centres in Kildare. The town centre, defined by one long main street running 1.2 kilometres, is bustling but somewhat jaded. An ultra-modern shopping centre stands

in marked contrast to the multiple vacant units on a main street still recovering from the economic collapse and global financial crisis of 2008. Even so, Killamany remains a key centre of commerce and market town for the surrounding agricultural hinterland and provides an array of services for its residential population. The presence of multinational companies has replaced reliance on the town's traditional manufacturing industries. Many residents also commute to neighbouring towns and counties, primarily Dublin, for employment.

The housing stock in Killamany consists predominantly of two-storey, terraced, semi-detached and detached homes located within housing estates that mostly offer communal open space such as green areas for recreational use. A number of apartment schemes are located around the town however the majority of children involved in this study lived in housing estates. There is a train station in Killamany which is located 800 metres from the main street, and while there are footpaths into the town centre there is limited provision of cycling lanes or facilities. This has exacerbated the traffic congestion with the high volumes of traffic corresponding with the morning drop-off and afternoon pick-up process of the 'school run'.

Figure 3.1. Public open space along the river that flows through town

Figure 3.2. Spacious park provides opportunities for recreation

The River Liffey flows through the town (Figure 3.1) with public open space existing along its banks. An attractive and spacious open park situated alongside the river provides opportunity for walking and recreation for children and adults (Figure 3.2). Structured sporting facilities are also in good supply with two top-level Gaelic

Athletic Association (GAA) clubs[2], one rugby club, an athletics club, three significant soccer clubs and a strong Community Games structure among the key outlets for young people within the town. A number of the schools have good sporting facilities and a Local Authority Sports Centre sits near the town centre, which is supplemented by a number of private gyms and swimming pools, pitch and putt and golf driving ranges, as well as a popular playground for younger children.

The vast majority (93%) of children in Killamany attend schools under denominational patronage, primarily Catholic. I spent two days a week, over a twelve-month period, in both a Catholic primary and secondary school in Killamany. These scheduled visits were only during the school term. A description of these two urban fieldwork sites will now be provided. Particular attention will be given to the school design and layout of play spaces. This description is necessary since most of the research for the urban component of this study took place in these settings.

3.4.1. Killamany Primary School

Killamany Primary School is a mainstream, co-educational primary school under Catholic patronage. It caters for children from 2nd class[3] to 6th class and at the time of fieldwork there were a total of 338 pupils attending; 179 boys and 159 girls. The teaching staff consisted of 13 mainstream class teachers, three Special Needs Assistants (SNAs) and two teachers in support roles. The school and its earliest buildings date back to 1914 when it was a boys' school only. The buildings were refurbished and extended in 1965 and again in 1979. As you enter through the main gate the school name is clearly displayed high above the main building. The lobby of the main building is filled with awards and trophies signifying the school's achievements, religious icons and symbols of faith, as well as various notice boards. The General Office is situated to the right of the main entrance of the school, with the principal's office located a little further along the corridor. Past the principal's office is the school's organic vegetable garden full of mature apple trees, lettuce, potatoes, strawberries, herbs and various flowers.

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[2] The Gaelic Athletic Association (GAA) is Ireland's largest sporting organisation. The Association promotes Gaelic games such as Hurling, Football, Handball and Rounders.
[3] Infants and 1st class operate in the affiliate school across the road from Killamany Primary School.

School uniforms are compulsory at Killamany Primary School. School starts at 8.50am and finishes at 2.50pm. The majority of children attending the school are predominantly white, Irish and Catholic (including a small number of Irish Travellers).

The building configuration in Killamany Primary School is simple and symmetrical with classroom blocks and other facilities such as laboratories, resource rooms, sports and games storage as well as the staff room located within the main building facility. The building to the east is the school's only double storey structure and forms an L-shape adjoining the main tarmac area. This part of the school includes classrooms as well as a small, open, indoor space used for activities such as music and drama and sports team meet-ups. The extension to the school includes three identical single storey redbrick buildings that face north-south in direction standing adjacent to each other and incorporate classrooms, resource rooms, as well as the school hall. These buildings are all connected internally via light-filled corridors that are interspersed with colourful artwork produced by the students. This flat site layout is surrounded and joined by tarmac paving and forms part of the external play spaces for children. The school is surrounded by a series of gates and low brick walls (Figure 3.3).

Figure 3.3. Gates and low brick walls surround the school

Figure 3.4. 'Back' play space for 4th, 5th and 6th classes
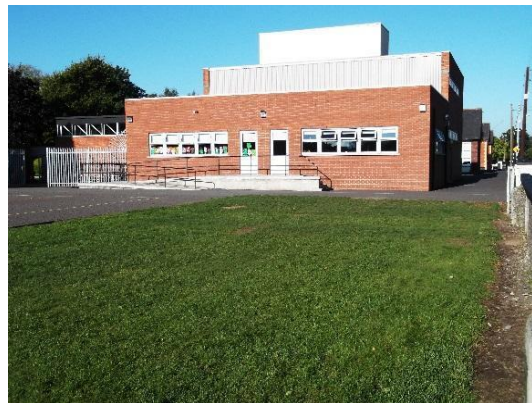
The various outdoor school spaces were referred to as the 'front', 'middle' and 'back' play areas. The front and the middle play space were entirely tarmac and oriented within the enclaves of the school building. These play spaces were assigned to the children in 2nd and 3rd classes. The largest play space, referred to as the 'back' was for children in 4th, 5th, and 6th class (Figure 3.4). This space consisted of a variety of

areas, including a tarmac surface roughly the size of a tennis court (25 x 9 metres) and a grassy expanse, similar in size to the tarmac area, bordered on one side with shrubs and trees. While the grass area was frequently wet and muddy children were not restricted in their use of the entire space. Rather, the children in 4th, 5th and 6th classes were required to change from indoor footwear (e.g. slip-on shoes) to footwear more suitable for outdoors (e.g. runners) before leaving the school building, ensuring no mud was tracked into classrooms. There were no sports fields on school grounds. It should also be noted that the school principal provided a rationale for the designated play areas stating that the segregation of children aims to provide a level of safety for the younger age cohort from the playground behaviour of older children.

There were no fixed playground structures in Killamany Primary School and playground markings on tarmac spaces were long faded. Wall games painted onto the exterior of the school building such as draughts and connect four were rarely used (similar findings reported in other studies e.g. Lucas, 1994; Thomson, 2005). The basketball hoops lie on the ground rusting with broken wall mounts and nets in obvious disrepair. Some loose sports equipment was available, soccer balls and skipping ropes. In design terms, the physical shape of the school and the play spaces resembled that of the Board School Model (*c.*1870 – 1920). The characterising feature of this model is that the overall shape of the school site resembles long rectangles with playground spaces or 'nooks and crannies' wrapped around school buildings. There are also elements of the early 20th century model (*c.*1920 – 1950) where square or rectangle playgrounds are set to one side of the school buildings (Armitage, 2005).

3.4.2. *Killamany Secondary School*

Killamany Secondary School was first established as a school for boys in 1852. In the 1980s it opened the school to girls and became a co-educational school. At the time of fieldwork, there were a total of 826 pupils comprising 420 boys and 406 girls. There is a total of 70 teaching staff, including four SNAs. A further 22 ancillary staff are employed in administration, maintenance, catering and cleaning. The school takes pupils from all local national schools including Killamany Primary School. It is a Christian school in the Roman Catholic tradition. School uniforms are compulsory

and strictly enforced. The ethnicity of the majority of young people attending Killamany Secondary School is predominantly white, Irish and Catholic. School commences at 8.50am and concludes at 3.30pm.

Killamany Secondary School is located in Killamany, west of the Main Street. Its complex of buildings stands in extensive grounds with the River Liffey running through the school and forming the fourth side of the main quadrangle. One of the most visually impressive aspects of the school is its architecture. The original and main building, complete with clock tower, exaggerated verticality and decorative tracery are neo-Gothic in design (Figure 3.5). This main building forms an L shape design around a tarmac car park for staff, which is referred to as "the quad" and forms the main entrance to the school. A Church is connected via a single-storey corridor and forms part of the L shape. As you enter the quadrangle area there is an additional three-storey stand-alone building on the opposite side that is architecturally similar to the main building complex. This building is an augmentation of the original church built in 1819 however it is now used for classrooms and offices.

Figure 3.5. Killamany Secondary School   *Figure 3.6. Social area*

The main entrance to Killamany Secondary School is situated at the far end of the quadrangle and staff car parking area and can be seen in Figure 3.5. Entrance to the school is via the large, wooded, pointed arch doors that remain open during school hours. The reception area is located to the left of the doors upon entering, while the principal's office is situated on the right. A spacious corridor is lined with portraits of past dignitaries and photographs of the school's sporting teams and annual musical groups.

Killamany Secondary School has undergone extensive refurbishment in recent years. The main building has been adapted to include a bright and spacious indoor social area for students (Figure 3.6). The social area is located on the ground floor beside the cafeteria and close to the main entrance of the school. This busy, bustling and well-designed space contains seating arrangements, a compact and movable sandwich bar and two table tennis tables.[4] The social area is fully occupied during break-times with children eating, talking, sharing headphones and listening to music, reading and completing schoolwork.

Killamany Secondary School had a variety of outdoor areas that young people utilised during break-times. This included substantial grass "sports fields", as they were referred to by young people (Figure 3.7), tarmac courts with markings for basketball and soccer, and other hard surface and green areas hugging the exterior of school buildings. The loose sports equipment used most in Killamany Secondary School were soccer, rugby and basketballs. A river system runs through Killamany Secondary School with the school buildings located on one side of the river, and the main sports fields on the opposite side. A small gated bridge joins the school site with the sports fields (Figure 3.8).

Figure 3.7. Sports fields

Figure 3.8. Access to sports fields

The bridge itself is locked during non-school hours, however, sometimes it also remains locked during school hours. The opening of the bridge during break-times is dependent on the yard duty resources available. In this way the bridge works to keep children within the boundaries of the main entrance and the quadrangle area.

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[4] Table tennis was popular during break-times and used by boys only.

Conversely, when the bridge was open and young people could access the natural nooks and crannies that border the large sports fields, they moved further away from the school buildings and from the immediate surveillance of adults. Adult supervision of the sports fields was challenging mainly due to the sheer size of the area. It should be noted young people generally referred to play as "hanging out" or "messing about". It is for this reason that I came to describe play in similar ways during fieldwork in both secondary schools. As such, the research was often discussed as "what do you do in your free time/at break-time?", "what are you doing when you are hanging out?".

The topography and aesthetics of Killamany Secondary School differed somewhat from Killamany Primary School in that there was a stronger presence of natural features including grass areas, hills and mounds, trees, shrubs, gardens and waterways. The most significant difference observed in secondary schools, in comparison to primary schools, was that outdoor areas were rarely crowded spaces during break-times. The main reason for this was that girls and boys had greater freedom of movement throughout the school site. In primary school children were largely controlled and contained within their segregated play areas on the school playground. Secondary school sites were larger and young people were permitted access to a variety of indoor and outdoor spaces during break-time.

3.5. The Rural Context

Ballyway is the pseudonym for the rural area in which the fieldwork took place. Ballyway is situated on the River Slaney in the rural hinterland of County Wicklow, approximately 100 kilometres south west of Dublin. County Wicklow has a population of 142,425 (CSO, 2016c) and is a popular tourist destination due to its scenery, beaches, walking, hiking and climbing options and attractions including ancient ruins. The population of Ballyway has grown considerably in recent years and has a resident population of 2,137 (CSO, 2016c), representing a 23% increase since 2006. The 25 – 44 cohort is the single largest group accounting for 29% of the total population in the town.

This research adopts the OECD (2011) methodology for calculating rural areas based on population density of below 150 persons per square kilometre. Ballyway

has a geographical area of 19.57 square kilometres (CSO, 2016c) and is therefore considered rural with a population density of 109 persons per square kilometre. The primary and secondary schools in Ballyway identify themselves as 'rural' and have a predominantly rural catchment area with some children traveling more than one hour each way to attend. The school sites however are positioned very near to a town centre which serves as the traditional backbone of the community.

Historically, the settlement of Ballyway developed around a market square which now forms the existing small town centre. Local convenience-based shopping and services are predominantly found on the Main Street, which is 300 metres in length. Some employment is sourced locally from activities pertaining to farming, industry and the services sector, however a considerable proportion of people commute for employment, primarily to the Greater Dublin Area.[5]

The housing stock in Ballyway consists of individual houses/bungalows and two-storey detached housing in rural housing developments. Some apartment schemes are located along the river frontage close to the town centre. The majority of children involved in the study lived in either one-off housing in rural settings or in detached housing in rural housing developments.

Local recreation facilities are provided for in the form of GAA and soccer playing fields, a golf club, and a spacious public park and playground adjacent to the river (Figure 3.9). Ballyway contains a significant amount of natural, archaeological and built heritage however the town is constrained by matters affecting its development. These include its relatively isolated location, a lack of retail services and employment opportunities, a number of derelict buildings and under-utilised sites (particularly around the outskirts of the town

Figure 3.9. Public park and playground

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[5] Greater Dublin Area includes the counties of Dublin, Meath, Kildare, and Wicklow.

centre), traffic congestion and the potential for flooding arising from the presence from the river.

Ballyway has three schools comprising two primary schools and one secondary school, educating approximately 925 students. I spent two days a week, over a twelve-month period, in one of the primary schools and the secondary school in Ballyway. Like Killamany, these scheduled visits were only during the school term. Both schools in Ballyway are under Catholic patronage and between them account for 92% of all school-going children in the town, with the rest attending the small Church of Ireland national school. A description of the two rural schools in which fieldwork took place will now be provided. As above, specific attention is given to school design and the layout of play spaces.

3.5.1. Ballyway Primary School

Ballyway Primary School is a co-educational Catholic school catering for children in the general catchment area of the town and surrounds of Ballyway. It caters for children from Junior Infants to 6th class and at the time of fieldwork there were a total of 351 pupils attending the school; 162 boys and 189 girls. The teaching staff consisted of 14 mainstream class teachers and three SNAs. Ballyway Primary School is situated 700 metres east of the Main Street, on one of the two main roads leading in and out of the town. The school's earliest buildings date back to the 1890s when it served as a boys' school only. The current school has been in existence since 1996 and consists of a modern school building with a new extension added in 2003. The school has 17 classrooms, a large sports hall and extensive grounds.

School uniforms are compulsory at Ballyway Primary School. The school opens at 8.45am and assembly takes place in children's classrooms until 9am, when lessons commence. The school finishes at 2.30pm. The vast majority of children attending the school are white, Irish and Catholic.

The school is on an elevated site and the building configuration includes the original structure at the front of the school, home to the General Office, the principal's office, the staff room and various storerooms (Figure 3.10). A long corridor runs directly behind the original building and interconnects four large rectangle shaped buildings

toward the back of the school. These buildings are the extension to the school and comprise the large sports hall and most of the classrooms. There are no walls or gates surrounding the front building.

Figure 3.10. Ballyway Primary School

Figure 3.11. Senior yard

Like Killamany Primary School, the children in Ballyway Primary School were also separated in their play spaces according to their corresponding class year group. The schoolyards were split into two distinct and separate areas; a junior[6] and a senior yard. The senior yard was a single large tarmac area situated at the rear of the school (Figure 3.11). This space was assigned to children from 2nd through to 6th class. Nevertheless, children were further separated within this singular space into specific class year groups. Designated play spaces were physically demarcated by white line markings and brightly coloured playground cones. The younger children of 2nd and 3rd class (approximately 8 & 9 years) were allocated the spaces closest to the school building, while the older children of 5th and 6th class (approximately 10 & 11 years) were situated furthest away. Like Killamany Primary School, the purpose of segregating children on the playground into class year groups was, according to the school principal, associated with safety precautions.

The entire tarmac space is line marked for two full sized basketball courts and has other playground markings such as numbers, shapes, patterns and for games such as hopscotch. The school utilised a playground rota for the basketball courts which meant children could take part in basketball activities during break-time on certain days. This playground rota was also applied to other play activities, namely soccer

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[6] The junior yard was for children in Junior & Senior Infants & 1st class. Fieldwork was not conducted in the junior yard.

and skipping. Children had regular access to a variety of loose sports equipment including soccer and basketballs, skipping ropes and hula-hoops.

Situated beyond the tarmacked senior yard was a grass playing field which physically occupied a sizable part of the school site (Figure 3.12). This area was

Figure 3.12. Grass playing field

referred to by children and adults in multiple ways, such as the "football field", "summer field", "play field" or simply "the field". This play space was effectively out of bounds during the wet and winter months and was only used from September to October and from April to June (when school breaks for the summer). Play activities on the grass playing field were also only permitted during the longer lunch break-time. There was an expectation that children would also be segregated in this play space, however this was difficult to enforce, and rarely adhered to. In design terms, the physical shape of the school and the play spaces follow the latter 20th century model (c.1950 – date). The characterising feature of this model is that playgrounds provided for older children are set away from the school buildings (Armitage, 2005). There are none of the 'nooks and crannies', and therefore definable spaces, found in older-designed schools.

3.5.2. Ballyway Secondary School

Ballyway Secondary School was established as a school in 1982. It is a co-educational Catholic secondary school serving a large and mainly rural catchment area. At the time of fieldwork there were a total of 468 pupils; 242 boys and 226 girls. There is a total of 32 teaching staff, including three SNAs. The ethnicity of the majority of young people attending Ballyway Secondary School is white, Irish and Catholic. School uniforms are compulsory, and school commences at 8.50am and concludes at 3.30pm.

Ballyway Secondary School is situated 600 metres east of the Main Street and sits beside the primary school. The school site is elevated with staff and student parking situated at the front of the school.

Figure 3.13. Ballyway Secondary School

Ballyway Secondary School is contemporary in design with three single-storey standalone buildings sitting behind one another and interconnected via long corridors. The first building comprises the entrance, school office, principal's office, a large sports hall, as well as classrooms (Figure 3.13). The second building incorporates the school cafeteria, the social area, the staff room and classrooms. The third building includes more classrooms and connects to the outdoor play spaces situated at the rear of the school site.

Like Killamany Secondary School, Ballyway Secondary School also had a large and bright indoor social space. The area consisted of long bench seating arrangements suitable for groups of young people to eat and gather. The space was also valued for solitary activities such as reading and completing homework. As there was limited seating available, 1st year students were allocated an extra ten minutes at the beginning of their lunch break to eat their food. Once the rest of the school broke for lunch the expectation was that the 1st year students would promptly vacate the seating area for the older students. In some ways, this practice framed the ways in which young people engaged in physical activity play. Those in 1st year were obliged to move on – vacating the coveted indoor social area and moving to other school spaces. 1st year students were more likely to utilise the school's outdoor play spaces during break-time, while those in the older year groups (2nd & 3rd) dominated the indoor social area, especially girls.[7] The staff room was situated beside the social area enabling the continuous surveillance and monitoring of young people who occupied the space.

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[7] Students from Transition Year and Senior Cycle (5th, 6th year) were permitted to leave the school premises during lunch break-time.

The main play and recreation spaces in Ballyway Secondary School were rectangle tarmac areas hugging the exterior of the two rear buildings which were used for a variety of social and physical activity play (e.g. walking-play, hanging out). A basketball court situated at the side of the school was valued for both basketball related play activities (e.g. bouncing a ball, shooting hoops), and for non-basketball activities (e.g. kicking a soccer ball, passing a rugby ball, hanging out). Like the primary school on the adjacent site, the expansive grass playground (or "sports field" as it was referred to) was situated at the back, and away from the school building (Figure 3.14) and valued for a mix of play and organised sporting activities during break-times. Loose sports equipment was available during break-time including soccer and basketballs, as well as frisbees.

Figure 3.14. Expansive playground space

3.6. Break-time in Fieldwork Schools

Neither Killamany or Ballyway Primary School had a cafeteria or canteen. Children ate food in their classrooms from a home-packed lunch box during morning and lunch break. The morning break was fifteen-minutes in total and ran from 10.45am – 11am; while the afternoon/lunch break was thirty-minutes from 12.30 – 1.00pm. Children were required to be outside during their break-times, weather permitting. Neither primary school had outdoor undercover or sheltered areas. Children remained in their individual classrooms when it was deemed (by adults) too wet to play outside, with limited freedom to engage in physical activities. This was referred to as "wet play" or "wet playtime".

The secondary schools varied slightly from one another regarding break-times. At Killamany Secondary School, young people received a 15-minute break at 10.45am and a second break for lunch from 12.55 – 1.40pm. At Ballyway Secondary School, the first 15-minute break commenced at 11am, while lunch ran from 12.50 – 1.30pm.

Both secondary schools had a cafeteria serving hot meals, sandwiches and a variety of snacks. The majority of young people spent time in the (indoor) social area, located near to the school's cafeteria, at the commencement of both break-times. Unlike primary school, young people had autonomy to move throughout the school site during break-times, regardless of the weather.

It should also be noted that extracurricular activities were available during break-time across the four schools to varying degrees. This included team sports practice (e.g. Gaelic football, rugby, hockey) and arts (e.g. drama, music).

3.7. The Role of the Researcher

A number of writers have discussed the ways in which a researcher acts while conducting research with children, for example, by adopting a 'detached observer' (Coenen,1986), 'non-authoritarian' (Corsaro,1985), 'least adult' (Mandell, 1991), or 'honorary child' (Atkinson, 2019) role. On commencing fieldwork, I sought to engage with children in a way that was different from most adults they had contact with. I was clearly an adult but by joining in with children's activities, I would sometimes behave more like a child. The researcher has to find a way of straddling the divide between adult's and children's worlds and adopting the role of 'adult friend' has also been proposed (Fine & Sandstrom, 1988). Certainly, the role of an 'adult friend' began to emerge as the most likely to provide the insights into children's experiences and perspectives I was seeking. Yet, I was also acutely aware that a relationship based on friendship would be difficult to maintain because of the unequal nature of adult-child relations, for example, if a child was being bullied by others. Although at times I felt similar to Corsaro's 'big kid' (2000), I was simultaneously cognisant of my role as a responsible adult, and of my adultness, which meant I would only ever be permitted partial access to children's worlds. I therefore fostered an approach that worked hard to acknowledge the inevitable and complex power differences between adult and child and seemed to fall somewhere between adult figures of authority and the children themselves. I was certainly not viewed as a typical adult but rather a curious type of adult who was interested in hanging out with children. My research positionality was therefore that of an 'unusual adult' (Christensen, 2004) – and one who was 'seriously interested in understanding

how the social world looks from children's perspective but without making a dubious attempt to be a child' (Christensen, 2004, p 174).

To carry out prolonged and intensive observations of children and to obtain the knowledge essential for the current study, it was necessary to first be accepted into the group. I embraced an easy-going approach which consisted of dressing casually and using an informal, and what I deemed as age-appropriate, language. I was keen to first observe children in their activities and to allow participation to flow from that. I drew on a model of field entry into children's worlds that has been successfully applied in the USA (Corsaro, 1985) and Italy (Corsaro & Molinari, 2000). Here researchers resisted adopting a prescribed role and allowed children to formulate an appropriate position for them. This 'reactive' strategy (Corsaro, 1985) advocates that children should *react* to the presence of the researcher, rather than the researcher taking an active role in establishing relationships and defining boundaries for the research. The reactive method worked well with primary school-age children, who were older than the children Corsaro had experienced, as they were immediately inquisitive of an unfamiliar adult. In the first two weeks of fieldwork children would approach me, or run past, while firing questions such as, "Who are you?", "Are you the new teacher?", "What are you writing in your book?", "Can I use the toilet?". The word spread on the playground that I was not the new teacher, and I was not the person granting permission to use the bathroom. Even so, I quickly became popular with many children vying for my attention and insisting I observe or join in their games. It did not take long before children were drawing me into their activities and into their social worlds. They did not think it was strange that I would be interested in how they spent their free time and were pleased that I was taking them seriously and writing down what they were telling me.

Perhaps unsurprisingly, the reactive method did not have the same level of success in secondary schools, where my presence was largely viewed with disinterest and as just another adult figure within a busy school environment. Still, it remained important to me that my role as researcher was 'negotiated rather than imposed' (Emond, 2005). Perseverance, patience and the construction of myself as a fellow student eventually resulted in young people opening up and becoming interested in the research. Speaking with young people during their free class provided an

opportunity to develop unique relationships, as did accepting their invitations to attend sporting and musical events.

Despite my initial introduction and presentation to teachers (Appendix H Information letter for teachers), the negotiation of my researcher's role within the school was not completely without misunderstanding. There were several discussions in the primary schools that I could assist in supervising children in some way (e.g. yard duty, wet break-time). I politely explained that I would not be reprimanding the children in any way and that taking on a role of 'adult in charge', would seriously compromise my position in the research, and the research itself. The literature has established some of the ways in which an additional adult within the school framework is often expected to help with supervision and surveillance of children (Delamont, 2016; Davis, Watson & Cunningham-Burley, 2017). This can result in researchers feeling pressured, caught between their will to resist and their desire to retain access, as they juggle the expectations of both adults and children. The researcher's role is therefore negotiated, but it is also dynamic and fluid, changing during diverse scenarios throughout the ethnographic process.

3.8.   Participant Observation

Participant observation requires a researcher to take part in the 'daily activities, rituals, interactions, and events of a group of people as one of the means of learning the explicit and tacit aspects of their life and routines and their culture' (Dewalt & Dewalt, 2011, p.1). Participant observation, a hallmark of ethnographic research, is regarded as 'the best (even the only) way to get data from which to build social science' (Delamont, 2016, p.8). In recent decades, there has been an increase in the number of studies including participant observation as a way to collect data in school settings (Delamont, 2016). Participant observation may be used as a way to enhance the validity and reliability of the study, as observations correspond to the reality, context and phenomenon under study (Dewalt & Dewalt, 2011). Validity of the study is strengthened when using additional methods and techniques alongside participant observation, such as interviewing, or quantitative methods (Dewalt & Dewalt, 2011). Participant observation is thus 'rarely' the only data collection method used when conducting an ethnographic study (Ibid).

In this study, participant observation involved spending extended time with children in their school settings, the spaces within the school occupied for physical activity play (e.g. playground, sports field, paved/tarmac areas), and the places within the local neighbourhood where physical activity play occurs (e.g. parks, green spaces). In the school setting participant observation predominantly took place during break-times (including wet playtime). As mentioned above, I spent two days a week, over a phased twelve-month period across four schools in Ireland. There was a total of 115 scheduled visits during the school term across the four schools including 30 days in Killamany Primary School; 29 days in Killamany Secondary School; 28 days in Ballyway Primary School, and 28 days in Ballyway Secondary School. These scheduled visits were mostly full days, with me arriving at the fieldwork site before school commenced and leaving on the completion of the school day. Occasionally, I remained at the school site after the completion of the school day, especially in secondary schools, as this is when, and where, many recreational activities for young people took place.

To further establish 'rapport', and to reciprocate to invitations made by children (and adults), participant observation also took place during appropriate school activities, in both school and non-school settings (e.g. dance, drama, sporting events). The participant observation techniques used in this research – playing, talking, walking, laughing, eating, watching, listening, and 'hanging out' with children, in all seasons over a twelve-month period, facilitated depth and perspective of knowledge pertaining to the phenomena of play. More specifically, participant observation has provided the foundation and inspiration for interpretation and analysis of the subsequent methods used in this research.

The writing of field notes is the primary method of capturing data from participant observation (Dewalt & Dewalt, 2011; Delamont, 2016). Preliminary brief notes were composed in my field journal concerning key features of encounters and observations. These initial notes consisted of all manner of conversations and interactions – between children and me, between children and adults, and the conversations amongst children themselves. At times, verbatim transcription of verbal exchanges was recorded to capture what was being said in an accurate manner. For ongoing assent, I regularly asked children, where possible, whether I could write down specific things they had said. To understand the goings-on within

the school setting my field journal also contains notes regarding day-to-day school routines and processes. These brief notes were then formally typed up and lengthened into full field notes later that same day, usually in the school social area or staff room or, on occasion, when I returned home from the fieldwork site. Producing immediate jottings and then elaborating them into field notes helped to maximize my ability to recall happenings in detail and preserved my immediacy of feelings and impressions (Emerson, Fretz & Shaw, 2011). The objective when crafting field notes was to fill out as much detail as I could remember and to provide an accurate record of field activities, while also capturing the broad themes, patterns and insights of the research.

The writing of notes in my field journal during break-times aroused curiosity. This began with children being surprised that I could remember their names. I informed them that I had written their names in my book. This led to children asking me to write my name on their hand (perhaps so they could remember my name also). As fieldwork progressed children wanted to know what I had written about them specifically. I permitted children to read what I had written, and to also write in my field journal, as has been done in previous studies (e.g. Corsaro & Molinari, 2000). Children initially wrote names – their names, the names of friends, pets, teachers, and the name of their favourite pop star or sports team. They also doodled and wrote 'hello' and 'how are you' type messages to me. As the field relationship developed, children began including phenomena they knew I was interested in, such as rules to playground games and jump rope rhymes. My field journal also included invitations from children to attend swimming and dance class and other sporting events, along with dates, times and location. Inscriptions into my field journal by children demonstrate how they assert themselves in the research process, becoming active participants, and supporting research 'with' rather than 'on' children.

3.8.1. *Analysis of field notes*

As is consistent with ethnographic research, a thematic approach was used to code the field notes. I used this approach as it is valuable for discovering patterns and themes in the data (LeCompte & Schensul, 1999), as well as being advantageous for examining children's perspectives. The analysis of field notes commenced

immediately during fieldwork and was an iterative, reflexive and ongoing process throughout the course of data collection and analysis. It required me to read and examine the data, to think about how components fit together, to think about what might be missing, and to write about these thoughts. This required the scrutiny of field notes line by line and to ask the data general and open-ended questions such as, What is this? What does it represent? What are children doing? What are children saying? Following the advice of Delamont (2016), as well as Dewalt & Dewalt (2011) I began by coding the field notes densely and 'wildly' – knowing it was better to have too many codes, than too few. Many of the initial codes were therefore broad and descriptive, while other codes aligned with research objectives in some way (e.g. forms of physical activity play, barriers and enablers, play space). Codes also mirrored children's language (e.g. "If it's not fun then I don't want to play", "we don't play, we hang"). Coding in this way was pivotal to ensuring the authenticity of the child's voice and shed valuable insight into the complexity of children's play.

The next stage of analysis involved a more focused approach, where relevant and reoccurring codes were highlighted, and the codes were refined. The coding and re-coding process aided in identifying overarching ideas and preliminary themes (e.g. play activities, play space) across the data. The codes were organised into theme-piles using MS Excel (see Appendix I for example of process). The themes were repeatedly and thoroughly explored in much greater depth long after exiting the field.

3.9. Data Collection Methods

Central to the methodological approach of this study was that children be involved in the research. Careful consideration has therefore been given to the data collection methods to ensure children are reporting or displaying their experiences in some way; to grant children their rightful position as 'experts' about their own lives and culture (James, 2001). One of the main challenges for researchers working with children is the disparity in power and status between adults and children. A way to alleviate the power imbalance, and enhance a study's reliability, validity and ethical acceptability, is by providing methods that place children in control of the data collection (Morrow, 2008; Alderson & Morrow, 2020). By providing children with multiple ways of expressing, 'in their own words', children may feel more

comfortable and express themselves with more honesty and openness (Glenn et al., 2013; Noonan et al., 2016). The use of child participatory methods is a well-established, and valuable, approach for capturing the rich and comprehensive accounts of children's play experiences (Veitch, Salmon & Ball, 2008; Walia & Liepert, 2012; Barron, 2013; Knowles et al., 2013; Willet et al., 2013).

In this study, participatory qualitative data collection methods were used including participant observation, as discussed in the preceding section, child-based photography incorporating photo elicitation interviews, and individual child-directed walking interviews. The study also used the quantitative data collection method of anthropometric measurement. In this section, I describe these methods and the related analysis in detail (see Table 3.1 for breakdown of data collection methods). The combination of diverse methods helped to stimulate children's thinking and discussion on what their play may be, while also ensuring different levels of engagement between myself and the children (Darbyshire, MacDougall & Schiller, 2005).

Table 3.1. Data collection methods and number of participants

Data Collection Methods	Total	Boys	Girls
	n	n	n
Child-Based Photography	**52**	21	31
Child-Directed Walking Interviews	**5**	2	3
Anthropometry	**941**	493	448

3.10. Visual Methods. Child-Based Photography

In recent decades there has been an increasing interest in visual research methods within the social sciences. Traditional word-and-number based disciplines have realised that there is considerable potential for gaining knowledge if image-based methods are adopted (Prosser & Loxley, 2008). Three major strands of visual approaches have developed: the researchers' production of visual data; participants' creation of visual data; researchers' and participants' collaboration in

the collection and creation of visual data (Prosser, 2006; Thomson, 2008; Banks, 2018). This study is specifically concerned with children's creation of visual data, whereby those who have agreed to become involved have produced the photographic images and subsequent data.

Child-based photography has been used to gain insight into the lives and perspectives of children; therefore, obtaining the emic viewpoint. Permitting children to take photos of their everyday places enables them to make decisions about what to include in, or exclude from, the photographic records of their lives (Smith & Barker, 2004). In this way, children record and construct what is important to them, rather than the researcher imposing adult interpretation of importance. Ethnographic research has benefited from the use of photography, as images have the 'capacity to defamiliarize experience…and to reveal what would ordinarily not be seen' (Greene, 1998, pp.128-129).

The children who volunteered to take photographs were given an age-appropriate plain language statement, along with an age-appropriate assent/parent consent (Appendix J). Parents also received an information letter (Appendix K). Children received verbal and written step-by-step instructions for camera functionality prior to distributing the cameras. The camera memory card (4GB) could hold approximately four hundred photographs, which meant there was little restriction on the number of photographs any one child could generate. Children were requested to take photographs over a one-week period of the places in their neighbourhood where they are physically active and/or where they like to play, capturing their play and recreation activities on weekends and outside of school hours. Before returning the digital camera to me, children and their parents were asked to review and delete any of the images they would not like to be included in the research for whatever reasons. Once the digital cameras were returned to me, all images were immediately transferred and stored onto my laptop, usually while I remained at the fieldwork site. Once images were safely transferred, they were immediately deleted from the camera.

To account for seasonal variation in children's play and recreation, and the spaces they occupy, cameras were distributed in the autumn and winter months between September and February, and also in the spring and summer months between

March and August (2014 – 2015). A total of 52 children participated in generating photographs (31 girls, 21 boys). 35 children were in primary school and 17 were in secondary school. The age of the children varied from eight to 15 years of age (M = 11 years). The 52 children recorded a total of 2,253 images of their play and recreation experiences, however 98 of these have been excluded as a result of duplication. Therefore, a total of 2,155 photographs remain and have been included in the final analysis. The Mean number of photographs recorded by children overall was 41. Girls recorded between 10 and 164 images (M = 43). Boys recorded between 5 and 155 images (M = 38).

3.10.1. Photo elicitation interviews

Photo elicitation is based on the idea of inserting a photograph into a research interview to generate discussion and create data and knowledge (Harper, 2002; Burke, 2005). Photo elicitation as a method was first introduced by anthropologist John Collier in 1957 who put forward that using photographs with interviews sharpened participants' memories and elicited longer and more comprehensive interviews. Photo elicitation interviews have primarily been used in ethnographic and social studies research with adults; however, it has also proven to be a fruitful method with children (Sharples et al., 2003; Rasmussen, 2004; Jorgenson & Sullivan, 2010; Barron, 2011).

Photo elicitation offers a rich perspective about the complexity of children's lives, particularly outside of school, where the researcher cannot have access (Clark-Ibáñez, 2007). The method enables children to participate meaningfully in research by providing them with a visual reference as a starting point for conversation. This is especially beneficial when children may not have the skills and/or abilities to discuss abstract ideas (Clark-Ibáñez, 2004; Cappello, 2005). The photographs presented and discussed reveal meanings, feelings and personal histories interwoven with children's places (Rasmussen, 2004), which is especially relevant for the current study.

Twelve photo elicitation group interviews were conducted with a total of 52 children aged 8 – 15 years. Seven group interviews were with primary school-age children, and five of them were with young people in secondary schools. Photo elicitation

interviews were conducted in small informal groups so that children would feel they were sharing their experiences with a group of peers. Children were asked to select five to ten of their own images which best represented what they wanted to portray. I also selected a number of photographs that I deemed thought-provoking to discuss within the group. My role was one of facilitating discussion rather than formally leading it. Photo elicitation interviews took place at various times throughout the day depending on the age group of the children. In primary schools, and after consultation with principals and teachers, interviews were conducted on wet weather days during class time. In secondary schools, interviews were conducted in free classes and directly after school.

A number of factors were considered when planning the composition of the interviews including group size, age and gender. The literature provides varying advice regarding the ideal size for group discussions involving children. Photo elicitation interviews in this research ranged from three to seven children. I agree with Morgan et al., (2002) who suggests that four or five participants is probably ideal, as this size enables children to express their views and ideas equally within the group. With regard to other aspects of group composition many authors have suggested that single-gender groups work best with children, especially older children and young people (Hennessy & Heary, 2005; Daley, 2013). However, when children know one another well, mixed-gender groups work equally well, as children feel safer and more willing to express their opinion (McGarry, 2016).

This research incorporates both mixed and single-gender photo elicitation interviews. Mixed groups were mainly used in the primary schools where children's interactions with each other represented a function and a flow of their relationship in the classroom and playground. Adhering to recommendations (Hennessy & Heary, 2005), single-gender groups were mostly used in secondary schools. In this study, utilising both single-gender and mixed groups elicited fruitful conversations and provided rich and varied data from different perspectives.

Interviews took place in either a resource room, a classroom or the school staff room. Children decided their own seating arrangement. It was also important that children had a clear view of the laptop as their photographs were being viewed by the group via a slideshow. I commenced each interview by acknowledging the value

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of each child's contribution to the research. From the outset, I stated the format and nature of the group discussion and provided children the opportunity to ask questions. I reiterated that there were no right or wrong answers and that the aim of the photo elicitation interview was to facilitate a discussion on the photos taken and to understand their perspectives so I could gain knowledge about an aspect of their lives. I obtained verbal consent to audio record the interview using the built-in digital voice recorder on the iPhone. As a back-up measure, I simultaneously audio recorded the interview on the iPad. Prior to commencing the interviews, I reminded the children of the non-disclosure of group discussion to non-participants. I also advised on etiquette for the group discussion, such as allowing individuals to make their point without being interrupted and listening and respecting other views.

The photographs presented in the group worked well to engage the children's attention, as well as creating a sense of fun. Mostly, children were curious about the photos taken by their peers as the images served as a glimpse into each other's daily lives. I began by asking standardized questions such as: What are you doing in this photo? Where are you and who are you with in this photo? I then allowed the nature of the questions to flow with the conversation, as would occur in a semi-structured interview format. This approach worked well to help build trust and rapport within the group. I sought clarification from children regarding their contribution to the discussion to ensure an accurate account of the children's photographs and their views, knowledge and experiences. Following the photo elicitation interview, I made reflection notes on potential emerging themes and the overall group dynamic. The photo elicitation interviews each lasted between 40 and 65 minutes and were transcribed verbatim by the researcher and analysed using thematic analysis (Braun & Clarke, 2006).

3.10.2. Analysis of child-based photography

Visual content analysis is an appropriate technique when approaching a large number of images in a consistent manner (Rose, 2016). Both Bell (2001) and Collier (2001) discuss the content analysis of the visual image. The procedures for content analysis is influenced by both scholars, however the definition used in this research is ultimately taken from Bell (2001), who defines visual content analysis as an 'empirical (observational) and objective procedure for quantifying recorded 'audio-

visual' (including verbal) representation using reliable, explicitly defined categories' (Bell, 2001, p.13).

The first stage of analysis involved creating an inventory of all images into MS Excel. Children's photographs were numbered in sequential order (Image number: 0001 – 2253). This stage of analysis began with broad categorisation including the child's gender, age, class/year and school. Viewing the photographs in context, alongside children's accompanying interview narrative, such as when and where the image had been recorded and what it depicts and means to the individual, aided in producing detailed descriptions of images and in developing initial codes.

The coding schemes developed by Sharples et al., (2003) were then modified and applied to the inventory of images. These codes included the season in which the image was taken, the specific location depicted in the image and who recorded the photograph. The presence of nature, animals/pets, and other people (e.g. siblings, cousins, friends) were also recorded.

This form of quantitative analysis of the visual content aids the process of identifying commonalities and differences in the data and assists in the development of codes specifically related to children's play and recreation and the spaces and places where this occurs. The subsequent content analysis therefore gathers the coding segments into specific categories of 'play objects' (e.g. wheel-based toys, skipping ropes), 'play activity' (e.g. riding a bike, kicking a ball) and 'play spaces' (e.g. back garden, neighbourhood, sports ground). Children's organised sporting activities (e.g. rugby, hockey, GAA) and screen-based activities (e.g. video/computer games, mobile phone, television) were represented as separate activities and categorized in ways consistent with previous studies involving middle childhood (Cherney & London, 2006).

The criteria for identifying and removing any duplicate images (n = 98) was based on the image not containing additional information for analysis or portraying differing meanings. Most of the duplicates occurred as part of a sequence of images. 21 of the duplicates consisted of portrait style images of people, mostly siblings. 17 were of animals/pets, and 12 depicted nature scenes (e.g. fields, forestry, waterways).

3.11. Child-Directed Walking Interviews

There has been a steady acceleration of social scientists using techniques where researchers walk alongside participants in order to observe, experience and make sense of everyday practices (Kusenbach, 2003; Anderson, 2004; Carpiano, 2009). Drawing on ethnographic research traditions of studying life in motion, it is children's geographies that have led the way using walks in childhood research, albeit using different terms (e.g. walks, routes, go-along, the guided commented trip, child-led expeditions, child-led neighbourhood tours) and different approaches (Percy-Smith, 2002; King & Woodroffe, 2017). It is also children's geographies that have demonstrated that walking interviews are an effective method for exploring places of significance to children (Cele, 2006; Chaudhury et al., 2019).

Individual walking interviews were used in this study, whereby the child went the researcher on a child-directed walk around their local neighbourhood, to further understand how children conceptualise and identify spaces and places for physical activity play and recreational activities. An advantage of using the walking interview method is that it offers participants a greater degree of control over the research process. In this way, children are able to show rather than describe the places of significance to them; it places experiences in spatial context which may assist children in articulating their thoughts; aspects of children's experiences told *in situ* can enrich the researcher's understanding and be used in an elicitation process to prompt more discussion; and, the multidimensional experience of the method can provide opportunities for the 'serendipitous' and the 'unanticipated' (Clark & Emmel, 2010).

Child participants were given an age-appropriate plain language statement, along with a student assent/parent consent (Appendix L). Parents also received an information letter (Appendix M). Walking interviews were audio recorded using the built-in digital voice recorder on the iPhone. The audio recordings were transcribed verbatim by the researcher following each interview. Children also produced visual data (i.e. photographs) of the places that became a focus of conversation during the walk using a digital camera. To map the route taken, the app MapMyWalk (also on the iPhone) was used. Used in this way, walking interviews produced quantitative data concerning the routes taken, as well as qualitative data derived from the

conversational exchange. Locating conversation accurately works to add another layer of interpretation to the data derived from this method (Evans & Jones, 2011).

Walking interviews were undertaken during daytime, on weekdays after school, and at the beginning of the school summer holiday period in urban and rural areas. Walking interviews began in various locations: the child's home, the school, and from a sporting club. Most of the interviews were concluded at the child's home. During the walking interview, children were asked about the spaces and places they occupy for physical activity play and recreational activities in local neighbourhoods and the wider built environment. In total, five child-directed walking interviews were conducted (3 girls, 2 boys). 3 children were in primary school and 2 were in secondary school. The children were aged between 11 and 13 years old. The distance walked ranged from 2.54 to 4.35 kilometres, and the duration between 45 to 68 minutes. During the walking interviews children produced a total of 193 photographs (girls 145, boys 48; spring 78, summer 115).

3.11.1. Analysis of walking interviews

The individual child-directed walking interviews produced data in the form of interview transcripts, photographs taken by the children during the walk using a digital camera, GPS maps, and field notes. Braun and Clarke's (2006) six-phase guide to thematic analysis was used on the interview transcripts. Braun and Clarke (2006) have argued that thematic analysis is a useful method for examining the perspectives of different research participants, highlighting similarities and differences, and generating unanticipated insights. A rigorous thematic analysis can therefore produce trustworthy and insightful findings (Braun & Clarke, 2006). The photographic data were used to support and contextualise the interview data; a thematic approach was also used on the field notes, as noted above; and the GPS data were used to produce a spatial representation of children's places for play and recreation in urban and rural neighbourhoods.

Phase one involved repeated readings of interview transcripts and field notes, searching for meanings and patterns, and noting initial ideas. Walking interviews were transcribed verbatim by the researcher. This was a rigorous and thorough process which facilitated the 'close-reading' and interpretative skills needed to

analyse the data (Lapadat & Lindsay, 1999). Field notes were typed immediately following each walk to provide context for the interview. This included details such as how the interview came about, previous contact with the child in the school setting, and my own reactions to the interview. Taking field notes helped to think through observations, reflections and interpretations of the walking interview.

Photographs were linked with children's place-based comments within the interview transcripts (e.g. "close to home", "favourite place", "it's haunted"). The photographs produced by children were used to support and contextualise the walking interview data, and to add depth to research results (Allen, 2012; Smith, Gidlow & Steel, 2012). Locating the images accurately during analysis to the spaces and places identified by children for their play and recreation supports their perspectives. At this stage, GPS data were downloaded, and a spatial map of the walking route was generated within Google Maps. Children's quotes were linked with the GPS route to provide a spatial representation of children's places for play and recreation in urban and rural neighbourhoods.

In phase two of the analysis many initial codes were generated to identify features of the data that appeared interesting and/or aligned with research aims. Some codes mirrored children's language (e.g. "place to meet up", "fun thing to do"), while other codes invoked theoretical perspectives around children's ways of playing and places for play. These initial codes were descriptive and low level (e.g. geographical distance to places is important for children to meet friends). Phase three focused on identifying preliminary themes based on initial codes, which also consisted of collating data extracts within the identified themes. Codes and data extracts were organised into theme-piles using an MS Excel (see Appendix N for breakdown of preliminary themes).

In phase four of the analysis, the themes were reviewed and refined in greater depth with higher-level themes emerging. This meant ensuring all collated extracts for each theme formed a coherent pattern, and that the validity of individual themes had been considered in relation to the entire data set. Phase five entailed defining and the final naming of the themes. A detailed analysis of final themes and sub-themes was conducted. A thematic map, like Braun and Clarke's 'final thematic map' (2006,

p.91), was produced to illustrate the relationships between themes and sub-themes, which is presented in Chapter Five.

3.12. Anthropometry

Anthropometry is defined as the study of human body measurements. This study is concerned with body weight and height measurements to determine the percentage of children and young people who are overweight or obese. The anthropometric data of children will be used to address a research objective in this study (research objective 5). The availability of data relating to children's weight status is important as children's play is now discussed together with physical activity, sedentary lifestyles and obesity (Janssen, 2014; Schaefer et al., 2014; Gray et al., 2015). Although anthropometric studies relating to different age groups do exist in Ireland, there are no studies covering middle childhood through to adolescence, which is the stage in which physical activity levels are known to decline, especially in girls. It should also be acknowledged that physical activity play has largely been ignored in relation to the prevention and reduction of childhood overweight and obesity. To contribute to an understanding of the weight status of Irish children and how their weight changes as they mature, the weight and height measures of consenting children were collected (Appendix O for age-appropriate plain language statement and assent; Appendix P for parent information and consent).

Protocols from the WHO European Childhood Obesity Surveillance Initiative (COSI, WHO, 2012) for carrying out anthropometric measurements on children were followed. Except for the removal of shoes for the height measurement, all children were measured fully clothed and/or wearing light sports clothing. Children's measurements were recorded at two distinct and separate 'stations' with one trained researcher present at each station. To the nearest 0.1kg, body weight was measured in duplicate using a calibrated Tanita WB-100 digital weighing scale. Height was measured to the nearest 0.1cm, also in duplicate, using a Leicester wall-mounted portable rigid stadiometer. There is low observer error, low measurement error and good reliability and validity with the measurement of weight and height by trained researchers (Lobstein, Baur & Uauy, 2004).

The weight and height measurements of 941 children, aged 8 – 17 years attending the four schools in urban and rural areas were obtained from March to June 2015 to determine BMI. BMI is a weight-for-height index calculated using the mathematical formula, weight (kg) divided by the squared height (m). The use of BMI to define being overweight and obese in children and young people is well established in both clinical and public health research (Must & Anderson, 2006; Bibiloni et al., 2013). This research uses the standards recommended by the International Obesity Task Force (IOTF) to define overweight and obesity in children, as developed by Cole et al., (2000, 2007) and revised and extended by Cole and Lobstein (2012). BMI data (kg/m^2) was categorised using the IOTF BMI age-and-gender-specific charts for children and young people which classify underweight, healthy weight, overweight, obese and morbidly obese participants in the sample (Cole et al., 2000; Cole & Lobstein, 2012).

3.12.1. Analysis of anthropometry

The data were analysed using Statistical Package for Social Sciences (SPSS, IBM) Version 24.0. A variety of descriptive statistics was prepared to show the trends (mean, standard deviation, range and percentage) of the analysed sample. Pearson's Chi-square tests of independence (χ^2) were used to evaluate the differences between groups including gender and IOTF classification. BMI and age were non-normally distributed. Therefore, non-parametric tests (Spearman Rank Correlation, Mann-Whitney U, Kruskal Wallis H) were applied to evaluate differences between BMI and age, including specific age groupings (primary school-age children and secondary school-age children). 95% confidence intervals (CI) for tests were reported in the results. All p-values were based on two-sided tests and considered statistically significant if p-value <0.05. Statistically significant results are those that are understood as not likely to have occurred purely by chance.

3.13. Ethical Considerations

The ethical clearance for the research proposal was submitted for approval to the DCU Research Ethics Committee to ensure that the study would meet the requirements of the University prior to commencement of fieldwork. Approval was granted in full for all aspects of this research (Appendix Q). In order to ensure the

highest level of ethical research, a range of national and international literature providing professional guidelines for undertaking research with children and young people was consulted (e.g. Christensen & Prout, 2002; Wiles et al., 2008; Gallagher et al., 2010; Shaw et al., 2011; DCYA, 2012; Graham et al., 2013). There were no specific ethical problems that arose from this study. Some teachers sought additional information pertaining to specific data collection methods (e.g. how children might be "selected" for the child-based photography, how anthropometry would be carried out). I addressed this by providing additional information (e.g. children would volunteer to take part, data will be anonymised) and explaining the key ethical issues related to conducting research with children.

3.13.1. *Informed consent and assent*

For consent to be valid, it must also be informed (Shaw et al., 2011). Informed consent has been described as 'an understanding of the research activity, whatever research methodology is being used' (Graham et al., 2013, p.57). Assent refers to a child's ongoing affirmative agreement to participate in research (informed assent). Parental/guardian consent is required for a child to participate in research, but good practice also requires the child's agreement or assent. Specifically, it has been recommended that children over the age of seven years should be asked for their assent to participate in research (National Commission for the Protection of Human Subjects of Biomedical and Behavioural Research, 1977 cited in DCYA, 2012). Assent is synonymous with information and understanding; it involves a verbal discussion about research aims, methods and potential outcomes, alongside written material geared toward the cognitive level of the child (DCYA, 2012).

Prior to engaging in fieldwork, and as part of the DCU Research Ethics Committee approval procedure, assent documentation was piloted with a sample of children to ensure information was clear and easily understood. Particular attention was paid to the layout, colour, size of text, the type of language used, and included the use of graphics. Minor changes from the original design were made to facilitate age-appropriate format. As per national guidance (DCYA, 2012), the priority was to ensure that children were able to make their own informed choice about engaging in the research and that they were given time to assimilate information and ask questions.

There are unique ethical complexities in research involving children due to the multiple research relationships involving the researcher, child participant and parent or carer (Graham et al., 2013). Children are often accessed through organisational settings for research, and agreements are mediated by institutional gatekeepers (e.g. school principals) regarding the way in which children and their parents are informed about a study and the process of consent/assent (Masson, 2004; Heath et al., 2007). Informed written parental consent (opt-in) for children's participation in school-based research is often considered most appropriate from an ethical perspective (DCYA, 2012), however, in some circumstances parents' passive consent (opt-out) is deemed sufficient (Santelli & Rogers, 2002; Roth et al., 2013). Passive consent, in which children participate in the research unless they or their parents actively object, permits researchers to bypass the usual parental consent requirement, and children to participate and contribute in research (Graham et al., 2013). However, this is a contentious area and has been debated in the literature, particularly in relation to studies involving young children and children with decision-making impairments, as well as sensitive research topics (Powell et al., 2012). The use of passive consent however can lead to a higher participation rate in research (Esbensen et al., 1996; Spence et al., 2014) and privileges children's decision making and participation rights (Thomas & O'Kane, 1998; Carroll-Lind et al., 2006).

Children and young people were first introduced to and informed of this study by me during school assembly, or individual classes, via an age-appropriate verbal presentation. Children were provided opportunities to ask questions pertaining to the study during class and break-time. This study adopts the active opt-in consent procedure for specific data collection procedures (i.e. child-based photography, walking interviews, anthropometry). The parents of those children involved, as well as the children themselves, were provided information letters in relation to the study and provided contact details (email and phone) should they wish to discuss the research in further detail. Key information provided in these letters included that children's participation was entirely voluntary and that they could withdraw from the study at any time, that the data were collected for specific academic purposes only, and that children's identity in the study was highly confidential (see Appendix J, K, L, M, O, P for example). Children could not participate without signed child assent and parental consent. As already discussed, a total of 52 children and young people across the four schools assented and took part in child-based photography; a total

of 5 children and young people assented and took part in individual child-directed walking interviews; and a total of 941 children and young people assented and took part in the collection of anthropometry measurements.

It was however agreed with school principals and deemed more suitable as the research posed low risk to participants and involved older children and young people, to offer parents passive consent (opt-out) for the participant observation component of this study. Parents were provided with an information letter informing them of the research and asked to sign and return a consent form if they did not wish their child to take part in the research (Appendix R). A total of ten non-consent forms, signed by parents, were received across the four schools. Children whose parents did not return the consent form were assumed to have consented to their child's participation. It is important to note that parents were also provided with details of this study, including my contact details, through the school newsletter, sent directly to parents via email.

As per ethical guidelines (DCYA, 2012; Graham et al., 2013), if a child was to withdraw assent from the research at any time, parental consent would not override their wish. Non-consent forms for children were not a requirement for this study; rather, children exercised their right to decline participation, simply by not engaging with me, or volunteering for any aspects of the research. It should be noted however that no child withdrew their assent (verbally) during this study. Moreover, children controlled the permission process, having the responsibility for returning all necessary documentation before participating in specific aspects of the study.

Related to the concept of informed consent/assent are those of confidentiality and anonymity, which figure prominently in ethical frameworks for research involving human participants and will now be addressed.

3.13.2. Confidentiality, anonymity and privacy

Confidentiality and anonymity are part of the legal and ethical relationship created between the researcher and participants. Best practice advice regarding the confidentiality of children participating in research includes privacy with regard to how much information the child wants to share; privacy in the processes of data

collection and storage; privacy of research participants so that they are not identifiable in the publication and dissemination of findings (Graham et al., 2013, p.76). All interactions and interviews between myself and the children in this study while collecting, analysing and reporting data have been treated in a highly confidential manner. This means that every effort has been made to separate or modify any personal, identifying information provided by participants from the data. Confidentiality and the reasons for privacy were explained to children in a clear and concise manner using age-appropriate language (DCYA, 2012). Children and parents were also informed that confidentiality could not be guaranteed if risk of harm to a child was divulged. By contrast, anonymity refers to collecting data without obtaining any personal, identifying information, which was the procedure followed in this research during the collection of anthropometric data.

Following the national Data Protection Act (2018), safeguards have been used in this study to secure personal data and ensure confidentiality and anonymity of children. This includes the use of data encryption software, altering identifying information, changing the name of communities, omitting children's names and using pseudonyms. In this way, the community is anonymised and the use of pseudonyms throughout this thesis ensures anonymity of participant identity. It should be noted that children and parents have provided written consent for the use of photographs featuring children in reports, presentations, publications and exhibitions arising from the research. Sensitive thought and careful negotiation have been applied to all of the photographic images used in this study.

3.13.3. Child protection and well-being

The DCYA (2012) recommends that research involving children in Ireland must be undertaken in accordance with Children First: National Guidance for the Protection and Welfare of Children (DCYA, 2011, 2017).[8] The recommendations, as outlined in 'Children First', have therefore been adhered to, with the well-being and rights of children paramount to the study. National and international child protection policies provide ethical and legal frameworks to ensure children are protected from harm (see UNCRC, 1989; Children First Act, 2015). There is a duty to ensure the safety

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[8] Children First: National Guidance for the Protection and Welfare of Children was revised and updated in 2017.

and well-being of children over the responsibility as a researcher to guarantee confidentiality. Procedures were developed should a situation arise during research, including when it would be appropriate to suspend research and intervene (e.g. to prevent physical danger to a child, including bullying); and when it comes to matters of child protection. A risk assessment was established, consisting of a child protection statement and a protocol for dealing with distressed children (Appendix E & G). Garda Clearance was obtained for all researchers involved in the study.

3.14. Summary

This chapter has provided an overview of methodological aspects and the fieldwork settings pertaining to this study. An ethnographic methodological approach has been adopted with participant observation the dominant method of data collection. Additional participatory qualitative and quantitative data collection methods have also been employed, as is consistent with ethnographic research. The child-based photography enabled children to document their play spaces and activities on weekends and outside of school hours, across the year, using digital cameras. Visual content analysis (Bell, 2001) was used on 2,155 photographs. Photo elicitation group interviews provided in-depth and contextual understanding of children's photographs and were analysed using thematic analysis.

The five child-directed walking interviews sought to understand how children conceptualise and identify spaces and places for play and recreational activities in local neighbourhoods and the wider built environment. Thematic analysis was used on the interview transcripts, and the GPS data were used to produce a spatial representation of children's places for play and recreation in urban and rural neighbourhoods. Finally, children's play is now discussed together with physical activity, sedentary lifestyles and obesity. In order to contribute to an understanding of the weight status of Irish children, the BMI of 941 children was recorded to establish levels of overweight and obesity within four school populations. Statistical analysis was performed on anthropometric data using SPSS software.

To follow are the two findings chapters (Chapter Four & Five). Chapter Four comprises the findings from the fieldwork in schools including the quantitative results from anthropometric measurements of children. The findings from the child-based

photography and the child-directed walking interviews are explored in Chapter Five. A short introduction is presented in the findings chapters to provide the reader a brief summary of the specific research methods and data analysis used.

Chapter 4. Findings from Fieldwork and Anthropometry

4.1. Introduction

The findings presented here derive from ethnographic fieldwork carried out over a twelve-month period across four schools in Ireland. To briefly recap: in school settings participant observation predominantly took place during break-times (including wet playtime). There was a total of 115 scheduled visits during the school term across the four schools including 30 days in Killamany Primary School; 29 days in Killamany Secondary School; 28 days in Ballyway Primary School, and 28 days in Ballyway Secondary School. Field notes are the main data used. A thematic approach to the analysis of field notes was undertaken. The findings from the fieldwork directly relate to research aims and objectives. More specifically, this chapter helps to identify the current forms of physical activity play that children and young people like to engage in during break-time (research objective 1). It also ascertains differences in physical activity play behaviours between gender and ages (research objective 2). The chapter also identifies (some) barriers and enablers to physical activity play in the school setting (research objective 3). The fieldwork findings are presented in two distinct sections. The first section identifies the play activities that are common, popular and physically active on primary school playgrounds. The second part of the discussion is concerned with the break-time activities observed in secondary school spaces.

This chapter will also present the results of quantitative anthropometric measurements, as it is broadly associated with the same cohort of children across the four schools in which fieldwork was conducted. The body weight and height measurements of 941 children and young people were used to determine the prevalence of overweight and obesity in the study sample (research objective 5). Statistical analysis was conducted on anthropometric data using SPSS software. The data is important for ongoing public health monitoring. It is also relevant because children's play is now discussed together with physical activity, sedentary lifestyles and obesity (Janssen, 2014; Schaefer et al., 2014; Gray et al., 2015).

4.2. Physical Activity Play in Primary School

The following discussion examines the physical activity play of primary school children. It is concerned with children from 2nd through to 6th class (approximately 8 – 11 years old). The discussion specifically considers children's chasing games, playground soccer, sociodramatic play, as well as dancing, singing and skipping games. Consideration will also be given to the gender differences observed on primary school playgrounds.

4.2.1. Tag or Chase. And you're it!

Chasing games were overtly one of the most popular physically active games observed on the primary school playground in this study. The main object of chasing games is to run, sidestep and swerve, tag, leap, escape and hide successfully. The thrill of being chased is just one of the many reasons that makes this form of physical activity play so popular among children the world over (Meire, 2007; Gray, 2013). The chasing games I was invited to play and observed on school playgrounds were wide and varied – infused with sociodramatic and rough and tumble play scenarios, adapted within the social and physical context of the play space, and influenced by children's wider social and media experiences. More importantly, break-time was fleeting and certainly not to be misspent, as explained by Rebecca (4th class) and Emma (4th class):

> Rebecca: We are wasting our time standing around like this. We should be playing.
>
> Emma: We will go and play if Karinda plays with us.
>
> Researcher: What would you like me to play?
>
> Emma: Tag or Chase. And you're it! (Field note excerpt: Killamany Primary School, October 7, 2013).

Children of all ages played variations of Tag or Chase, Hide-and-seek, Tip the Can and Back to Base. This finding is not overly surprising considering that adaptations of these chasing games have been documented by folklorists, demonstrating how children's games thrive on playgrounds through the generations (Opie & Opie, 1959, 1969; Sutton-Smith, 1973, 1975, Bishop, 2014, 2016; Barron & Gannon, 2017). The

flat and open playgrounds of tarmac and grass, and the shrubs and vegetation surrounding these spaces, are well known to support the chasing, running and hide-and-seek style games observed in this study (Armitage, 2005). There were notable variations in children's chasing games associated with gender. For instance, and as will be reported in these findings, girls' chasing games generally moved at a slower pace or involved intermittent bursts of physical activity, as opposed to boys of the same age, who engaged in chasing games with greater intensity and for longer periods of time.

The circle is a basic format for children's play, and a number of circular games include an element of running and chasing (Roud, 2016). During fieldwork I participated in a game the children called 'Circles' on numerous occasions. This most often comprised seven to twelve children from 5th class, mostly girls. Each person participating in the game occupied a circular line marking on the tarmacked playground. The exception to this was the person who stands in the middle (without a circle) and is assigned the role of "it". The circles act like a home or safe base. If you leave your circle in an attempt to run and join another circle you are at risk of being tagged and replacing the person in the middle as 'it'. The game is somewhat unhurried as there is no urgency to move from an individual circle. Players often remained in their circle singing, dancing, talking and taunting the 'it' person in the middle. The girls explained rules and variations of the game to me, such as the possibility to have more than one person in one circle at any given time to accommodate additional players.

The 'circles' game was predominantly imagined, initiated and instructed by the girls, although some boys occasionally joined in, even if only for brief periods. Consistent with previous research (Blatchford, Pellegrini & Baines, 2016), it was girls who mainly used playground markings in this way. It has been reported that playground markings facilitate increased physical activity at break-time (Stratton & Mullan, 2005; Huberty et al., 2011). However, a systematic review of playground design reported that the evidence linking playground markings with increased levels of physical activity during break-time in the long term was inconclusive (Escalante et a., 2014). Playground markings were used by girls in this study in ways which suited their style of play. The girls' games were organised and imaginative and the markings

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facilitated a somewhat leisurely and individual pace of play within a restricted playground space.

The boys in the same section of the playground preferred their own chasing game of "off-the-ground Tag", a game which utilised a much larger segment of the 5th class designated play space than the girls game of Circles. This was a fast-moving and highly physical game which left the boys sweaty, red-faced and out-of-breath. In line with previous research (Thorne, 1993; Pellegrini et al., 2004) it was anticipated that boys, more than girls, would engage in vigorous physical activity play, and that they would claim more of the playground space for their chasing games than girls do. The boys transformed a fixed in-ground basketball pole into a climbing apparatus. According to James (5th class), "If you're off the ground then you can't be caught". Mostly, players used the vicinity of the basketball pole (also referred to as the "den") to catch their breath and move swiftly if they saw 'it' coming toward them. It was not uncommon for several boys to be climbing and hanging from the basketball pole simultaneously.

The boys' version of Tag frequently resulted in what was considered as "rough play", with the yard supervisor issuing a caution or ceasing the game altogether. Consistent with stereotypic gender roles, there was some expectation that boys would engage in more aggressive/rough play activities (Thorne, 1993; Blatchford, Baines & Pellegrini, 2003). This is interlinked with rough and tumble play, the more socially demanding physical activity play, which is reported to peak in middle childhood (Pellegrini & Smith, 1998). The differences and preferences in boys and girls play have been attributed to social, cultural and possibly biological factors (Factor, 1988; Sutton-Smith, 1999).

Girls from 4th class regularly attempted to conceal themselves behind me in a game of what was reported to be "Tip the Can". The tree at the opposite end of the playground was the appropriated "Can". In one of their games, Sarah was 'it' and was seeking nine other girls who were distributed over different parts of the playground. Seeking the others, however, was not an easy task considering this was the largest play area, comprising children from all 4th, 5th and 6th classes. Sarah returned to the 'can' to nominate the new 'it' person once they had been identified on the playground. At this point, all the girls who were participating in the game

returned to the 'can'/tree before a new round could commence. A common feature of the game was "just laying eggs", which involved hiding within close proximity to the "den" (which was also the "can"). The girls used the words "den" and "can" interchangeably, which is an indication that they have adapted several variations of 'traditional' chasing games into their play. For instance, games consisting of either tipping or kicking the 'can', as well as those involving 'dens' (and sometimes a fox and chickens) have been played far and wide for many generations (Opie & Opie, 1969; Factor, 1988). Research has long shown that girls are more likely than boys to play seeking games on primary school playgrounds (Pellegrini, 1995; Blatchford, Pellegrini & Baines, 2016); and that hiding often enhances the attractiveness of ordinary chasing games (Aldis, 1975).

This study has reported that children are creative in adapting the opportunities of the built environment for their physical activity play (e.g. playground markings, constrained space, poles, trees, people); transforming culture anew with their use and interpretation of the physical features of the playground. Children's games are also adapted and developed within the social context of the playground including peer group, gender, playground rules and adult surveillance. Although some playground practices may be considered 'traditional', it is important to note that they are also subject to constant variation. As scholars of folklore have argued for some time: tradition is a dialectical process within culture … 'a process of both continuity and change, stability and variation, dynamism and conservatism, both through time and across space' (Bishop & Curtis, 2001, p.10). More recently, Marsh & Richards (2013) employed the concept of 'sedimentation' to children's games to suggest persistence, but not 'fixity', of particular play forms over time. The wide variety of chasing games observed on school playgrounds in this study lends support to the enduring popularity, creativity, continuity and change of this physical activity play.

4.2.2. Difference and disruption

Soccer was a significant physical activity play observed in this study. Brightly coloured traffic cones or playground markings were used by schools to highlight the boundaries in which the game should be played and contained, although this was seldom adhered to and difficult to manage. When soccer was permitted (by school policy) it dominated the play space available, primarily because the game itself

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required a relatively large area of physical space, but also because it affected everyone else playing nearby. Soccer therefore not only involved the children who participated in the actual game but also those who were constrained to the margins by the playground space it took up, as has also been reported in other studies (Connolly, 2003; Paechter & Clark 2007; Lucas & Dyment, 2010). In this way, soccer has an influence on how other children's play occurs during break-time.

During break-time, soccer was predominantly played and controlled by boys (verified in many other studies e.g. Swain, 2005; Pawlowski et al., 2016; Martínez-Andrés et al., 2017; Dudley et al., 2018); however, girls also played. There were considerable differences in the way in which girls and boys played the game. In general, girls played soccer with much less intensity than boys, and for shorter bursts of time. Girls were commonly observed hanging out and talking to one another at the boundaries of the game, participating only when the ball came toward them. While boys mostly played soccer for the entire break-time, girls were much more likely to drop in and out of games, commonly returning to friend groups in other areas of the school yard. In many ways, the girls separated themselves from the boys while participating in the same game. This resulted in the girls appearing as passive and marginal within the game. We can interpret this behaviour in a number of ways. Firstly, we know that girls are generally less physically active than boys during break-time and view it largely as an opportunity to socialise with friends (Dudley, 2018; Baines & Blatchford, 2019). We can also draw on gender constructs where masculinity is overwhelmingly constructed through participation in playground soccer, in effect marginalising girls (Renold, 1997; Swain, 2000; Mayeza, 2017). This contrasts with traditional stereotypical femininity which suggest girls should be passive and unassertive (Paechter & Clark, 2007).

It became apparent during fieldwork that some girls were intimidated by the play behaviour of boys. For example, girls did protest about boys being "too rough" or "too serious" when playing soccer. This resulted in girls seeking games with children younger than themselves (in other parts of the playground) or withdrawing from soccer altogether. In this way, intimidation in playground games can, and does, result in a decrease in physical activity play. There was also evidence in this study that some girls felt soccer was "boring" mainly due to the fact that the boys always had the ball. According to Ann- Marie (5th class): "If you don't get the ball then it's

not much fun. If it's not fun, then I don't want to play". This finding is comparable to those of Pawlowski et al., (2014) who also reported that girls avoided taking part in aggressive and competitive play activities. Although some of the girls in her study wanted to play soccer during break-time, they felt excluded because the boys did not pass the ball to them. Instead, girls had to demonstrate their skills and ability to be accepted by the boys and included in the game.

In this study boys made some references to the girls who they considered to be the "good players". These were usually the "sporty girls" – the ones who played soccer or other team-based sports (e.g. GAA, basketball) outside of school hours. The "sporty girls" occupied prominent positions in the game when playing. Yet, they also tended to drop in and out of games, moving between playground soccer and friendship groups on the periphery, or in other parts of the playground. It is important to reiterate that there were girls in both (primary school) fieldwork sites who actively and enthusiastically participated in the game, albeit for shorter time frames than the boys. It was also not uncommon to observe a group of girls stampeding an existing game of soccer to gain immediate control of the ball. However, girls' resistance strategies of boys' control of playground soccer tended to focus on disruption rather than in equal participation, a finding which has also been reported in other studies (e.g. Thorne, 1993; Paechter & Clark, 2007).

Games of soccer with rules were popular on the school playground, however, so were other activities involving soccer balls. Kicking or dribbling the ball to one another or practising various ball skills and tricks such as "Keepie Uppies" (i.e. catching/juggling the ball with feet) were commonly observed. Boys in 3rd and 4th class enjoyed kicking the ball against the low brick wall surrounding one side of the school playground. There were components of risk and challenge involved with this play activity as the ball could easily be kicked over the wall and into the road. This generally meant losing the ball for the remainder of the break however as Paul (4th class) explained to me: "That's how we play. It's the fun of it". Break-time is a time for children to construct fun, playful and sometimes risky activities in a relatively safe environment (Baines & Blatchford (2019), which is also known to contribute to children's physical, intellectual and social development (Brussoni et al., 2012).

Soccer balls were also transformed as play objects in more imaginative ways. A group of 3rd class girls, playing a game called "Superbabies", used a soccer ball as a prop for a baby. The girls played a variety of roles including mother, father and big sister. They cared for the baby, which they had named "Squidgy", by feeding it grass clippings and leaves, and by soothing and rocking the baby while humming and singing modified versions of lullabies: "hush little baby, hush little Squidgy, don't be bold, cause if you cry, you're gonna fly, into the clouds, and up high" (Maisie, 3rd class). Maisie then delivered a swift kick to the ball/baby shouting "fly Squidgy baby, fly". The other girls involved in the game pretended to cry and protested: "but you kicked our superbaby".

Sociodramatic play permeated much of children's physical activity play on school playgrounds. Girls, predominantly those in 2nd, 3rd, and 4th classes, often participated in pretend family-based games. As highlighted in the above fieldwork example, the games generally centred around caring for a baby in some form (i.e. human, animal, object) for a period at least. This finding aligns with research that has shown girls are largely socialised into feminine stereotypes revolving around caretaking and nurturing roles (Montgomery, 2009; Corsaro, 2015). Nevertheless, as demonstrated in the girls game of "Superbabies", Maisie rather quickly forewent her care-giving role to kick the crying ball/baby across the playground. As Sutton-Smith (1997) reminds us, 'life in the ludic lane can never be understood simply in terms of which it interprets realistically, the so-called real world. It must be about mockery as well as mimicry' (Sutton-Smith, 1997, p.159). The girls' game of "Superbabies" may therefore be understood in terms of exploring particular social roles, but it is ultimately about having fun.

There are very few empirical studies that have reported on sociodramatic play in middle childhood in school settings (exceptions include Dunn, 2006; Willet et al., 2013)[9]. Indeed, some authors have been fairly explicit in their claims that pretending stops by the age of seven years (e.g. Fein, 1981; Sutton-Smith, 1997; Cook & Cook, 2005). It is well documented that children enjoy play activities and games that involve structured rules in middle childhood, however, that is not to say that they no longer engage in pretending. Rather, sociodramatic play persists and evolves during

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[9] Dunn's (2006) study includes the dramatic play of 11 & 12-year-old-girls. Willet et al., (2013) includes the different types of pretend play among 7-to-10-year-olds.

middle childhood to reflect the physical and cognitive changes of this developmental period (Smith & Lillard, 2012).

4.2.3. Fairy tales and warfare

In this study, mythical characters such as unicorns, mermaids, dragons, griffins, fairies, witches and wizards were incorporated into children's play during break-time. This finding is perhaps not overly surprising considering that the themes derived from fairy tales, television and popular cultures are well known to have a significant influence on children's play (Opie & Opie, 1969; Willet et al., 2013). For instance, fairies featured prominently in this study as they lived among the trees and bushes of primary school playgrounds. Throughout fieldwork it was commonplace to observe children, mostly girls, creating small fairy circles and concocting fairy potions from the natural elements found and collected on the playground (e.g. sticks, dirt/mud, grass clippings, stones, flowers, feathers). Films, television, toys, books and advertising have popularised a specific image of fairies as diminutive, magical, sweet and glittering. This Disneyfied version however bears little resemblance to the darker legends found in the cycles of Irish folklore where fairies are equally feared and revered. It was not possible to tell whether the children in this study were referencing the Irish or Hollywood representations of fairies in their play. It is, however, important to recognise the many ways that children appropriate, adapt and blend popular culture, and their societies' cultural history, for play purposes.

In another fieldwork example, the pen I used to make fieldwork jottings during break-times was procured by Holly (4th class) to write the names of characters on her hand:

Figure 4.1. A spell is cast to summon characters to play

a "princess, zombie, skeleton, vampire, ghost, monsters" (Figure 4.1). My pen was then transformed into a magic wand with Holly casting Harry Potter inspired spell incantations (*e.g. "Wingardium Leviosa", "Expecto Patronum"*) to summon the characters written on her hand to play. As Figure 4.1 was recorded in the first week of October, these characters may have been inspired by

upcoming Halloween festivities. The point here is that children are endlessly creative, and their physical activity play was imbued with popular cultural references in which to participate in peer cultures and maintain friendships.

There were notable differences regarding the content and themes of girls' and boys' pretend play scenarios. The primary difference observed in boys' sociodramatic play was that it was more likely to feature combat scenarios and the use of fantasy weapons (similar results reported in Richards, 2013). For instance, there were multiple groups of boys, predominantly from the younger classes (2nd, 3rd and 4th class), who regularly played games involving some form of "good guy" or "bad guy". The boys wielded a variety of imaginary weapons, pretending to shoot and stab one another, and blow up imagined objects, while chasing and hiding from each other on the playground.

Overall, the boys' sociodramatic play was louder, faster and more physically vigorous than the girls'. Boys were mostly inspired by Marvel 'superheroes' and World Wrestling Federation (WWF) characters. Their play involved "shooting webs at the bad guys" (Roan, 4th class), "saving the world" (Peter, 4th class) and acting out 'fake' violence resembling wrestling. Superhero media discourse generally conforms to strict gender stereotypes, presenting men as hypermasculine authority figures (i.e. strong, powerful, aggressive) (Kirkpatrick & Scott, 2015). It follows then that it is boys who are more likely to play the important roles of superheroes. This is also true for the 'masculine melodrama' that surrounds wrestling (Jenkins, 2005). The boys are viewed as 'performing' a specific masculine identity (Butler, 1990) which is likely to be shaped by their media experiences. The performance may also provide the boys an opportunity to feel strong and powerful in a world in which they feel relatively powerless. It is important to recognise the ease with which a wide range of media and cultural forms and technologies are absorbed into children's physical activity play, which can either be deliberate, agentic or accidental (Grugeon, 2001; Ackerley, 2002; Schrøder et al., 2003).

4.2.4. Dance, movement and music

Dancing, singing, clapping and skipping were play activities heavily dominated by girls, as has been reported in many studies over time (e.g. (e.g. Opie & Opie, 1969;

Thorne, 1993; Blatchford, 1998; Bishop, 2014). As noted in the aforementioned section, we know that children's play frequently emulates pop culture and media experiences. This was also true for the song and dance routines created, practised and performed on school playgrounds:

> *Bang Bang is will.I.am… Abby and Naomi perform a dance routine while simultaneously singing the lyrics to a song called Bang Bang from the American rapper, will.i.am. Others gather around cheering and clapping along while the girls are dancing. A request from other children to "dance some more" is declined. The girls are learning a new dance to a Beyoncé song which they promise to show me once they feel their routine is good enough.* (Field note excerpt: Killamany Primary School, September 25, 2013).

Abby and Naomi (5th class) attended a local dance academy and it was clearly evident that both girls were highly proficient in this activity. The girls also spent much time together outside of school hours where they utilised (social) media, such as YouTube, to assist them in learning new dance routines. Children's performances on playgrounds can be viewed in terms of Goffman's (1959) presentation of self. Goffman (1959) analyses social interaction as a kind of theatrical performance where people move between 'front stage' behaviour (conventional, realistic) and 'backstage' performances (more relaxed, closer to our 'true-selves'). Abby and Naomi project a certain image of themselves as accomplished performers in front of a playground audience. This is supported by the fact that they are reluctant to perform an additional dance sequence until they deemed it 'good enough'. YouTube referenced play is believed to carry high symbolic value in peer relations and supports the presentation of oneself as both savvy and innovative (Bishop, 2014).

Throughout fieldwork I observed many girls engaged in a variety of dance styles on the playground including hip hop, free style and Irish dancing. Girls regularly invited me to watch their choreographed dance routines which incorporated singing of pop songs and/or synchronised clapping. I also observed girls teaching other girls dance sequences. For instance, Mya and Ada (4th class) regularly taught Irish dancing to other children during break-times. Both girls were recognised as competent Irish dancers and clearly enjoyed demonstrating the various steps and techniques for other children (mostly girls) to learn. This fieldwork example reminds us that school

playgrounds are settings par excellence for developing and transmitting peer cultures, often with very local, particular features (Factor, 2004).

There were many other examples of peer transmission of play activities found on playgrounds. For example, children teaching others clapping and skipping games, rhymes and ball tricks. The skills associated with many play forms are predominantly learnt through observation of others, and peer tuition, and are honed through repeated participation (Bishop, 2014). Richards (2012) offers a way of thinking about play activities performed by girls and suggests what they learnt and what they taught each other might focus on 'girlhood', where bodily competence is 'repeatedly explored, challenged and furthered through daily enactments of songs, dances, chants, rhymes, clapping and skipping' (Richards, 2012, p.381). From this we see that children's physical activity play regularly draws on cultural resources from an eclectic mix – from American rappers, YouTube and from each other.

While skipping was dominated by girls in this study, boys were also likely to join in at some point during break-time. This finding may not be overly surprising considering skipping was originally a male dominated activity, ceasing once team sports became popular (Ackerley, 2003). There was also minimum time commitment required by boys in becoming adept and confident in skipping games, as opposed to the choreographed dance routines enacted by girls. Part of the appeal of skipping was the speed at which the activity can be performed. While single skipping with a short rope, and group skipping with a long rope was a popular playground activity, some children acknowledged that they found it difficult to skip everyday as, "it can get very hard on your legs" (Jenny, 3rd class). Nevertheless, children also displayed considerable creativity in transforming skipping ropes for other play purposes. Long ropes had multiple functions such as tug-of-war and limbo-style competitions. A long or short rope was imaginatively transformed in pretend and chasing games to secure children together and to hold them in "jail" or the "dungeon" for a period of time. Figure 4.2 depicts four girls and one boy from 4th class skipping on the periphery of the school yard together. The girls instruct the one boy to be "on the rope", while they skip (and perform the various accompanying actions) to a favoured rhyme:

Teddy bear, teddy bear, turn around
[jumper turns while jumping].
Teddy bear, teddy bear, touch the ground
[jumper touches the ground].
Teddy bear, teddy bear, show your shoe
[jumper thrusts out shoe].
Teddy bear, teddy bear, run upstairs
[jumper acts out running upstairs].
Teddy bear, teddy bear, say your prayers
[jumper places hands together in prayer].
Teddy bear, teddy bear, turn off the light
[jumper switches off imaginary light].
Teddy bear, teddy bear, say goodnight
[jumper claps hands together at side of face and closes eyes].

One, two, three, …
[the rope is sped up as the numbers increase]. (Field note
excerpt: Ballyway Primary School, February 27, 2014).

Figure 4.2. "Teddy bear, teddy bear, turn around"   Figure 4.3. Boys disrupt girls' games

It is not surprising to have heard this rhyme used by children as it is an internationally ubiquitous skipping game known in various forms from the late 19th century (Opie, 1959). Furthermore, many different variations of the Teddy Bear rhyme have been recorded across Ireland since the early 1900s (Buckley, 2018). Figure 4.3 shows three additional boys dash into the skipping rope and invade the girls' game. The girls react by teasing the boys at their lack of competence in the activity, especially when it is the boys who break the rhythm of the game by getting their feet caught in the rope.

Many studies have reported that boys are more likely to disrupt girls' activities on the playground than vice versa (e.g. Blatchford, Pellegrini & Baines, 2016). Thorne (1993) uses the anthropological concept of 'borderwork' to conceptualise the spatial

separation between boys and girls that constitutes a kind of boundary, which may be created through contact as well as avoidance. Interaction across these boundaries can create and/or strengthen gender boundaries. The well described processes of 'invasions', where boys, in particular, invade girls' activities have been referred to as an asymmetric form of 'borderwork' and are concerned with the power and dominance of boys over girls (Thorne, 1993). Nevertheless, I also observed girls engaged in their own playful kind of 'borderwork' – taunting, teasing, chasing and gently hitting the boys for disrupting their play. However, as Thorne rightly points out, a good deal of borderwork tips the balance of power to boys because they are frequently the aggressors and control more playground space than girls. Thorne (1993) also argues that borderwork creates a space where girls and boys in middle childhood can come together to experiment and reflect on how to relate to one another.

4.3. Physical Activity Play in Secondary School

The discussion now turns to the physical activity play and recreational activities observed in secondary schools during break-times. It is primarily concerned with young people in the three-year Junior Cycle of 1st, 2nd and 3rd (approximately 12 – 16 years old). Like the discussion preceding, this examination will also consider the specific forms of physical activity play and the gender differences and dynamics observed in secondary school settings. The physical activity play forms examined include young people's walking practices, flirtatious exchanges, rough and tumble play and ball play. Young people's indoor play culture will also be given consideration.

4.3.1. Hanging out. An absence of activity?

A significant break-time activity identified at both secondary schools was 'hanging out'. The literature maintains that by the time children are in secondary school physical activity and games are almost completely replaced by 'sustained talk' (Blatchford, 1998), or in some sense – an 'absence of activity' (Blatchford, Pellegrini & Baines, 2016). Fieldwork observations uncover that hanging out was not only a significant social activity for young people, but also one with prominent physical dimensions, and an activity that was much more than it purports to be. Hanging out

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outdoors during break-times, often begins with a decision made indoors to go for a walk. Walking activities were regularly discussed and negotiated among friendship groups including the route to be walked, the distance and the destination. A walk with friends on school grounds however was dependent on a number of factors including the time available or remaining during break-time, the weather conditions, access to spaces such as playgrounds, and if others were out and about.

There were notable differences in the way in which girls and boys participated in walking, talking and hanging out. Consistent with the literature, girls were more likely to embark on walking activities in distinct dyad or triad groupings; while boys were observed in larger (and louder) social groups (Blatchford, Baines & Pellegrini, 2003). Other notable differences were that girls walked at a much slower pace compared to boys, frequently sharing slow meandering strolls across a variety of spaces on the school site. Boys, on the other hand, walked with intent and purpose, as if they were in a hurry to reach a specific destination. There appeared to be a competitive dimension to the way in which boys conducted their walk. For instance, boys kept a close eye on each other's movements and increased their walking speed (or ran) if they felt they were falling behind others in the group.

Both girls and boys walking and hanging out involved physical contact with one

Figure 4.4. Trees and shrubs valued for privacy

another however differences in the forms of physical contact can also be discerned. Girls regularly walked with arms linked around the elbows conveying an intimate and close friendship, while boys' groups were consistently marked by rough and tumble play. It was also not uncommon to observe girls seeking partially hidden places as part of their walking route such as trees and shrubs on the periphery of the playing fields (Figure 4.4), and the more discreet nooks and crannies on the exterior of the school building. The findings acknowledge that places offering some degree of privacy are important for young people's play, especially girls. Boys, on the other hand, were more inclined to walk to and hang out in more visible and open

outdoor spaces such as playgrounds. This also echoes the many studies, primarily conducted on primary school playgrounds, that maintain boys dominate large play areas for their games, while girls are on the periphery of physical activity play (Thorne, 1993; Pellegrini, 2004). Overall, hanging out in secondary school often featured playful walking activities, which presented young people opportunities for some privacy and a certain degree of spatial autonomy for their social experiences.

4.3.2. The 'Lap', the walk and the 'Meet'

Ballyway Secondary School had what was widely known and referred to as the "Lap". This was an adapted walking route on the school site which proved to be a valuable space for the physical activity play of young people. The 'Lap' comprised

Figure 4.5. The 'Lap' facilitates walking, talking, hanging out

mostly of the tarmacked area that hugged the exterior of the entire rear of the school building, with one full Lap measuring approximately one hundred and twenty metres (satellite image shown in Figure 4.5). Often after the bell had sounded to return to class, I overheard the proposal made among friends: "Time for a quick Lap?". Girls and boys, mostly in dyadic groups, would then exit the school building and engage in a brisk walk, run or chase around the 'Lap' before returning to class. Commencing and completing a 'Lap' in this way, subsequent to the sound of the bell, draws attention to the agency of children and emphasises the creative ways in which they transgressed adult authority and seized opportunities for resistance and recalcitrance of specific rules, such as arriving to class on time.

The 'Lap' was appealing for a number of reasons. Firstly, as discussed, the physical act of walking and completing a 'Lap' enabled young people to take control of the time available to them – it seemed to 'give form to time and centred action within a particular space' (Richards, 2012, p.384). It was also a physical activity offering "fresh air", and somewhere to "stretch the legs a little". It was not uncommon for

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some, mainly boys, to walk, run or to chase one another six or seven laps in one lunch break. These observations were corroborated by the boys themselves as they went by me on the school yard: "Are you counting the laps today? That's six now" (Tom, 14 years). This is significant because many young people were cognisant of the health benefits associated with physical activity generally. The 'Lap' was also popular because the route was easily accessible and achievable, even with time restrictions (e.g. short mid-morning break). For the same reason, the 'Lap' could also be completed during the wet and the wintry months, when other outdoor school spaces situated further away from the school building may not have been as appealing due to being wet, muddy or slippery. The walking practices of young people therefore centre on the agency, creativity and spontaneity afforded from the experience. Walking can be equivalent to physical activity play in that it incorporates 'playful context' (e.g. pushing, prodding, piggybacking) and 'physical activity' (e.g. chasing, running) (Pellegrini & Smith, 1998). Walking was central to young people's "hanging out" and "messing about" on school grounds; and, most importantly, it was described in this study as "how we play".

For many, the 'Lap' formed part of their everyday play and recreation behaviour. A group of 2nd year girls (approximately 13 years) compared walking the Lap to a traditional religious and cultural custom.

> *Hannah: We like to walk in circles.*
>
> *Robin: It's a throwback to walking around religious icons and stuff, like at Knock.*[10]
>
> *Aideen: Yeah, we walk round and round saying our prayers over and over.*
>
> *Researcher: And what are you praying for today?*
>
> *Sophie: We know what Robin's praying for?*
>
> *Robin: What?*
>
> *Sophie: For a Lap with Daniel.* (Field note excerpt: Ballyway Secondary School, February 13, 2015).

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[10] Knock (Irish *Cnoc Mhuire*, 'Hill of the Virgin Mary') is a major international Catholic pilgrimage and prayers site located in County Mayo in the west of Ireland.

Irish holy wells are often dedicated to unofficial and territorial 'saints' and preside over landscapes that incorporate prehistoric sites, sacred trees and rocks as 'stations' for prayer (Ray, 2015). Known as 'paying the rounds' or 'rounding', the structured visitations of stations constitute folk liturgies, which are prayers and behaviours undertaken in a set order (Ray, 2015) (e.g. walking around the well an odd number of times in the direction of the sun and drinking or bathing in the waters at specific intervals). Holy wells have been sites of worship and prayer for centuries and continue to be visited today by those who seek the healing properties and 'cures' offered by the waters. The ritualised activity of 'rounding' is also practiced in some schools. For example, to celebrate a Saint's day, such as St Bridget in Kildare on the 1st February.

Certainly, walking is a phenomenon with more complexity than a simple "stretch the legs". Anticipation and discovery were key characteristics of the walk – what might happen, and whom might you encounter while out and about? In the conversation above, Sophie is teasing Robin about wanting to walk the Lap with a boy named Daniel. When one boy and one girl participated in walking the Lap together, this was then referred to as the "Meet". A Lap with the opposite gender largely conveyed couple status. According to the girls, if a couple was holding hands or touching in any manner this communicated that they were "currently dating". While two people of the opposite gender walking the Lap together suggested they were "considering dating" one another. Given the heteronormative culture of school spaces (Epstein & Johnson, 1998), it is unsurprising that only opposite-gender couples walking together in this manner were referred to in this way. Adolescence is a period in which romantic relationships emerge in many settings (Collins, Welsh, & Furman, 2009). These relationships are also a major topic of conversation among young people, especially girls (Eder, 1993; Thompson, 1994). A walk on school grounds may therefore be viewed as an opportunity to construct more elaborate play events, and explore new social relations, including young people's romantic experiences.

4.3.3. Flirty, rough and risky

The flirtatious encounters observed in secondary school settings were enacted via displays of affection (e.g. hugging, touching), aggression (e.g. wrestling, pushing), humour (e.g. jokes, laughing) and teasing (e.g. insults). These often-contradictory

behaviours were mostly interpreted as playful and friendly and suggest a covert (and sometimes overt) growing interest in the opposite gender. Fieldwork observations reveal boys taunting and chasing the girls on the school grounds, and vice versa. According to Kailey (14 years): "The boys tease us, and we don't let them away with it. We catch them and beat them up". Sutton-Smith (1959) suggests that informal activity of this type appears to be practically universal throughout the Western world.

Girls' and boys' social interactions frequently exhibit physical behaviour resembling rough and tumble play. Pellegrini (2003) examined young peoples' intersexual rough and tumble play, in the context of the 'push and poke' courtship. Because gender segregation is well entrenched since early childhood, and crossing gender boundaries is socially risky (Thorne, 1993; Bergin et al., 2018), Pellegrini maintains that intersexual rough and tumble play may be used a gambit to establish heterosexual contact. Adolescence is a time where young people explore their identity in relation to other people around them (Elkind, 2007). It is also a time of increased sexual attraction to other people. It is therefore hardly surprising to have observed this form of physical activity play on secondary school playgrounds – where play, games and social relations are often removed from immediate adult surveillance and control.

The natural characteristics of the physical school environment influenced young people's physical activity play. Grass slopes forming part of the natural topography, while wet and muddy during the winter months, were particularly alluring in the warmer and drier periods. Many studies have reported that natural elements on school grounds (e.g. trees, grass, rocks, sticks) encourage children's physical activity play, while also promoting social interaction and cognitive development (Dyment, Bell & Lucas, 2009; Ridgers et al., 2012; Mårtensson et al., 2014). Such spaces were valued for sitting, standing, flirting and rough and tumble play (i.e. hanging out). The following field note excerpt is related to the space shown in Figure 4.6:

I am struck with just how rough the boys are today with pushing, wrestling and piggybacking one another down the hill. Others come running toward the group, as if appearing from nowhere, to watch or to join in. Boys, and some girls, are running down the hill uncontrollably toward the direction of the river. There is a lot of noise with shrieking and jeering one another … From behind me I hear Mr D shouting at them to stop. They either don't hear or are much too caught up in what looks to be a lot of fun. To break up the play Mr D physically inserts himself within the group. He then selects some of the 2nd year boys to stand on the bridge as a reprimand for what he describes as "unruly" and "rough" behaviour. (Field note excerpt: Killamany Secondary School, October 4, 2013).

Figure 4.6. Varied topography valued for risky play

Play involving risk comprises elements of physical activity play (Smith, 2005) and rough and tumble play (Humphreys & Smith, 1987). The play scenario described above, together with the varied and irregular topography seen in Figure 4.6, clearly presents young people with an exhilarating, challenging and fun play experience. Pushing, wrestling and piggybacking downhill toward a river is no doubt interwoven with feelings of being out of control and overcoming some fear of falling into the river (Sandseter, 2009). On the other hand, young people are disempowered when individual play preferences are discouraged and constrained by adults. Disciplinary techniques are employed according to adult perceptions of what is considered not safe or "unruly", rather than giving young people the freedom to judge situations for themselves. We know that risky play is essential for healthy child development and that children who expose themselves to risky play scenarios, also display clear strategies for mitigating harm (Mikkelsen & Christensen, 2009; Sandseter, 2009; Tremblay et al., 2015). Safety concerns may be well-intentioned, however, they also result in minimising risk-taking play and decreasing the value of 'real play' that occurs on school grounds (Ball, 2010). It should also be noted here that rough and tumble play is reported to peak during middle childhood between the ages of 8 – 10 years and to decline during adolescence (Pellegrini & Smith, 1998). The current study however found it to be an

overwhelming aspect of physical activity play with much older children, especially boys.

Ball playing was a prominent activity for boys during break-time. Occasionally girls joined the boys however this was usually done in ways to disrupt their play and draw attention to themselves (e.g. steal or kick a ball away from where the boys were playing). Ball play differed from playground soccer in that it incorporated any type of ball and it did not bear a resemblance to the physical game of soccer. For instance, soccer consisted of numerous players and teams, boundaries and goals. Ball playing, for example, could involve kicking/passing a soccer or Gaelic football to one another, throwing a tennis ball against a wall, bouncing a basketball/shooting hoops. Ball playing could be interspersed with performances of elaborate moves and tricks including fancy footwork with soccer balls and basketball dribbling techniques. These activities required high-level and complex skills which boys were eager to perform amongst themselves and for bystanders. The kicking, passing and bouncing of balls commonly comprised competitive components, which the boys in this study claimed was "fun" and "relaxing". Play involving competition has been reported to be highly enjoyable for some children (Opie, 1993). The following fieldwork excerpt highlights the way in which boys turn physical activity play into a contest:

> *Mark (14 years) explains that they are having a 'competition' to see who can kick the ball into the air the highest. In the process, they have lost three balls over the fence into the Credit Union car park area, which is adjacent to the school, and are in trouble with Mr P. Mark finds this amusing and tells me: "It gets a bit rough out there, but it's something to do anyway". Another ball is quickly found, and Mark joins his friends. While I continue watching the boys kicking the ball as hard and high as they possibly can, Mr P, who is the Gaelic football coach approaches, and informs me "they are good lads" and "some of the best players on the team". Mark sees me speaking with Mr P and shouts across the field: "Sir, what position am I tomorrow?".* (Field note excerpt: Ballyway Secondary School, March 5, 2015).

The formation of homogeneous social groups is an example of young people finding physically compatible play partners (Pellegrini, 2005). Mark and his friends are highly proficient in kicking a ball because of their shared interest in Gaelic football and no doubt because they are considered "some of the best players on the team".

Swain (2003) maintains that the 'body plays an essential role in the formation of masculine identities, with competitive displays of skill and strength' (Swain, 2003, p.95). Embodied forms of physicality have been shown to be a key factor of masculine stratification among school aged boys, with the most athletic at the top of this masculine hierarchy (Swain, 2003, 2004). High status boys, like Mark, gain considerably from the hierarchy as they earn social prestige (e.g. "good lads", "best players") and secure resources for themselves (e.g. extra balls, large play space). Seemingly being 'in trouble' with Mr P for losing multiple balls on the neighbouring property did not lead to the cessation of the boys' ball play. Rather, a fourth ball was quickly located enabling them to continue participating in the highly vigorous ball kicking competition. In terms of demonstrations of play activity, the boys were provided an open or 'front stage' (Goffman, 1959) to show themselves off and to perform their masculinities on a regular basis (Swain, 2003). The ability to demonstrate and perform physical prowess is an important requirement for establishing and maintaining status in peer groups at both primary and secondary school levels (Gilbert & Gilbert, 1998; Connell & Messerschmidt, 2005).

4.3.4. Indoor play culture

Girls and boys physically separated from one another while spending time in the school's prominent indoor social space; however, it was the girls who dominated the area. Girls generally occupied most of the inner seating, while boys either stood on the periphery of the space or took up any remaining seats. A study of the physical activity of children in Ireland has highlighted that children of primary school-age spend much less time sitting than young people in secondary school (Woods et al., 2018). We also know that girls are less likely than boys to meet the physical activity recommendations, with the likelihood of meeting recommendations decreasing with increasing age (Ibid). It is therefore feasible that girls seek out and assert dominance over the school's central social space because they have a greater interest in sedentary activities with friends in comparison to boys.

There were distinct and gender-stereotypical ways in which young people participated in activities in the school's central social space during break-time. For instance, girls were generally quieter than boys as they sat, talked, listened to music or completed school work. Girls were also often observed engaged in practices

socially recognised as feminine like grooming one another (e.g. fixing each other's hair into buns and braids, painting nails). Boys, on the other hand, were louder and more active and physical than girls. It is important to reiterate that boys' physical contact and rough play were a persistent feature of break-time in both indoor and outdoor space. A hug or a headlock, the ruffling of hair, the gentle-to-moderate push or punch, the holding of an arm, or the simulated kick to a body part, spotlighted in the confines of indoor space, were affectionate play gestures and used as a way for the boys to express fondness or friendship with one another (Reed & Brown, 2000). The rough and tumble play culture of boys' in outdoor school spaces, although physically more vigorous due to the nature of the space (e.g. large sports fields, varied topography) certainly bore a resemblance to the briefer play episodes observed indoors.

The long and narrow school corridors were not only thoroughfares and walkways from one classroom to another but were also vibrant and crowded places for young people to hang out during break-time, especially during the wet and wintry months. School corridors may be thought to have little compatibility with physical activity play; however, pushing, prodding, piggybacking, chasing and flirtatious play encounters were commonplace in school corridors. Following Foucault (1977), school buildings are panoptic by design and organised in such a way that visibility and ongoing surveillance of children is possible at more or less any time. School corridors however may be an exception to this because they are situated in the blind spots of direct adult surveillance – they are 'part of the hidden face of the school' (Clark, 2010, p.768) and afford a degree of privacy. Young people in this study found ways to evade the panoptic gaze and used corridor spaces in ways not intended or planned.

The 'shy girls' and the 'phone zombies', as they were referred to by both young people and adults, exclusively dominated the small carpeted corridor situated near to the school's central office and reception area. These two groups were physically situated alongside one another (i.e. opposite sides of the corridor); however, they were distinct in their play and recreational activities. There were ten members of the 'shy girl' group of 12-to-14-year-old girls. During break-time the preferred activity of the group was to read from a physical book or a personal electronic device such as a tablet or kindle. The 'phone zombies' spent a large proportion of their break-time

gaming or listening to music via personal electronic devices (e.g. smartphone, tablet). There were roughly twelve members of this group made up of 12-to-14-year-old boys. My initial impression of the boys was that they were participating in solitary screen-based activities however this was not always the case as they often played online games against one another. Moreover, communication within the group frequently took place via mobile apps (e.g. Snapchat) – taking place in the virtual, rather than in the real world.

Young people were permitted the use of personal electronic devices during break-times in both secondary schools, and as Aideen (13 years) commented: "The kids in this school are attached to their phones". Nevertheless, none were labelled in the somewhat derogatory terms of 'shy' or 'zombie', primarily because they pursued (and performed) a variety of gender-differentiated modes of play during break-time (in a variety of school spaces). The use of electronic devices may therefore increase sedentary activities, and act as a barrier to physical activity play during break-times for some young people.

The two groups, the 'shy girls' and the 'phone zombies, relied heavily on Wi-Fi connectivity for their sedentary play activities. The corridor was particularly appealing, not only for the warmth provided by the carpet, but because of the strength of the school Wi-Fi network, which could not be accessed across the entire school site, especially outdoors. Also, the corridor provided a sense of spatial privacy – not only away from the immediate adult gaze, but also some distance from other students who, when indoors, were primarily in or near to the central social space. I observed strategies invoked by group members to ensure they continued to control and dominate the area. For instance, the girls placed their school bags around the exterior of the group creating a physical barrier between themselves and others. Following the work of Sack (1986, p.21), the 'territorialisation' of space is about possession of an area; a place that is 'ours or not yours'. As Sack (1986) succinctly explains, 'territoriality can be easy to communicate because it requires only one kind of marker or sign – the boundary (Ibid, p.32). The territorialisation of physical space by the 'shy girls' and the 'phone zombies' is primarily understood through their constant occupation and demarcation of the area for their own play needs. Young people engage in a multitude of play and recreational activities that express aspects of their identity (e.g. a reader, a gamer), with the physical spaces

in school settings playing an important role in the processes of identity formation (Abbasi, 2016).

4.4. Results of Anthropometry

This section presents the results of anthropometric measurements of children. The anthropometric data is broadly associated with the same cohort of children who were telling me about their play lives across the four schools in which fieldwork was conducted. The body weight and height measurements of 941 children, aged 8 – 17 years, were used to determine BMI and the prevalence of overweight and obesity of children and young people. BMI (kg/m^2) was categorised using the IOTF BMI age-and-gender-specific charts for children which classify underweight, healthy weight, overweight, obese and morbid obese participants in the sample (Cole et al., 2000; Cole & Lobstein, 2012). Anthropometry adds to the study overall by addressing a research objective (research objective 5).

The child risk factors leading to overweight and obesity include physical activity and sedentary behaviour. As reported in the literature review, the proportion of children around the world, including Ireland, meeting the physical activity guidelines is alarmingly low and is likely to be declining (Hallal et al., 2012; Tremblay et al., 2014; Woods et al., 2018). Physical inactivity is now the fourth leading risk factor for global mortality (6% of deaths globally) with overweight and obesity responsible for 5% of global mortality (WHO, 2009). There is clearly a need to advocate for increases in physical activity and decreases in sedentary behaviour for the present and future health of children and young people (Tremblay et al., 2011). For this to be successful widespread efforts towards research and recommendations are required. Ultimately, resolving the problem of inactivity requires a sustained change in individual daily activity and sedentary behaviours (Tremblay et al., 2011).

4.4.1. Childhood overweight and obesity

A range of descriptive statistics were prepared to show the trends of the analysed sample. Data were collected and analysed from 448 girls and 493 boys. Ages of children ranged from 8.64 to 17.21 years old, with the mean age value of 13.65 years. The mean age for girls was 13.53 years. For boys the mean age was 13.76

years. Most children attended Killamany Secondary School (urban) (42.4%, *n* = 399), followed by the Ballyway Secondary School (rural) (28.1%, *n* = 264), Ballyway Primary School (rural) (15.5%, *n* = 146), and Killamany Primary School (urban) (14%, *n* = 132). This corresponds to an overall participation rate of 68%.[11]

The BMI of participants ranges from 12.50 to 40.10, with the mean value of 20.67. The mean BMI for girls was 20.86 with a 95% confidence interval of 20.54 to 21.18. The mean for boys was 20.50 with a 95% confidence interval of 20.20 to 20.80.

Full details of BMI by gender and individual age groups (rounded) are as follows: Mean BMI at 9 years (girls 19.64, boys 17.45); Mean BMI at 10 years (girls 17.99, boys 18.31); Mean BMI at 11 years (girls 18.04, boys 18.58); Mean BMI at 12 years (girls 19.04, boys 19.50); Mean BMI at 13 years (girls 20.66, boys 20.07); Mean BMI at 14 years (girls 21.92, boys 20.45); Mean BMI at 15 years (girls 21.92, boys 21.29); Mean BMI at 16 years (girls 22.24, boys 21.91); Mean BMI at 17 years (girls 22.24, boys 22.72).

Using the IOTF cut-off points of BMI (age-and-gender-specific), 72.8% of children and young people belong to the group of normal weight (girls 67.6%, boys 77.5%), 19.4% are overweight (girls 22.8%, boys 16.4%), 4.7% are underweight (girls 7.1%, boys 2.4%), 2.7% are obese (girls 2.2%, boys 3.0%), and 0.4% are morbidly obese (girls 0.2%, boys 0.6%). The overall prevalence of overweight and obesity (inclusive of morbid obesity category) in the dataset is 22.5% (girls 25.2%, boys 20.0%) (Table 4.1). The Pearson Chi-Square test (=17.01) is statistically significant ($p < 0.05$). This implies that there is a statistically significant association between gender and BMI (IOTF) classification (Appendix S).

The mean BMI for children ranging from 8.64 to 11.99 years (*n* = 206) is 18.35 with a 95% CI of 17.94 to 18.76. The mean BMI for young people aged 12.00 to 17.21 years (*n* = 735) is 21.32 with a 95% CI of 21.08 to 21.56. The prevalence of overweight and obesity in children (8.64 to 11.99 years) is 22.3% (girls 24.3%, boys 20.4%) and in young people (12.00 to 17.21 years) is 22.60% (girls 25.50%, boys

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[11] Total participation rates by individual school: Killamany Primary School 47%; Killamany Secondary School 68%; Ballyway Primary School 82%; Ballyway Secondary School 77%.

20.0%) (Table 4.1). Full details of the prevalence of overweight and obesity by gender and individual age groups (rounded) are provided in Table 4.2.

Table 4.1. Overweight and obesity prevalence (categorised using IOTF standards) by children and young people
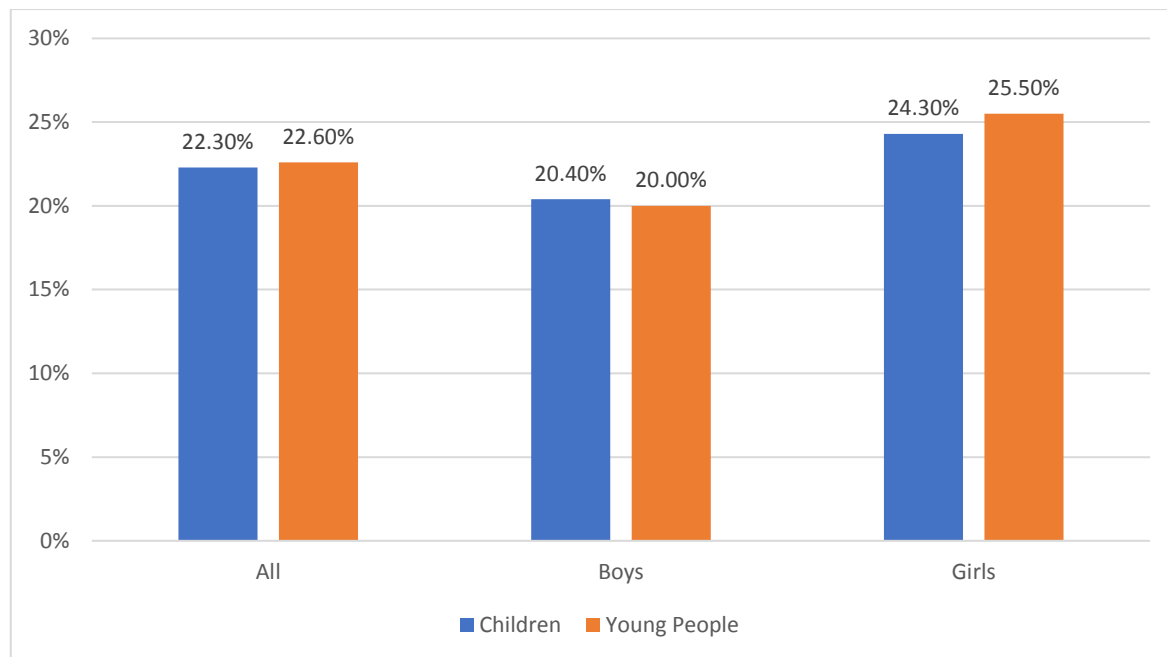
Table 4.2. Prevalence of overweight and obesity (categorised using IOTF standards) by individual age groups (rounded)
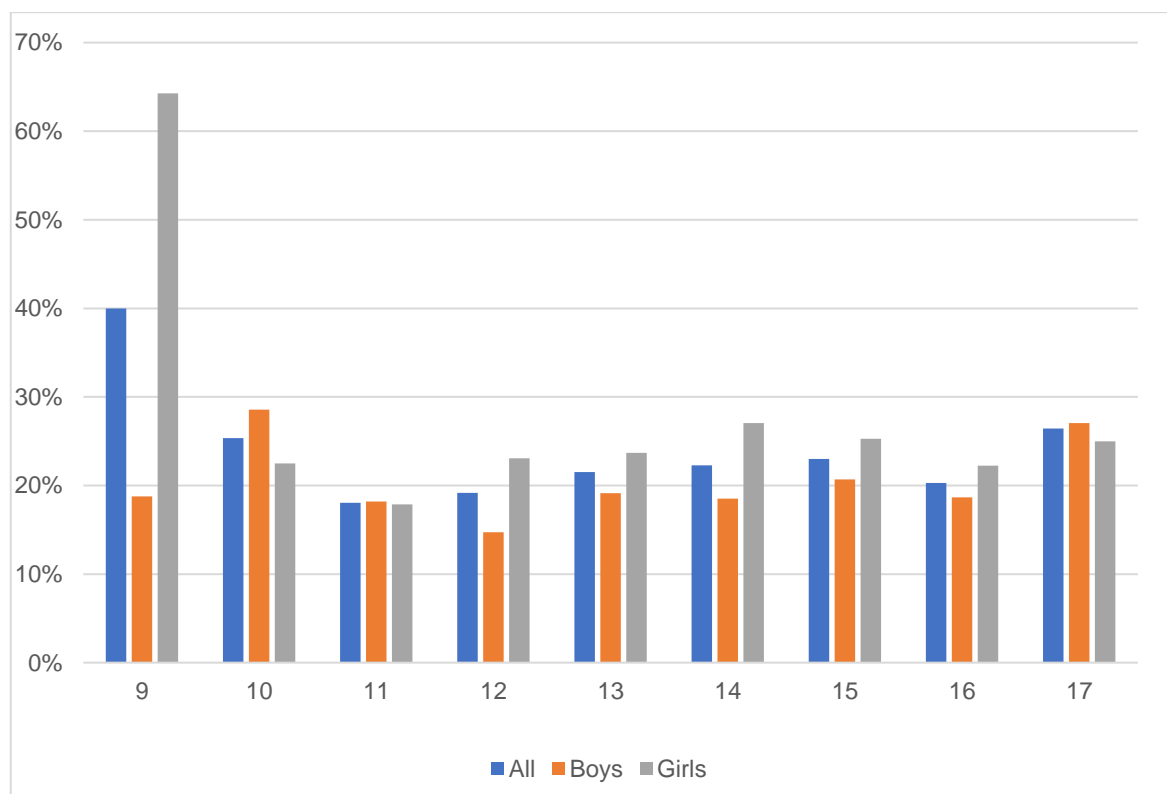
These results tell us that just over one in every five in the data set is overweight or obese (children 22.3%, young people 22.6%). Girls more likely than boys to be overweight or obese across most of the age groups, but particularly during adolescence (overweight and obesity levels for girls peaked at age 14 years, at 27.06%). These findings align with the most recent data from Ireland, which comes from the Childhood Obesity Surveillance Initiative (COSI, Bel-Serrat et al., 2017) and the GUI longitudinal study (Williams et al., 2018), and reports that at least one in five children (6 – 13 years) are overweight or obese. The levels of overweight and obesity in those 8 years and older appear to be stabilising albeit at a high level;[12] and there is a marked difference across genders with more girls tending to be overweight and obese than boys across all four data collection rounds from 2008 – 2015 (Bel-Serrat et al., 2017). Overweight and obesity in this study sample of 22.6% (girls 25.50%, boys 20.0%) is lower than the most recent figures available for young people in Ireland at 26% (girls 30%, boys 24%) (Williams et al., 2018). A plausible explanation for this result is likely to be attributed to the significantly larger data sample in the GUI study (Williams et al., 2018) in comparison to this study.

While a certain level of weight gain is expected during adolescence, overweight and obesity occurs during this period at a higher rate compared to any other time during growth and development (Jasik & Lustig, 2008; Alberga et al., 2012). As children transition from middle childhood to adolescence, physical activities may be replaced by sedentary activities, with girls more likely to have a significant drop during this time (Kimm et al., 2002; Corder et al., 2010; Dumith et al., 2011). For the majority, physical inactivity tracks into adulthood (Telama et al., 2005, 2014), as does childhood overweight and obesity (Simmonds et al., 2016). Approximately 55% of obese children go on to be obese in adolescence, around 80% of obese young people will be obese in adulthood and around 70% will be obese over the age of 30 (Simmonds et al., 2016). The most recent data for the ROI shows that the majority of adults are overweight and obese (60%) (Department of Health, 2019), with levels projected to reach 89% and 85% in males and females respectively by 2030 (Keaver et al., 2013). The direct healthcare costs associated with these increases are expected to amount to €5.4 billion by 2030 (Keaver et al., 2013).

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[12] This stabilisation is not observed in children attending (social or economic) disadvantaged schools in Ireland (Bel-Serrat et al., 2017).

4.4.2. Urban-rural difference

From the 941 children and young people, 56.43% in the study sample attend urban schools (Killamany) (*n* = 531: girls 238, boys 293) and 43.57% attend rural schools (Ballyway) (*n* = 410: girls 210, boys 200). The mean BMI for children in urban located schools is 20.41 (girls 20.36, boys 20.45) and for those in rural schools the mean BMI is 21.01 (girls 21.42, boys 20.58). The linear regression model (ANOVA) is statistically significant for location (t = 4.387, p < 0.05). The coefficient, B is -.907 indicates that children attending schools situated in urban areas have a lower BMI than those in rural locations by .91, controlling for gender and age (Appendix T).

Using the IOTF cut-off points of BMI (age-and-gender-specific), the overall prevalence of overweight and obesity (including morbid obesity) in the urban study sample is 16.20% (girls 16.00%, boys 16.40%) and in the rural sample is 30.70% (girls 35.70%, boys 25.50%) (Table 4.3). As already mentioned, girls are more likely than boys to be overweight and obese across most of the age groups in this study, particularly during adolescence, which may partly be attributed to the physical and physiological changes of puberty. It is notable that secondary school-age girls who attend school geographically situated in a rural area have significantly higher levels of overweight and obesity than their urban counterparts (urban 16.81%, rural 36.1%). Secondary school-age boys in rural schools also have a much greater prevalence of overweight and obesity than their urban peers (urban 15.8%, rural 26.7%) (Table 4.4). Although COSI observed no significant differences in the prevalence of overweight and obesity between children attending either urban or rural schools, their dataset includes children of primary school-age only, while this study sample features children and young people up to 17 years. This result however should be interpreted with caution as it is based on school location rather than the geographical location of where children live. We have no way of knowing which children attending urban schools actually travelled from rural settings and thus bias the findings.

Table 4.3. Overweight and obesity prevalence (categorised using IOTF standards) by urban and rural schools
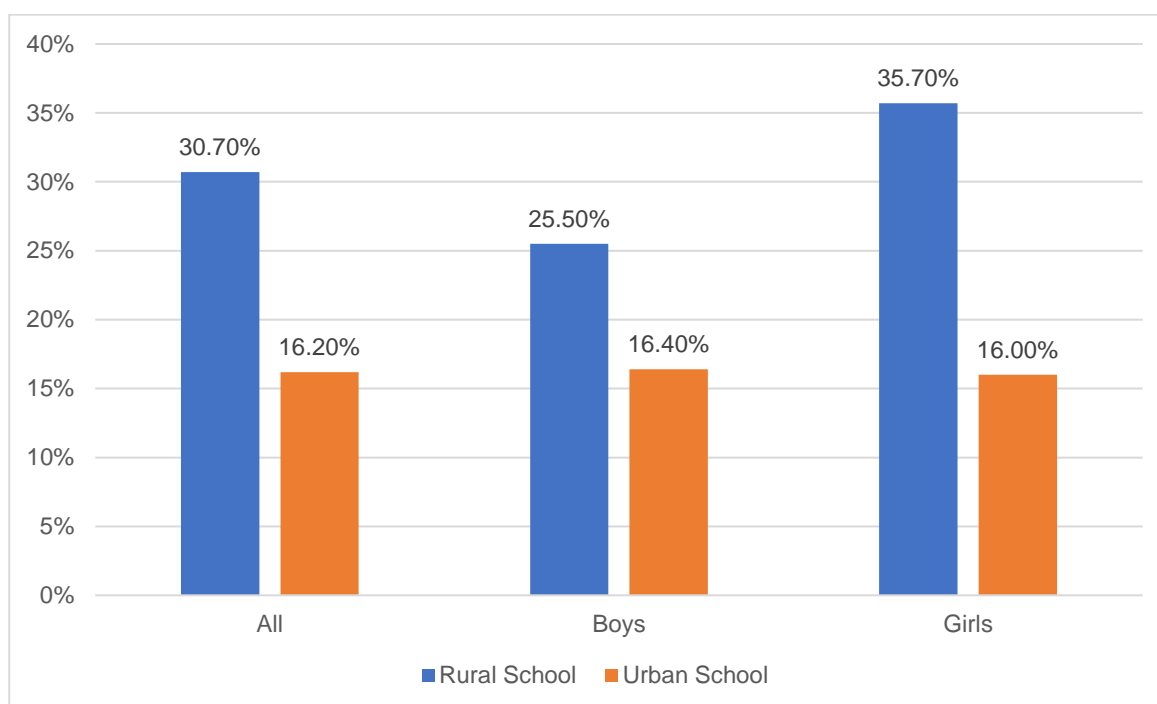
Table 4.4. Comparison of overweight and obesity (categorised using IOTF standards) by young people (12 – 17 years) and urban and rural schools

School Location	IOTF Category	Boy		Girl	
		Frequency	%	Frequency	%
Urban, Killamany	Underweight	6	2.5	10	5.3
	Normal	196	81.7	148	77.9
	OW, OB	38	**15.8**	32	**16.8**
	Total	240	100	190	100
Rural, Ballyway	Underweight	4	2.7	10	6.5
	Normal	106	70.7	89	57.4
	OW, OB	40	**26.7**	56	**36.1**
	Total	150	100	155	100

International studies have identified geographic variation in overweight and obesity rates among children (Singh et al., 2010; Davis et al., 2011; Shriver et al., 2011). Many studies have found that children in rural areas are more likely to be overweight or obese than their urban peers (Sjöberg et al., 2011; Lui et al., 2012; Johnson & Johnson, 2015; Erdei et al., 2018). The reason for the differences in the rates of overweight and obesity among children based on geography are unclear. Possible

explanations point to social, cultural and economic differences between geographic locations, and the greater presence of certain risk factors in rural environments. For example, as has been noted in the literature review, low residential density in rural areas may reduce children's opportunities to engage in spontaneous group play activities (Walia & Liepert, 2012). There may also be less possibility for physical activity due to the lack of, or the greater distances to reach recreational facilities in rural areas, as well as limited transportation opportunities (Matthews et al., 2000; Tucker & Matthews 2001). It has been reported that more children from urban areas compared to rural areas, actively commute (i.e. walk or cycle) to school in Ireland (Woods et al., 2010; Harrington et al., 2016). Moreover, the age-related declines seen in other types of physical activity do not exist in active commuting (Woods et al., 2010). It has been estimated that the difference in physical activity in travelling by motorised transport (e.g. car, bus), rather than walking to school could lead to a weight gain of one kilogram (2–3 lb) a year, all other things being equal (Tudor-Locke et al., 2003).

4.5. Summary

Chasing games were one of the most popular physical activity play forms identified on primary school playgrounds. Physical features of the playground were adapted and utilised to support children's preference and style of play (e.g. playground markings, trees/people for concealment). Children's games were also adapted and developed within the social context of the playground (e.g. peer group, gender, rules, surveillance). Girls' chasing games were organised and imaginative and were generally conducted at a very different pace in comparison to boys' chasing games. Boys, on the other hand, participated in fast-moving and highly physical games utilising a larger playground space than girls.

Playground soccer was a prominent form of physical activity play identified on primary school playgrounds. Boys played soccer for entire break-times (when permitted) while girls, even those considered competitive and "sporty", dropped in and out of games and favoured the social aspects that break-time permits. Intimidation and/or boredom experienced during soccer can, and does, result in a decrease in physical activity play, mostly for girls. Girls employed resistance

strategies towards boys control of soccer however this was focused on disruption rather than equal participation in play.

Sociodramatic scenarios permeated much of children's physical activity play on primary school playgrounds. This finding was interesting as some authors have been explicit in their claims pretending stops by the age of seven years (e.g. Fein, 1981; Sutton-Smith, 1997; Cook & Cook, 2005). Girls' sociodramatic play was more likely to involve family-based games, which is reflective of the stereotypical femininity that girls are largely socialised into (e.g. nurturing/caring). Boys' sociodramatic play, on the other hand, was more likely to feature combat scenarios and the use of fantasy weapons. The boys may be viewed as 'performing' a certain masculine identity shaped by their media experiences (e.g. Marvel superheroes, WWF characters).

Dancing, singing, clapping and skipping, imbued with pop cultural references, were physical activity play dominated by girls. The skills required for these play forms were regularly learnt through observation, peer tuition and repeated participation (Bishop, 2014). Boys did join in with girls' skipping games however this was mostly done in disruptive ways (e.g. dashing in and out of girls long rope skipping games). Thorne's (1993) 'borderwork' draws attention to the power and dominance of boys over girls; and the space in which children in middle childhood contemplate how to relate to one another.

In secondary schools 'hanging out' was a significant break-time activity, and one with prominent physical dimensions (e.g. walking, rough and tumble play). Walking was central to young people's physical activity play and dependent on numerous factors (e.g. time availability, weather, access to space, presence of others). Girls formed intimate dyad or triad groupings and engaged in relaxed strolling, incorporating partially hidden places (e.g. trees, shrubs) into their walking routes. Boys, in larger and louder social groups than girls, walked in a competitive manner permeated with rough and tumble play, with a preference for walking to/hanging out in visible outdoor spaces (e.g. sports fields). Walking enabled privacy and spatial autonomy for young people's social experiences. The 'Lap' draws attention to the agency, creativity and spontaneity of young people's walking practices. From young peoples' perspective, the repetitive walking of the 'Lap' is analogous with a religious

and cultural custom known as 'paying the rounds' or 'rounding'. This was meaningful for the construction of more elaborate play events and for exploring new social relations (e.g. romantic experiences). Overall, young people's walking practices in school settings is a complex phenomenon – an activity that is much more than just walking.

Flirting was a prominent form of physical activity play for young people, in that girls' and boys' social interactions involve rough and tumble play. This finding was not surprising given that adolescence is a time of increased sexual attraction to other people. The natural features of the school setting encouraged physical activity comprising risky and rough play (e.g. pushing, wrestling, piggybacking downhill toward a river). A fieldwork example has illuminated the intrinsic value of this play form (e.g. exhilaration, challenging, fun), and how young people are disempowered when play preferences are curtailed.

Ball playing was a prominent physical activity for boys in secondary schools. Ball play incorporates play with any type of ball (e.g. soccer, rugby, basketball, tennis ball). It also did not bear a resemblance to the physical game of soccer which required, for example, teams, boundaries and goals. A fieldwork example provided in this chapter has demonstrated how boys can turn ball playing into a contest, which is inextricably linked with stereotypical masculinity and the acquisition of status in peer groups. This study has reported that high status boys are enabled by schools/adults in their play preferences and provided an open or 'front stage' (Goffman, 1959) to perform their masculinity.

Girls dominated indoor social spaces. It is feasible that this is because girls had a greater interest in sedentary activities, in comparison to boys. Boys' physical contact and rough play were a persistent feature of break-time in both indoor and outdoor spaces. This study has noted that boys' rough and tumble play outdoors certainly bore a resemblance to the briefer play behaviours observed indoors (e.g. gentle-to-moderate push or punch, the simulated kick to a body part). School corridors, often situated in the blind spots of direct adult surveillance, afforded young people a degree of privacy for their social relations. The fieldwork examples of the 'shy girls' (readers) and 'phone zombies' (gamers) have established that the use of personal

electronic devices (e.g. smartphone, tablet) during break-time has the potential to increase sedentary activities, and act as a barrier to physical activity play.

The anthropometric results presented relate to data collected during fieldwork from a sample of 941 children (8 – 17 years). The weight and height measurements of children were analysed using the IOTF cut-off points in conjunction with BMI, to determine overweight and obesity levels by age and gender, and according to the geographic location of the school in which children attended. The prevalence of overweight and obesity in children (8.64 to 11.99 years) is 22.3% (girls 24.3%, boys 20.4%); and in young people (12.00 to 17.21 years) is 22.60% (girls 25.50%, boys 20.0%). This tells us that just over one in every five in the data is overweight or obese, with girls more likely than boys to be overweight or obese across most of the age groups, but particularly during adolescence. This study also reports notable differences in the overall prevalence of overweight and obesity according to geographical markers (i.e. urban or rural school location) (urban 16.20%, rural 30.70%).

This chapter reported and discussed the results from the ethnographic fieldwork and the anthropometric measurements of children and young people across primary and secondary schools in urban and rural settings in Ireland. The findings have shown that the school setting, and break-time specifically, is significantly associated with the physical activity play of children and young people. This is important in the context of the progressive trends towards sedentary lifestyles, physical inactivity and childhood obesity, and the many health risks associated with these conditions. In the next chapter, Chapter Five, the results from the child-based photography and the walking interviews will be presented.

Chapter 5. Findings from Photography & Walking Interviews

5.1. Introduction

This chapter reports the findings from two separate but interrelated data collection methods including the child-based photography, as well as the child-directed walking interviews. To provide a recap: visual methods are used in this research to understand and interpret child-based photography. Hence, this study is specifically concerned with children's creation of visual data. Child-based photography was conducted by providing 52 children and young people with digital cameras over a one-week period and requesting them to take photographs of the places in their neighbourhood and community where they like to play. Children were asked to capture their play and recreation activities on weekends and outside of school hours. To account for seasonal variation in children's play and recreation, and the different spaces they occupy, cameras were distributed in the autumn and winter months between September and February, and also in the spring and summer months between March and August. Children's photographs were analysed using visual content analysis (Bell, 2001). Twelve photo elicitation group interviews were also conducted to provide contextualisation, knowledge and insight to children's photographs. The photo elicitation interviews were transcribed verbatim by the researcher and analysed using thematic analysis (Braun & Clarke, 2006).

This study also drew from walking interview data whereby the child went with the researcher on a child-directed walk around their local neighbourhood. The walking interviews were conducted to further examine children's play spaces identified in the child-based photography and to enhance the richness of data. The objective of the walking interviews was to obtain an in-depth and contextual understanding of children's play and recreation in local neighbourhoods and the wider built environment. The walking interviews were also transcribed verbatim by the researcher and analysed using thematic analysis (Braun & Clarke, 2006).

The combination of methods allows for a deep and broader understanding, and a more holistic and multifaceted look at children's play spaces. These methods were

used specifically to help address research objective 3: to identify the play spaces in neighbourhoods in urban and rural settings, and the forms of physical activity play engaged in; and, research objective 4: to ascertain barriers and enablers to physical activity play in neighbourhoods and the wider built environment.

This chapter will first present the findings from the child-based photography. The discussion begins with the play spaces in and around the home, predominantly the private space of the back garden, and then moves to children's play spaces found in the neighbourhood and larger environment. The analysis will address some of the wider sociocultural processes that impact children's physical activity play such as age, gender and seasonality. A common characteristic in children's photographs in the visual methods was the portrayal of the natural environment. For this reason, the discussion on child-based photography concludes by exploring the significance of nature for children in relation to their play and recreation.

The findings from the walking interviews will then be presented. Two dominant themes will be addressed which includes children's independent and interdependent mobility, as well as children's encounters and experiences with people and places (Tolland, Barron & Corcoran, 2020).

5.2. Results of Child-Based Photography

A total of 52 children and young people participated in generating photographs. There was an unequal gender split with 31 girls and 21 boys. Thirty-five children were in primary school and 17 were in secondary school. The age of the children varied from 8 to 15 years of age ($M = 11$) (see Table 5.1 for demographic breakdown). The Mean number of photographs recorded by children was 41. Girls recorded between 10 and 164 images ($M = 43$). Boys recorded between 5 and 155 images ($M = 38$). There were also 12 photo elicitation group interviews conducted, 7 of which were with primary school-age children, and 5 with young people in secondary schools. The 52 children recorded a total of 2,253 images of their play and recreation experiences however 98 of these have been excluded as a result of duplication. Therefore, a total of 2,155 photographs remain and have been included in the final analysis.

The 52 children and young people who participated in the child-based photography, were not limited in their representation of images. Rather, children were permitted free choice with representation. However, it should be noted that there was no duplication in representation due to the criteria for identifying and removing duplicate images. As such, all photographs included in this study represent children's play spaces in neighbourhoods and the wider built environment. There was also little restriction on the number of photographs any one child could generate due to the size of the camera memory card which could hold up to four hundred images.

The four dominant spaces children occupy for their play activities during middle childhood and adolescence include: the home space (33%), the immediate neighbourhood (11%), the local community (36%) and recreational sites (outside of the local community) (20%) (Table 5.2). Children recorded more of their images over the year during the spring and summer months (girls 67%, boys 51%) (see Appendix U for breakdown of girls and boys spaces for play and recreation by season, setting and school). Most of the photographs include images of the child participant with other children, mostly friends and siblings (girls 59%, boys 51%), with the vast majority depicting outdoor spaces (girls 81%, boys 81%), reflecting the focus of the study.

Table 5.1. Demographic breakdown of participants

Participant Profile	(n = 52)	
Urban Setting	Boy, 9	Girl, 14
Rural Setting	Boy, 12	Girl, 17
Age	**Children in Urban Setting**	**Children in Rural Setting**
8	0	2
9	3	4
10	2	2
11	5	11
12	6	0
13	0	3
14	5	3
15	2	4

Table 5.2. Spaces for play and recreation over the calendar year

Children's spaces and places of play and recreation over the calendar year

- 33% Home
- 11% Immediate neighbourhood
- 36% Local Community
- 20% Outside local community
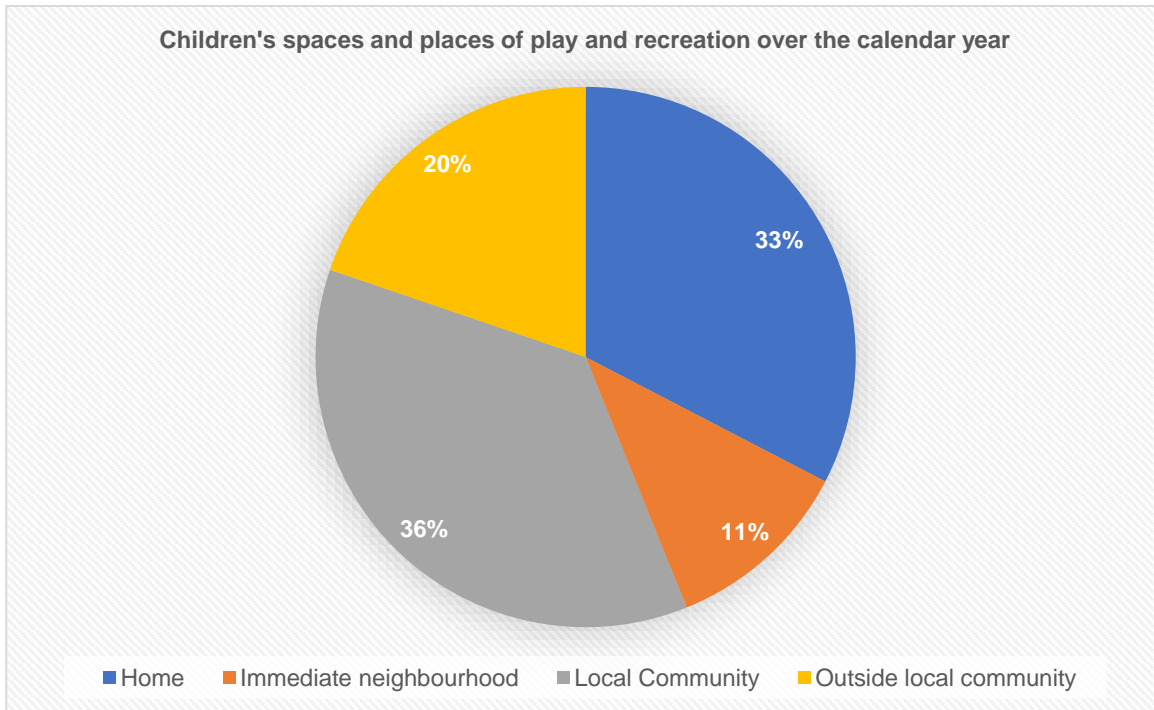
5.3. The Home Space – House and Garden

Children recorded 33% of their total photographs depicting the spaces in and around the home site (girls 36%, boys 28%) (Table 5.2). The places portrayed outside the home include the back and front garden, while the indoor images depict the living room, bedroom, kitchen, home office and playroom (Table 5.3). The home space is an important influence on the physical and sedentary behaviour of children, especially for those who have limited independent mobility and spend much of their time at home (Maitland et al., 2013). Several studies report that time at home indoors is more likely to be sedentary, while time at home in the garden is more likely to be active (Sener et al., 2008; Biddle et al., 2009). Hence, there is an important link between location within the home space and children's physical and sedentary play (Maitland et al., 2019).

Table 5.3. Girls' and boys' play spaces in the house and back garden

Play spaces in the home and garden
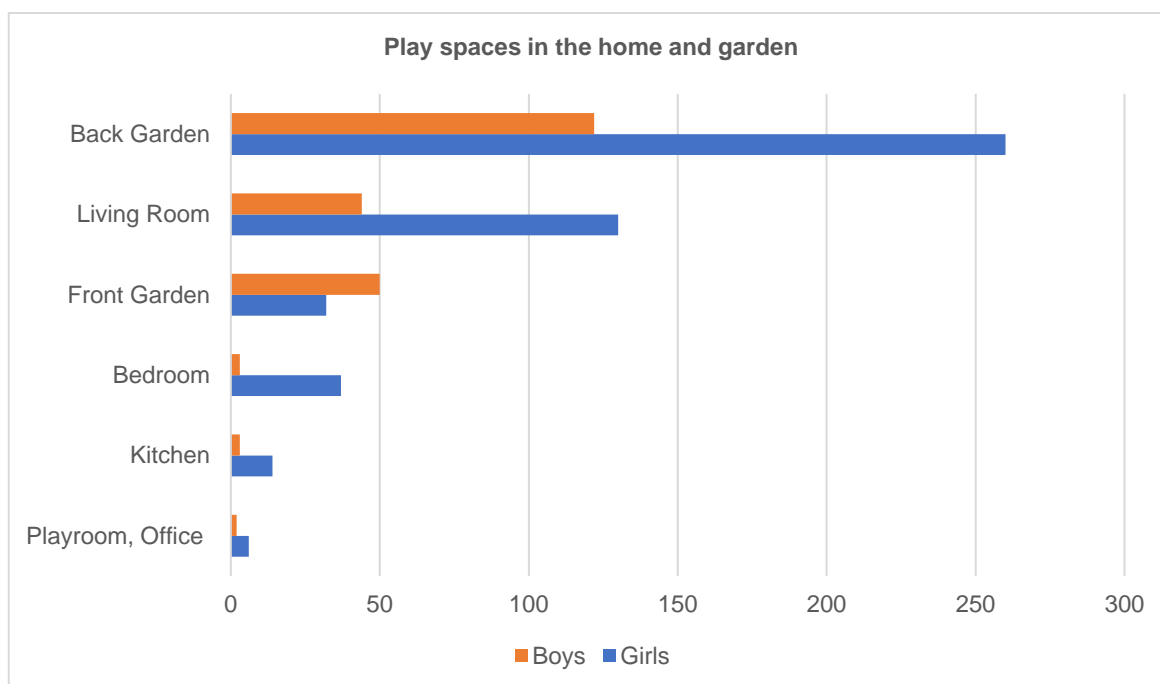
5.3.1. Back garden

The majority of photographs recorded in the home space category depicts the back garden (girls 54%, boys 54%), with most of the images recorded in the spring and summer months. This shows that children use the back garden for physical activity play more than anywhere else within the home space. A higher percentage of images depicting the back garden have been recorded by children (primary school-age 13%, secondary school-age 8%). Overall, however, this was the most popular place recorded in the study with 18% ($n = 382$) of children and young people's total images representing the back garden (girls 19%, boys 15%). This is not surprising considering the research shows that most contemporary outdoor play among children with limited independent mobility, is closely centred on the home, and predominantly the child's own garden (Prezza et al., 2001; Barron, 2013).

The literature notes that the home space cannot be reduced to a dwelling and that for many children the 'home' includes both indoor and outdoor spaces. While younger children consider 'home' to be the place where one plays; at age 12 or 13, children regard the 'home' as just composed of indoor space (Nordström, 1996; Rasmussen, 2004). This illustrates that the concept of the back garden changes between age groups of children. This was consistent with the findings in this study

where children referred to the back garden as distinct from 'indoors' or 'inside'. The back garden is characterised by contiguous private outdoor space to the rear of the home site. In Ireland it is commonly enclosed by walls, fences or hedgerows, and therefore preserved from the public gaze. The children's images clearly depicted back gardens containing numerous fixed and moveable play equipment (e.g. swings, slides, trampolines, sand pits, goals, badminton nets) and toy objects (e.g. balls, Frisbees, rackets, hula-hoops, skipping ropes). Photographs portrayed the back garden as a place to spend time either alone or with playmates, mainly siblings, friends and pets. The back garden was also somewhere to perform and practice various physical skills and sports-based play, such as swinging on monkey bars, running and chasing games (Figure 5.1), soccer drills and trampoline tricks. For James (10 years) the trampoline was where he could "jump really high and do flips and other things" (Figure 5.2).

Figure 5.1. Chasing games with friends

Figure 5.2. "Jump really high and do flips"

It was a place for skipping, juggling, dressing up, and for dancing and gymnastics. The natural features of the back garden were photographed in detail with the space being portrayed as somewhere to explore, discover and interact with the natural environment, such as searching for insects (e.g. butterflies, ladybugs), gardening and climbing trees. Maitland et al., (2014), in their study of home physical environments, identified that children's creative play was better facilitated by natural features within the back garden.

It is clear that the back garden is a key place for a variety of children's play and recreation (Barron, 2013; Gundersen et al., 2016). Indeed, a lack of garden space has been reported as a barrier to children's physical activity play (Veitch et al., 2006;

Jago et al., 2009). It is likely that parents consider the back garden as a relatively safe and secure environment because of the natural surveillance it permits (Veitch et al., 2006; Maitland et al., 2014). As such, children are encouraged to play in the back garden and are provided a wide range of equipment for their outdoor play on the home site (as shown in previous Figures 5.1 & 5.2). Burke (2005), in her study of primary school children in the UK, found that play took place in spaces where children felt safe, such as the back garden. An important element in Burke's study was the sense of enclosure and privacy that such spaces provide. While the children in this study did not specially refer to the back garden in terms of 'safe' and 'private', they did offer some explanations as to why they played there. This was expressed in terms of preference: "We play in the back garden because that's where we like to play" (Sophie, 9 years). It was also conveyed in terms of a direct instruction from parents: "It's where mum is always telling us to go and play, especially when she has a headache" (Dara, 10 years). There was also evidence demonstrating how back gardens change and evolve as a play space for children as they progress through childhood. Jessica (14 years), referring to photographs she had taken of her siblings on play equipment in the back garden (i.e. swings, slide, seesaw) remarked:

> *My sister is 6 and is the only one that still uses it a lot. It's pretty old, it's been there since I was a kid. My brother is 12 and they both use the trampoline… I don't use them though, or the trampoline, not for a long time.* (Photo elicitation interview: Killamany Secondary School, April 17, 2015).

5.3.2. Front garden

In this study, the front garden was not as popular as the back garden; however, it remains a valued play space with 12% of images in the home space recorded here (girls 7%, boys 22%). Both girls and boys recorded most of their images of the front garden during the autumn and winter months. Also, a higher proportion of images depicting the front garden has been recorded by children (primary school-age 56%, secondary school-age 48%). Wheyway and Millward's (1997) substantial piece of research on 12 housing estates across the UK identified front gardens as much more popular than back gardens for children's play, because of the increased opportunity to connect with friends passing by. In this study however, only 82 images

capture the front garden and/or driveway space, compared to the 382 portraying back gardens.

Children in rural settings recorded more of the images of front gardens compared to those in urban areas (rural 14%, urban 9%). It is important to restate here that the majority of children in this study from urban settings lived in housing estates, while those from rural settings lived in either one-off housing or in detached housing in rural housing developments. For this reason, the portrayal of front gardens varies considerably in children's photographs; however, some comparisons can be made. For instance, front gardens have definitive boundaries between themselves and the road, such as low walls, fences and hedges. These boundaries work to restrict children's movements and to constrain movement of outsiders towards the home and have seen front gardens referred to as a 'buffer zone' between the private home and the public street (Ravetz & Turkington, 1995). The primary difference between the front and back garden images is that most of the images portraying the front garden also feature a tarmac or paved driveway, or dedicated car parking area. We know that hard/paved surfaces are valued by children for specific forms of physical activity play (e.g. wheel-based activities, basketball) (Biddulph, 2011), providing some rationale as to why children sought to play in front gardens.

Children's photographs of front garden spaces predominantly show a variety of fixed and moveable play equipment (e.g. goal posts, basketball hoop and stand), toy and play equipment (e.g. balls, rackets, hula hoops), as well as wheel-based objects (e.g. bikes, carts, scooters). Like the back garden, children's photographs portray the front garden as a place to engage in play activities, mainly with siblings and pets, and also somewhere to perform and practise physical skills and sports-based play, such as playing soccer, shooting basketball hoops and riding bikes. In Figure 5.3, Jack (9 years) is playing soccer with his

Figure 5.3. "It's fun to play out front"

younger brother in the front garden. The image depicts the low wall that demarcates the space, with the boys remaining physically near to the home and within close

supervision of parents while playing. According to Jack: "It's fun to play out front because that's where our [soccer] goals are… We do play other things too". The aesthetic and layout of some of the front gardens suggest that the original or primary function is as a car parking area; however, as children progress through childhood they colonise the front of the property for their own purposes. The front garden, like the back garden, evolves during childhood to have multiple functions, becoming a valued space for physical activity play.

5.3.3. Living room

A quarter of the images recorded in the home space depict the living room, or the 'sitting' room as it is commonly referred to in Ireland (girls 27%, boys 20%). Children's photographs of living rooms primarily consisted of toy objects and screen-based activities. Photographs were either of the specific play item itself (e.g. teddy bear, Rubik's cube, book, remote control, tablet/iPad), or of the children themselves participating in the activity, such as playing cards, watching television, playing video games or researching homework on the computer. Arts and crafts, such as drawing, painting or making loom bands, and music related activities, such as playing the piano/organ or guitar were also portrayed, however to a lesser extent. The living room was also somewhere to display medals and trophies for various sporting and educational achievements (e.g. GAA, Irish dance, Scouts). Family members and pets were also commonly depicted in this space. Siblings played alongside one another constructing Lego, playing Jenga, or engaged in various board and video games. Parents completed jigsaws, played cards, and watched television together with children, while pets were photographed sleeping on furniture or interacting in playful ways with the child-participant, or other family members. The living room therefore functions in multiple ways – as a play and games room, an entertainment space, somewhere to display personalised artefacts and material objects, and a place where families and pets coexist.

Children spend a large amount of time in their private home space (Karsten, 2005). It has been reported that most of this time is indoors and sedentary (Biddle et al., 2009; Liao et al., 2014; Loebach & Gilliland, 2016a). Parents also control the arrangement of the home and largely influence how it should be used. For instance, parents control how electronic media are introduced and incorporated into the home

(Willet, 2017). The location of entertainment options and media technology in central home spaces, like the living room, is likely to facilitate parental control and monitoring of children's electronic media.[13] Studies have also identified sedentary entertainment options, such as televisions and computers, as barriers to children's physical activity play (Veitch et al., 2006; Jago et al., 2009; Sebire et al., 2011). While this study did not examine sedentary play activities in depth, it is important to acknowledge the link between location within the home space and children's active and sedentary behaviours. The vast majority of children's photographs portray the living room as having little compatibility with physical activity play. This was also supported in the children's narratives: "I watch Netflix there, pretty much every day" (Ellie, 13 years); "That's my PlayStation … [I play] Grand Theft Auto and stuff like that really, like for a couple of hours every weekend I'd say" (Adrian, 13 years).

5.3.4. Bedroom

There has been a growing body of work exploring the significance of bedrooms for children as they progress through middle childhood and adolescence (Livingstone, 2007; Abbott-Chapman & Robertson, 2009; Lincoln, 2012). The bedroom space offers an escape from parental control and adult supervision (Karsten, 2005), as well as being closely associated with concepts of identity, privacy and the self (Livingstone, 2007; Lincoln, 2012). This was evidenced in children's photographs, where they depicted aspects of their bedrooms in a variety of ways. For instance, posters of children's individual interests lined bedroom walls (e.g. cars, animals, Harry Potter). Several toy objects and artefacts were also shown in much detail. Soft toys, board games (e.g. Monopoly), books and dressing up clothes were photographed by the younger children in the study. Some photographs also depicted siblings and pets, predominantly sitting on beds. The older children portrayed screen-based objects, such as the Kindle, iPad, laptop and television, as well as written homework (e.g. maths, geography). The vast majority of children who produced images of bedrooms had their own bedroom. During interviews this was deemed important to children who considered the space as somewhere for them to "escape" and "relax" (similar findings reported in Abbott-Chapman & Robertson, 2009). The children also mainly referred to using the bedroom for sedentary

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[13] Portable electronic media, which may be used anywhere within the home provides additional challenges for monitoring.

entertainment purposes, such as listening to music, watching movies, reading books or connecting online with friends (via Snapchat).

Figure 5.4. Watching a DVD via laptop

The photographs portraying children's bedrooms represent only 6% of the images recorded in the home space, with girls recording the overwhelming majority of these (girls 8%, boys 2%). There is seasonal variation in when children play in bedroom spaces with most of their photographs recorded during the autumn and winter months. The modest number of photographs portraying children's bedrooms was somewhat unexpected, especially as children, particularly girls, become more interested in their bedrooms during middle childhood (Lincoln, 2012). This finding could be interpreted in a number of ways. Firstly, home environments are rapidly changing with new electronic media technologies such as wireless broadband and interactive video games now integral in developed countries (Maitland et al., 2013). Evidence concludes that electronic media equipment in the bedroom is positively associated with screen-related sedentary behaviour (Pate et al., 2011; Verloigne et al., 2012). Additionally, cyber guidelines recommend that families designate device-free locations in the home, such as bedrooms (Webwise, 2019). For these reasons, children may be increasingly drawn to the areas in the home where (fixed) digital infrastructure and media technologies are commonly available, such as the living room. As Geraldine (13 years) explained: "We do have Wi-Fi, but it's not very good… It doesn't reach my room". Rather, Geraldine engages in activities in her bedroom that do not require wireless broadband, such as reading, or watching DVDs via laptop (Figure 5.4). Further explanation as to the minimal number of images portraying children's bedrooms may reflect the focus of the study, which emphasises physical activity play.

5.4.   The Immediate Neighbourhood

A social and playful engagement and interaction with the built environment emerges as children move from the enclosed and private spaces of the home and back

garden, to the more public spaces within the neighbourhood (Tolland & Barron, 2018). The immediate neighbourhood represents the least recorded play space at 11% (girls 11%, boys 12%). This finding was unexpected given that many studies have long reported that the roads and pathways in the immediate neighbourhood were the most popular locations for play, and that children preferred to play in open view rather than in more hidden areas (e.g. back garden) (Wheway & Millward, 1997; Rasmussen, 2004; Thomson & Philo, 2004; Barclay & Tawil, 2013; Valentine, 2016). The places portrayed in children's photographs of their immediate neighbourhood include nearby fields, communal green areas, roads and pathways, and friends' houses (Table 5.4).

Table 5.4. Girls' and boys' play spaces in the immediate neighbourhood
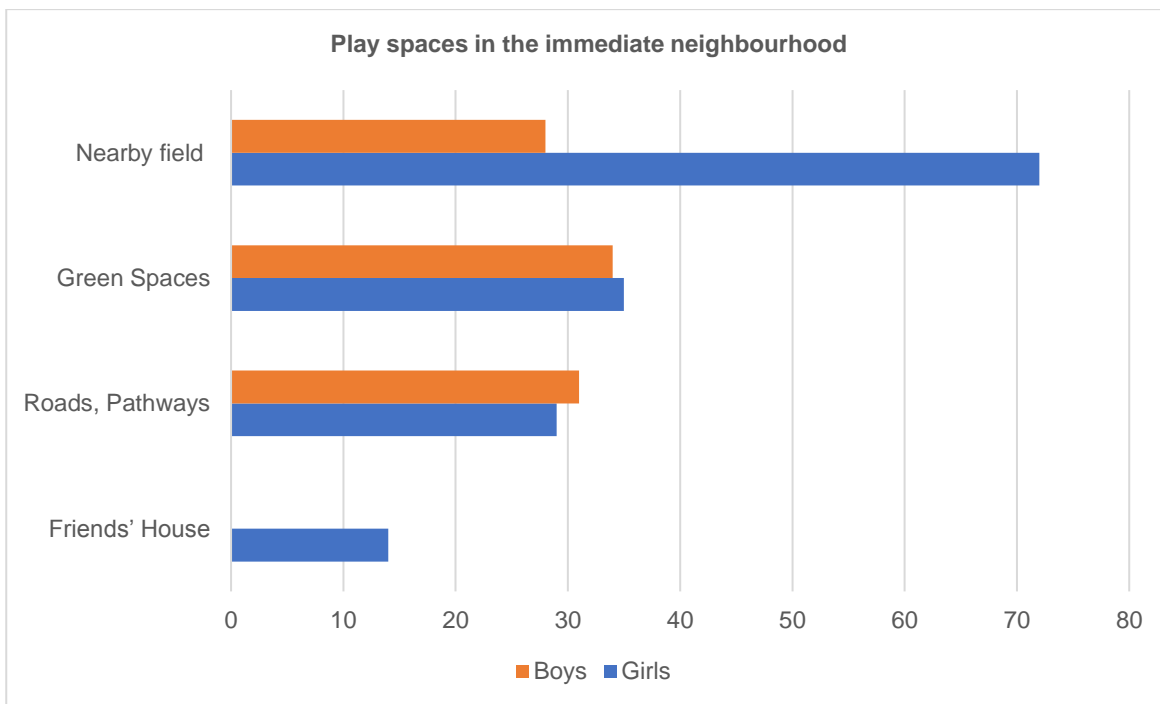
5.4.1. Nearby or neighbouring field

The most popular play space in the immediate neighbourhood was the nearby or neighbouring field (Table 5.4), with 41% of children's photographs in this category recorded here (girls 48%, boys 30%). These figures are heavily skewed by children in rural settings who recorded the overwhelming majority (94%) of photographs portraying this space. This was largely anticipated given that the immediate neighbourhood of a child living in a rural setting differs to that of a child in an urban area, with children in rural settings having fields nearby and more readily available

to them for their play and recreation, compared to their urban counterparts. Young people recorded a higher percentage of images depicting nearby fields, compared to those in primary school (primary school 32%, secondary school 63%), with most images (99%) recorded in the spring and summer months. Pets, such as dogs and cats, and other farm animals, such as sheep, chickens and cows featured

Figure 5.5. "It's really good for exploring"

significantly in children's photographs. Most of the images portray the animal itself (e.g. cow in the field), while others show the child interacting with the animal in some way (e.g. trying to pat and/or take 'selfie' pose with a horse, walking with a dog). Some of the photographs depict farm machinery, such as tractors and chainsaws, while others show the child standing beside hay bales in the field. Many

of the photographs specifically portrayed the field itself, which was clearly situated beyond immediate adult surveillance. Figure 5.5 shows Anna (10 years), and two of her friends (from the same class) walking in a field near the housing development where they all live. For Anna, the field is valued because: "It's really good for exploring around there, like around the trees and the streams that are there". A growing body of literature shows that the natural environment has profound effects on the well-being of children, which I address in further detail toward the end of this discussion. The broader approaches to child well-being values independent mobility for fostering children's spatial, personal and social skills through navigating, interacting and connecting with physical and social environments (Skelton, 2009; Zubrick et al., 2010).

5.4.2. Green and natural neighbourhood spaces

Houses within urban and rural developments in Ireland are commonly arranged around communal green spaces which are the most obvious and central play site for children as they permit passive surveillance by adults. Nevertheless, children (especially girls) found ways to evade surveillance by playing in the extremities of

these places, such as green corridors and overgrown areas. Children recorded 28% of their total images in the immediate neighbourhood portraying the green and natural spaces (girls 23%, boys 37%), with the vast majority of these recorded during the spring and summer months. Socialising activities were a central feature of photographs with many images depicting playmates (i.e. friends, siblings, pets). Boys recorded a greater number of images of themselves in these green spaces engaged in physical activities (e.g. soccer, chasing games, rough and tumble play). Girls, on the other hand, recorded a higher number of images portraying their play and recreation on the fringes of the space (Figure 5.6), or in the hidden and natural nooks and crannies of the immediate neighbourhood (Figure 5.7).

Figure 5.6. The fringes of the green space   *Figure 5.7. Natural nooks and crannies*

These findings echo the many studies, predominantly conducted on school playgrounds, that maintain boys dominate large play areas for games like soccer, while girls are more likely to occupy the peripheries of space (Thorne, 1993; Pellegrini, 2004; Pawlowski et al., 2016). The findings also acknowledge that hidden places offering some degree of privacy are important for play. As proclaimed by Titman (1994), children seek 'to have a private persona in a public place, for privacy, for being alone and with friends, for being quiet in noise, for being a child' (Titman (1994, p.58).

5.4.3. Street play. Roads and pathways

Residential streets have been problematised as a 'dangerous' place for children, with fewer children using the streets for play than a few decades ago (Living Streets, 2009; Allin, West & Curry, 2014). Perhaps it is for this reason that 'street play' has

received little attention in the literature, at least in comparison with other spaces where children play, such as school playgrounds. Nevertheless, multiple studies have reported on the significance of streets for children's play (Veitch, Salmon & Ball, 2007; Biddulph, 2011; Barclay & Tawil, 2013). Tranter (2016) argues that residential streets have the potential to be more important for children's well-being than the special purpose spaces adults have designed for children's play. Children recorded 25% of their total images in the immediate neighbourhood portraying their play activities on roads and pathways (girls 19%, boys 33%), with a higher percentage of images recorded by children (primary school-age 31%, secondary school-age 9%). This finding is consistent with that of Biddulph (2011) who reported that young people did not hang around and socialise in residential streets, rather they were passing through on their way to other destinations. It also reflects what we already know from previous research conducted in Ireland and elsewhere, that children's independent mobility progressively increases with age, with the transition from primary to secondary school the most significant period in a child's life in terms of gaining increased autonomy (O'Keefe & O'Beirne, 2015; Shaw et al., 2015).

The children's photographs portray either the place itself, such as a tree lined or cul-de-sac street or the specific play activity participated in, such as kicking a ball on the road, playing tennis, walking with friends and/or dog. Children's photographs reveal a multitude of 'street play' activities featuring creative ways of playing. For instance, objects in the streetscape lend themselves to appropriation including a wall for tennis, a metal electricity box repurposed as home base in chasing games, trees for hiding behind and climbing, and cars/vans used for concealing in hide-and-seek games. Wheel-based objects account for just over one-third of children's images recorded on roads and pathways in the immediate neighbourhood. Boys

Figure 5.8. Riding a bike

and girls portrayed themselves in public displays of skateboarding, riding bikes (Figure 5.8), carts and scooters, or practising rollerblading. The images reveal a wide range of physical activity play, some of which are generally easier when performed on hard surfaces like roads and pathways. Overall, roads and

pathways of the immediate neighbourhood were most valued for harder surfaces (similar findings reported in Biddulph, 2011) and for socialising with other children, or as Eabha (8 years) commented: "I play there because that's where all my friends that live near me are playing".

5.5. The Local Community

The local community incorporates the photographs children recorded outside of their immediate neighbourhood and portrays a variety of places including sports grounds and facilities, school settings, local playgrounds, public parks and gardens, forestry areas, waterways, local shops and cafés (Table 5.5). The local community represents the largest category in both urban and rural settings with 36% of children's total photographs recorded here (girls 28%, boys 50%) (urban 46%, rural 31%). Young people recorded over one-third of their total images portraying places in the local community (girls 37%, boys 40%). This finding was anticipated due to the increasing levels of autonomy and independent mobility of this age group. As might be expected, children in urban areas (especially girls) recorded more images in a variety of places in the local community, in comparison to their rural counterparts, who predominantly recorded images of sports grounds.

Table 5.5. Girls' and boys' play spaces in the local community

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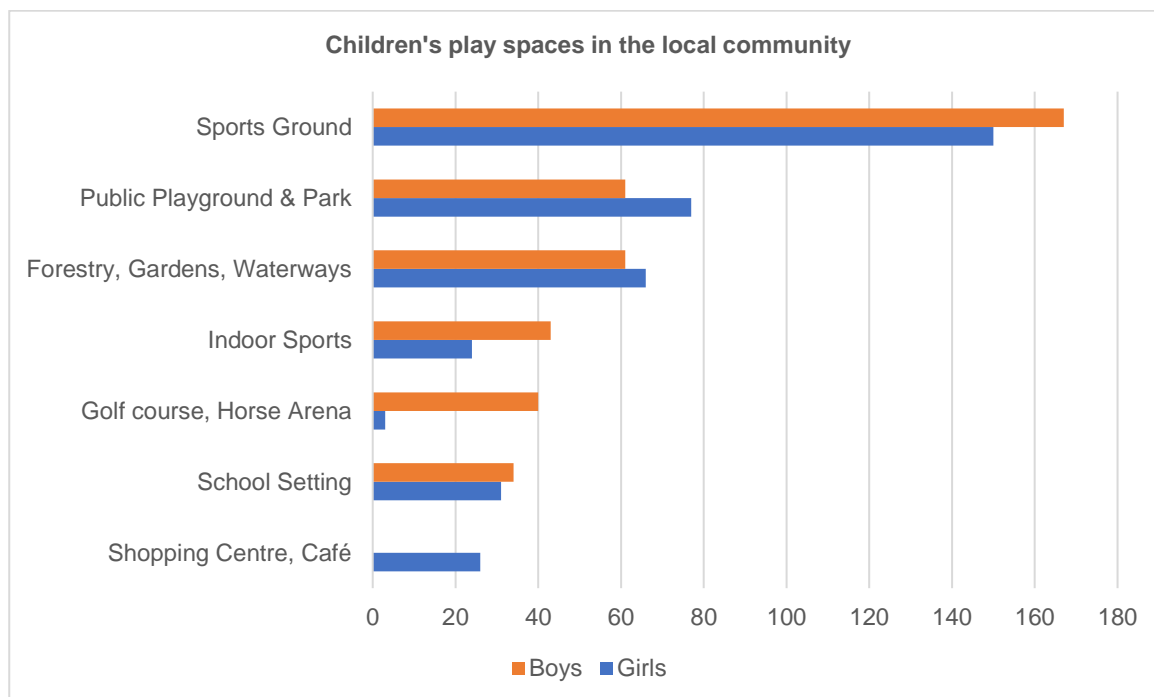
5.5.1. Sports ground

A total of 40% of children's photographs recorded in the local community depict the sports ground (girls 40%, boys 41%), most of which were taken in the autumn and winter when specific sports are played. This is not overly surprising given the cultural significance of organised sporting activities in Ireland, with 54,163 children and young people surveyed in a national consultation identifying sport as the second-best thing about living in Ireland (Coyne, Dempsey & Comiskey, 2012). The photographs show the sports ground itself and close up shots of sports equipment in the space, such as goals, balls, hockey sticks and rugby boots. Children portrayed themselves participating in either a team training session, an official game, or as spectators of sport. The various sporting activities depicted in children's photographs include Gaelic football, rugby union, soccer, hockey and badminton. Overall, this was the second most popular place recorded in the research with 15% (n = 317) of children's total images showing the sports ground (girls 11%, boys 21%).

An increase in children's time spent in structured activities may explain the large number of images of sports grounds. For instance, more primary school children in Ireland are now taking part in sport in a school or community setting than in 2010 (Woods et al., 2018). This is also reflected in the higher percentage of images depicting sports grounds recorded by children (primary school-age 43%, secondary school-age 32%). However, elicitation interviews reveal that these children were commonly accompanied by adults to various destinations within the local community including sports grounds. Notably, girls in secondary school recorded a much lower percentage of photographs in the local community depicting sports grounds, compared to boys of the same age group (girls 14%, boys 47%). One interpretation of this finding may be the decline in participation in physical activity among secondary school-age girls (Woods et al., 2010, 2018).

Figure 5.9. Comradery in team-based sports

A significant feature of children's photographs of sports grounds is the presence of other children. The photographs clearly convey the social context and comradery of team-based sports with children posing with team mates, receiving medals and certificates alongside teammates, huddled together in a team talk (Figure 5.9), or supporting a team from the sidelines. Referring to soccer, Sean (11 years) commented:

> *I like playing in a team, but I like mucking around too. It's good to have both, cause sometimes when your friends aren't there [neighbourhood] and then you're like: 'I can't wait to go to training cause then all your other friends will be there'.* (Photo elicitation interview: Killamany Primary School, June 12, 2014).

This is consistent with what has been reported in the literature with friendship and having fun through social interaction cited as the primary reasons for participation in sporting activities (Yungblut, Schinke & McGannon, 2012; Tannehill et al., 2015). While the social aspects of sports participation are reinforced through friendship and peer interaction, some are also cognisant of the associated health benefits, especially as they progress through middle childhood and adolescence, as explained by Rachel (14 years):

> *I play hockey mainly to be with my friends. We have a laugh and enjoy ourselves. My mood is better. I sleep better. And I have a fear of getting fat if I stop playing.* (Photo elicitation interview: Killamany Secondary School, February 26, 2014).

5.5.2. Public playground

In Ireland there has been substantial progress over the past 15 years in regenerating and developing public playground provision, which was a result of the National Play Policy (NCO, 2004) and its associated action plan. Overall, 16% of photographs recorded in the local community depict public playgrounds (girls 18%, boys 15%).

All of the images have been recorded by children in urban areas.[14] This was unexpected and differs from my fieldwork and walking interview data where children in rural areas frequently make use of the contemporary and well-equipped local playground located very near to the school sites. The finding also contrasts with the interviews where the public playground was described as a popular after school activity. As Lauren (10 years) explained:

> *Mum collects us and we go to the playground most days after school, except for like when it's raining bad. We like the new basketball area that's there and climbing in the nets best.* (Photo elicitation interview: Ballyway Primary School, March 13, 2015).

While Lauren lived within walking distance of the school and the public playground, most of the other children involved in the child-based photography lived further away, often catching a bus on completion of the school day. This may have contributed to the zero images of the local public playground from children in rural areas.

Figure 5.10. Play equipment used in unintended ways

The children's photographs either focus on the specific play equipment in playground spaces or show the children and their siblings (and occasionally parents) posing or utilising the equipment in some way, such as swings, slides, tunnels, spinning tops, climbing and balancing structures. The photographs also depict the children using the play equipment in unintended or riskier ways such as standing on swing seats (Figure 5.10), standing/balancing on see-saws, climbing over the top of high tunnel slide structures and children doubled up on flying fox/cableway play equipment. Children also displayed themselves using various playground markings, such as hopscotch. Most of the photographs of local public playgrounds were

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[14] Children in rural settings recorded an almost equal number of photographs of playgrounds while day-tripping or holidaying and have been included in the recreational sites (outside of local community) category.

recorded in the autumn and winter months. This is significant because the cooler months are when family members (parents, siblings, cousins) emerge as prominent in children's physical activity play, when the daylight hours are less conducive to play outdoors with friends in the immediate neighbourhood.

Photographs of local public playgrounds have only been recorded by children, with no child over 11 years recording images of this space. These children did not go to the playground independently and were always accompanied by an adult. This restricted mobility is connected to the changing role of contemporary parents, and to the associated social trends and cultural expectations of a child of this age group not being seen in the community or the playground alone. This finding was not surprising considering a recent international study ranked children's mobility in Ireland 12th lowest out of 16 countries (Shaw et al., 2015), as already mentioned in the literature review. The study found low levels of independent mobility (without adult supervision) common across all ages (7 – 15 years), but this was especially true for children under 11 years. This finding also signals a clear transition in play spaces from childhood to adolescence. The barriers to older children using public playgrounds are well known as they are often overlooked in typical playground design and infrastructure (Jansson, 2008; Coyne, Dempsey & Comiskey, 2012; Chaudhury et al., 2019). Older children and young people have also reported feeling unwelcome or under adult scrutiny in spaces typically perceived as no longer suitable for them (Rogers & Coaffee, 2005; Wood, Martin & Carter, 2010). In this study, young people also referred to 'time', or lack thereof, when discussing why they no longer used playground spaces, as explained by Eimear (13 years):

> *I used to go to the playground at the weekends sometimes, with my little sister if I have time, but I don't really have the time right now because I'm really too busy with my [Irish] dancing and homework, and I have exams in a few weeks.* (Photo elicitation interview: Killamany Secondary School, April 24, 2015).

5.6.   Recreational Sites Outside the Community

The recreational sites category includes images children recorded outside of the immediate neighbourhoods, and also outside of the local community, while day-tripping or vacationing with family and/or friends. Children's photographs depict

campsites in natural settings, mobile homes near the beach, hotels in the towns of nearby counties, as well as the playgrounds on-site of these places. The photographs show children hill walking/trekking, climbing and swinging from trees, walking the grounds and fairy trails of stately houses, and engaged in activities at the beach and inland waterways (e.g. collecting shells, building sandcastles, wading in the water, paddle boating, water zorbing). Children's physical activity play was photographed in much detail predominantly at mobile home sites, such as swing ball, chasing games, riding bikes and scooters, walking/running with the dog and water balloon fights with friends. Children recorded 20% of their total images at recreational sites outside of the local community (girls 25%, boys 11%) with most produced in the spring and summer months (65%), when the daylight hours are longer, warmer and more favourable to family-style outings of this nature (Table 5.6).

Table 5.6. Girls' and boys' play spaces in recreational sites outside of the local community

	Girls			Boys				
Play Space	**A/W**	**S/S**	**%**	**A/W**	**S/S**	**%**	**Total**	**%**
Waterways	0	12	**2**	0	2	**2**	**14**	**2**
Towns	0	14	**4**	0	14	**16**	**28**	**7**
Hotel Room	0	0	**0**	0	29	**34**	**29**	**7**
Campsite	0	0	**0**	0	39	**46**	**39**	**9**
Beach	0	41	**12**	0	0	**0**	**41**	**10**
Adventure Centre	0	53	**16**	0	1	**1**	**54**	**13**
Mobile Home	79	20	**29**	0	0	**0**	**99**	**23**
Playground on-site	72	50	**36**	0	0	**0**	**122**	**29**
	151	**190**	**100**	**0**	**85**	**100**	**426**	**100**

A/W (Autumn & Winter). S/S (Spring & Summer)

Ireland is a small island country with impressive natural scenery and a blend of ancient and modern attractions, including many that are easily and affordably accessed from both fieldwork settings. Nevertheless, it was children in rural settings who recorded the overwhelming majority (98%) of photographs in this category. One possible inference is that children who live in rural settings have less access to a

diversity of activities and locations that they feel warrant a photograph in their immediate surroundings. This also accords with an earlier finding, which showed that children in rural settings did not photograph the public playgrounds situated near school sites (local community), as they may not have had free access to them. Rather, parents constructed play and recreational opportunities for children (via car transport) on a regular basis, and these were the ones they chose to represent. Children in urban settings, on the other hand, may have had more mobility and a greater choice of what to represent within their own environments.

5.6.1. Playground on-site

It is common to find a playground or play equipment on-site in tourist and holiday destinations. A total of 29% of children's images in this category portray activities in such playgrounds. All of the photographs portraying playgrounds on-site have been recorded by girls of primary school-age (girls 36%, boys 0%) (Table 5.6). This supports earlier findings with no child over 11 years recording images of playgrounds, and further highlights the transition in children's play spaces as they move from middle childhood to adolescence. The girls' photographs typically portray themselves, or with friends and siblings, utilising a range of play equipment, such as monkey bars, tunnels, baskets and traditional swings, slides, various climbing structures and flying foxes. The girls described the playgrounds on-site in tourist or holiday destinations in terms of the physical activity that they could do there, such as "swing", "climb", "jump", "run", "fly", "hide" and "get dizzy". Some playgrounds on-site in tourist or holiday destinations differed from those found in local communities. Figure 5.11 shows a sand-filled nautical themed playground situated near to the water and consisting of natural looking wooden structures. Eabha (9 years) valued this playground on-site at a mobile home

Figure 5.11. "Interesting and fun … and a place to meet other kids"

and caravan park because it was "interesting and fun … and a place to meet other kids". Research has long shown that playgrounds are important social spaces for

children (Moore, 1986; Karsten, 2003). It has also been reported that children's use of playgrounds is linked to the appearance of the entire outdoor play environment (Jansson, 2008). For the children in this study, the playground was valued for what was available there – varied equipment for physical activity play, the quality of the setting, and for the social aspects of visiting the playground.

5.7. Children's Play and the Natural Environment

A common feature in children's photographs was the depiction of the natural environment. Across the four dominant play spaces examined, children recorded 43% of total outdoor images portraying elements of the natural environment (girls 43%, boys 42%) – in developed outdoor spaces (e.g. back gardens, public playgrounds/parks, sports grounds) and in natural settings (e.g. forests/woodlands, fields, beaches, waterways). For an image to be included there had to be a deliberate intent to capture the natural elements of the environment within the photograph.

Scholars have long been intrigued about the significance of nature for children, with extensive research indicating that children have a 'strong and deep-rooted sensitivity to the natural world' (Lester & Maudsley, 2007, p.xi). There is also evidence regarding the importance of natural environments for facilitating physical activity play in children and young people, which is essential to their health, well-being and development (Bird, 2007; Bowler et al., 2010; Gill, 2014). Children's contact with nature was significant with images of trees, flowers, shrubs, gardens, forest areas, rainbows, waterways, insects and other animals photographed in much detail. This finding reflects previous research in Ireland, with (rural) children's vivid descriptions of natural spaces and animals, establishing that nature was integrated into their everyday lives (Kilkelly et al., 2016). The natural environment represented a place where children could use their imagination, explore and manipulate their environments, experience fun and adventure, and discover new things.

The photographs portrayed children engaged in a range of physical activity play, such as climbing/swinging in trees, digging the soil, play fighting with sticks, utilising natural dens/hideouts in shrubs, jumping from rock to rock over waterways, walking/running with the dog, playing on/around hay bales and searching for insects

and fairies. These forms of physical activity play were represented in photographs as solitary child-centred activities (e.g. exploring a woodland close to home, climbing a tree) or as social activities (e.g. hill walking with friends, walking with family in public green spaces).

There was a larger percentage of images depicting the natural environment during the warmer months of the year (spring/summer 54%, autumn/winter 24%). This finding further highlights that the weather in Ireland can and does impact children's play and recreation, and how they relate to the environment. Children in urban areas also produced a much higher percentage of photographs in these spaces compared to their rural counterparts (urban 68%, rural 38%). This finding was unexpected as urban and rural Ireland are noticeably different spaces. Nevertheless, the photographs clearly illustrate that children in urban areas had access to a range of natural spaces, some with varying degrees of human design (e.g. gardens, communal green areas, public playgrounds, recreational parks, nearby waterways).

Young people recorded a much higher percentage of images depicting their play and recreation in the natural environment (primary school 38%, secondary school 68%). This finding is interesting as there is increasing evidence that the adolescent stage of development results in a completely different relationship with the natural environment. Several studies have found young people, compared to younger children, show a lower preference for natural settings and greater preference for certain types of developed areas (Lyons, 1983; Kaplan & Kaplan, 2002). It is also possible that young people framed or composed images with greater intent to capture the natural world (Sharples et al., 2003). Additionally, young people are more independently mobile compared to their younger counterparts, moving more freely to places in the natural environment they wanted to portray.

The tree is an example of a 'children's place', that is, a special place that some children deem important (Rasmussen, 2004). Trees were also significant for the children and young people in this study, who used them in a variety of ways (e.g. to climb, to meet, to hug, to hide, to observe, to demonstrate strength and physical ability). Jessica (14 years), while climbing a tree in her garden at home (Figure 5.12) explains:

Jessica: I don't exactly know how high it is really. I'm like I'd say about 10 metres up in that photo. That's the best tree to climb. There's like a branch I sit on and sometimes I just like go on my phone and like read a book or something.

Researcher: You read a book on that little branch?

Jessica: Yeah (laughing). It really is a good place to escape to.
(Photo elicitation interview: Killamany Secondary School, April 17, 2015).

Figure 5.12. "The best tree … a good place to escape to.

This iconic childhood pursuit of tree climbing and the desire for risk and challenging play settings has a significant role in facilitating development and well-being (Pellegrini, 2003; Barron, 2011). For Jessica, the tree is also associated with retreat and escapism.

The use of technology (i.e. smart/mobile phone) in the natural environment is also noteworthy as we see young people balancing the role of technology in their lives with (at least) some of the benefits of outdoor play. This may not be what is understood as true physical activity play, but rather a shifting version of it in an ever-changing world, adding to the complexity and notoriously difficult discourse surrounding definitions of children's play more generally (Tolland & Barron, 2018).

Figure 5.13. Hugging favourite tree

There has been growing concern among researchers that the child-nature connection is under serious threat (Gill, 2007b; Louv, 2008). In its broadest sense, 'connection to nature' describes the mix of feelings and attitudes that people have towards nature, such as 'loving nature' or having a 'sense of awe and wonder' or simply 'caring for the

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environment' (Chen-Hsuan Cheng & Monroe, 2012). The connection to the natural environment is described succinctly by Ciara (13 years) and Ellie (13 years) (Figure 5.13):

> *Ciara: That's just us giving the tree a hug.*
> *Ellie: We wanted to show you how much we love those trees.*
> *Ciara: Yeah, but that one's definitely my favourite.* (Photo elicitation interview: Killamany Secondary School, April 24, 2015).

Figure 5.13 was recorded on the school grounds, revealing that children find ways of being, and ways of playing, with elements of the natural environment in their everyday spaces. Overall, the findings in this study indicate that children have a deep connection with nature. There is also evidence supporting the view that the context of this connection may be changing in Ireland – from the wild areas enjoyed by previous generations, to the outdoor spaces closer to home and within neighbourhoods (Fanning, 2010).

5.8. Results of Walking Interviews

The individual child-directed walking interviews generated data in the form of interview transcripts, photographs taken by children during the walk using a digital camera, GPS maps and field notes. Braun & Clarke's (2006) thematic analysis was used to identify and analyse the patterns in the interview data. The interpretation of the data revealed that children's personal experiences within specific sites are unique, yet there are similarities in how children utilise these places.

The two dominant themes to emerge from the analysis of the data are: (1) Children's independent and interdependent spatial mobility (sub-themes: parental permissions and restrictions; and, accompanied mobility: companions and devices); (2) Children's encounters and experiences with people and places (sub-themes: playmates and play spaces close to home; looking outward: the built environment and natural spaces; place feelings and emotions). The final thematic map is presented below (Figure 5.14). Five child-directed walking interviews were conducted (3 girls, 2 boys). Three children were in primary school and two were in secondary school. The children were aged between 11 and 13 years old (M = 11.80). The findings therefore represent children in middle childhood and early

adolescence. The walking interviews took place during the spring and summer months (see Appendix V for demographic breakdown and results).

Figure 5.14. Final Thematic Map

```
┌─────────────────────┐        ┌─────────────────────┐
│ Children's independent │        │ Children's encounters │
│ and interdependent   │        │ and experiences with │
│ spatial mobility     │        │ people and places    │
└──────────┬──────────┘        └──────────┬──────────┘
           │                               │
    ┌──────┴───────┐               ┌───────┴──────┐
    │  Parental    │               │ Playmates and │
    │ permissions and│             │ play spaces close│
    │ restrictions │               │   to home    │
    └──────────────┘               └──────────────┘
           │                               │
    ┌──────┴───────┐               ┌───────┴──────┐
    │ Accompanied  │               │ Looking outward:│
    │ mobility:    │               │  the built    │
    │ companions and│              │ environment and│
    │ devices      │               │ natural spaces │
    └──────────────┘               └──────────────┘
                                           │
                                   ┌───────┴──────┐
                                   │ Place feelings and│
                                   │  emotions    │
                                   └──────────────┘
```
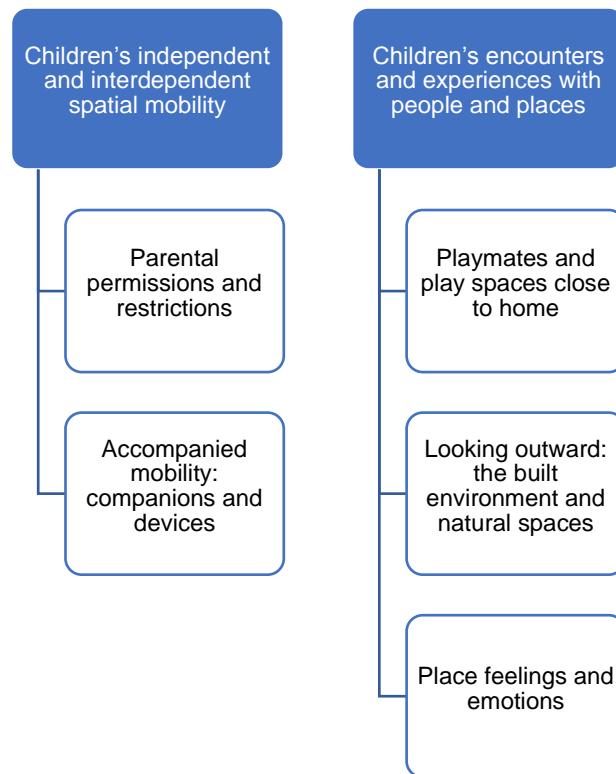
5.9. Children's Independent and Interdependent Spatial Mobility

Theme one presents children's perspectives on their independent and interdependent spatial mobility. As defined in the literature review, independent mobility is the freedom of children to travel or move about neighbourhoods without adult supervision (Shaw et al., 2013). To understand the determinants of children's physical activity play it is important to consider both play activities and unsupervised travel to play space (Oliver et al., 2011). In this study, children played an active role in negotiating with parents on issues surrounding their everyday mobility. This dominant theme is therefore considered alongside some of the interdependencies that children's spatial mobility involves. The sub-themes include parental permissions and restrictions, and accompanied mobility, which involves, for example, the presence of peers and siblings, and children carrying smart/mobile phone devices while away from home. Children had a deep understanding and

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awareness of the places in their neighbourhood where they were permitted or restricted, and the facilitators that their everyday independent mobility required.

5.9.1. Parental permissions and restrictions

There is a complex interplay of factors shaping children's everyday spatial mobility. Parental attitudes and fears, and age of child have become the main influences restricting children's mobility and play in outdoor environments independently (Shaw et al., 2015). During the walking interviews one of the most commonly reported factors influencing where children played was parental permissions and restrictions. In general, permission to travel independently within the neighbourhood was evidenced only when play and recreation sites were located a close distance to home and were easily accessible by foot or bike. For example, Eoin (11 years) did not have permission to walk or cycle home from his local GAA sports ground due to it being "too far away". Figure 5.15 shows the distance from the sports club to Eoin's home as 4.35 kilometres. He was however allowed to move within his own, and nearby housing estates, including the local shop, independent of adult supervision.

All children clearly identified where they were and were not "allowed to go", or where they "shouldn't really go". Figures 5.15 – 5.19 show individual walking routes using GPS data and indicators to show where each interview commenced and concluded. Distance markers, which are numbered on each map and represent one kilometre, are used to illustrate children's spatial ranges in regard to their independent mobility. Children's favourite places to play and Main Street have also been highlighted and will be referred to in theme two.

Figure 5.15. Eoin (11 years, urban): 4.35 kilometres

Figure 5.16. Susan (13 years, urban): 4.3 kilometres

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Figure 5.17. John (11 years, urban): 2.54 kilometres

Figure 5.18. Lorna (13 years, rural): 4.18 kilometres

Figure 5.19. Orla (11 years, rural): 3.4 kilometres
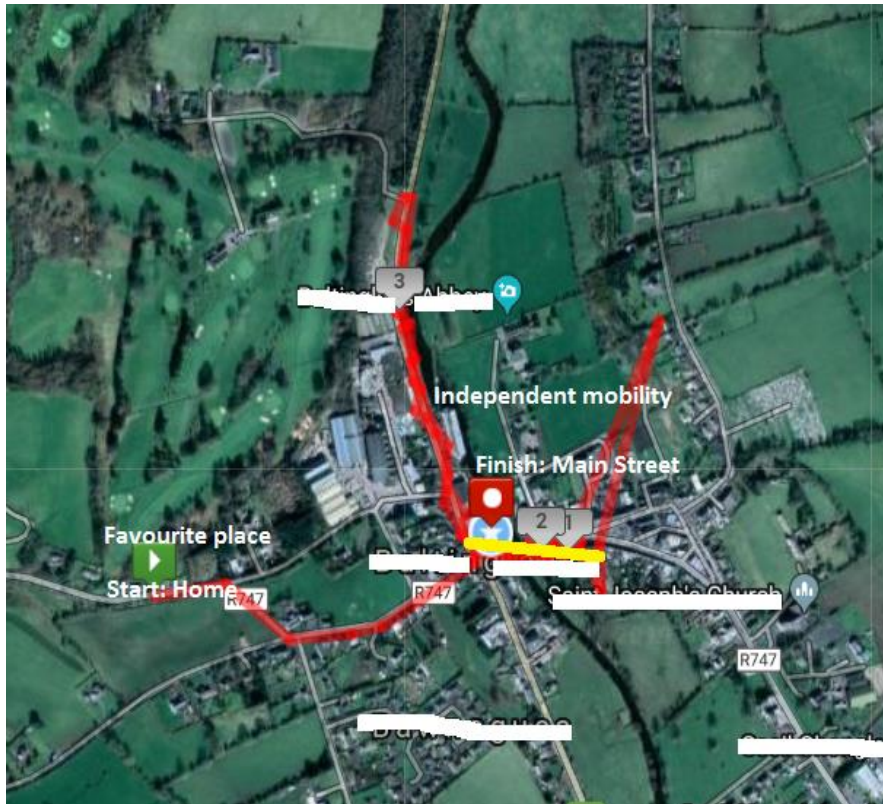
* Figures 5.15 – 5.19 show individual walking routes using GPS data.

* Distance markers are numbered on each map and represent 1 kilometre.

* ▶ indicates the start of the walking interview.

* ◻ indicates the conclusion of the walking interview.

* ▬ indicates Main Street.

The geographical distance (or spatial ranges) children could travel independently from home to specific places in their neighbourhoods was pinpointed by combining GPS data with interview transcripts. The children in the study generally had parental permission to roam independently within a range of 200 to 3,000 metres from their home. The spatial range in which children were permitted by their parents was repeatedly referred to during the walking interviews, as John (11 years) commented:

> *Usually when I ride my bike, I go to the top of the road there and down to the end of the road numerous times. Sometimes when I'm allowed, I cycle down to the park. If I'm allowed.* (Walking interview: Killamany, July 8, 2014).

The audio transcripts show John placing intentional emphasis on the words "*If I'm allowed*", with the exact phrasing used on four separate occasions throughout the 36-minute walking interview. "*If I'm allowed*" certainly alludes to the fact that, on occasion, John may be permitted to travel the extended distance to the park. John plays an active role in seeking opportunities to expand his spatial range, and to travel beyond the "end of the road", or in John's words: "I just ask my mum and see".

Children also had a strong awareness that parental permissions increased with children's chronological age, often coinciding with the transition from primary to secondary school, and from middle childhood to adolescence. John (11 years) recognised that when he becomes a "teenager" parental restriction surrounding his spatial mobility will be relaxed, enabling him to enjoy the freedoms his older brother has: "My older brother goes out a lot now that he is a teenager. I'd like to ride my bike up the town, but I'm not allowed. Only my brother can go". Similarly, Orla (11 years) understood that her parents will grant her greater independence when she commences secondary school, without having to be accompanied by an older sibling: "I wouldn't really be allowed to go that far by myself yet, but perhaps next year I will".

The children involved in the walking interviews lived within a close distance of schools and town centres however they were not always permitted to travel to these destinations independently. Children cited their age and road traffic as the primary reasons for their low level of independent mobility. The children in urban areas were

more likely to express these concerns, even though there was less developed infrastructure in rural areas for safe walking and cycling. Susan (13 years) acknowledged her parents' fears surrounding child abduction and strangers, which may be partly attributed to the disappearance of a local girl 20 years prior. Her parents used the disappearance to warn of potentially dangerous people or situations that may arise while out and about in the neighbourhood: "My mum knew that girl and wants me to be careful". A series of high-profile unsolved disappearances of young women in Ireland in the mid to late 1990s incite a cultural fear that surrounds child abduction and 'stranger danger' more generally, partially with speculation that they may be linked (see Bailey, 2014, pp.205-235). Public anxiety surrounding such events are heightened by widespread and enduring media coverage on the topic, which may in turn influence Irish parenting practices that restrict children's independent mobility, and therefore opportunities for physical activity play.

5.9.2. Accompanied mobility: companions and devices

The concept of independent mobility encompasses both solitary travel and travel accompanied by other children (e.g. siblings, friends) (Mikkelsen & Christensen, 2009; Shaw et al., 2013). Eoin (11 years), referring to the days of the week he attends both Gaelic football and soccer training consecutively:

> *Researcher: So, you don't really walk around here by yourself then?*
>
> *Eoin: I walk with my Dad… No, well sometimes there's training at [GAA sports ground] and then it's on again in Killamany town [for soccer]. So, sometimes I walk across on my own.*
>
> *Researcher: Oh, so you do walk it alone?*
>
> *Eoin: Yeah, but with my friend too.* (Walking interview: Killamany, July 8, 2014).

In response to the question as to whether Eoin travelled by himself in the specific area in which we were walking, Eoin immediately replied: "I walk with my Dad". He then takes a short pause and corrects himself [line two]: "sometimes I walk across on my own". It is interesting that Eoin understands "on my own" to mean without a parent, "but with my friend". This statement specifically draws attention to the Eoin's

increasing mobility, which is shifting to allow some independence when accompanied by friends.

Children who were mobile, without being supervised by an adult, were regularly accompanied by siblings and/or peers. Referring to a privately-owned field near the river where children spent time after school (Figure 5.20), Orla (11 years) commented:

> *My friends don't go there. I don't think their parents let them or think it's safe… But I'm allowed because I'm with my [older] sister and her friends, and they like to hang out there.* (Walking interview: Ballyway, June 26, 2015).

Figure 5.20. "A good place to hang out"

Orla maintained that she experienced greater freedom than other children of the same age. It is clear however that Orla lacked autonomy in determining her own mobility patterns and the places visited. For Orla, the chance to roam freely and access play spaces close to home was minimal as mobility was largely possible only when accompanied by an older sibling. Children also used the presence of friends to negotiate greater independent mobility with parents. For instance, John (11 years) shared the strategy he employed to gain permission to travel to the park to play: "If I say my friend will be there, I might be allowed to go there". Friends therefore not only provide companionship in physical activity via mobility, but also play an important role in parent-child negotiations in terms of reassurance and a sense of safety (Mikkelsen & Christensen, 2009; Nansen, et al., 2015).

Children did not only rely on friends and siblings in supporting their spatial mobility. The girls involved in the walking interviews referred to using their smart/mobile phone devices, as an aid in developing greater independent mobility.[15] Orla (11

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[15] The two boys involved in the walking interviews (both 11 years) referred to using mobile phones in their homes however they rarely carried the device to school.

years) spoke about recently receiving and carrying a smartphone with her to school. She attended Gaelic football after school twice a week and this was located on the main road approximately two kilometres from the school site. Orla walked with a group of children who attended the same Gaelic football; however, she was also required to send a text message to her parents on arrival at the GAA sports ground. The newly acquired mobile phone and associated responsibility meant Orla could also instruct her parents, via text message, the location she would like to be collected from after Gaelic football: "I can go to my friend's house after training and Dad can get me from there". The mobile phone therefore provided Orla the freedom to start making choices concerning her everyday mobility, and also her play and recreation.

The mobile phone was central in communicating new arrangements with parents should the opportunity arise. Susan (13 years) preferred to go "up the town" with friends after school: "I am supposed to go straight home, but I don't always. But I would let my mum know [via text]… As long as she knows where I am". The smartphone not only facilitated Susan in making her own decisions regarding her mobility but is also largely enmeshed with her social relationships. On the other hand, owning and carrying a mobile phone also ensured Susan's mother could exercise parental power at any time: "If she wants me home, she calls me". Mobile phones have been viewed as a form of surveillance technology (Fotel & Thomsen, 2004) and an 'invasion' of children's space (Williams & Williams, 2005). Other studies however acknowledge that children gain a degree of empowerment and autonomy from carrying a mobile phone (Brockman, Jago & Fox, 2011; Nansen et al., 2017). In this study, the children and young people did not view carrying a mobile phone in antagonistic terms. Rather, they valued being able to keep in contact with parents and negotiate with them in ways that support their developing mobility.

5.10. Children's Encounters and Experiences with People and Places

Studies show that children mostly value places where they can play, meet and spend time with friends (Cele, 2006; Hayward, 2012; Blundell, 2016). This theme therefore highlights the social aspects of play, which are closely intertwined with children's place-based experiences. Children's favourite places to play, on their own or with friends, and prominent peer gathering areas in the neighbourhood are

identified. The sub-themes include: (1) playmates and play spaces close to home; (2) looking outward: the built environment and natural spaces; (3) place feelings and emotions. This dominant theme is strongly linked to the data and reveals rich insights from the children, as they walk through, and talk about, the various spaces and places in their neighbourhoods.

5.10.1. Playmates and play spaces close to home

The presence of other children is an important determinant in a child's decision to engage in play and recreation activities outdoors (Veitch et al., 2006; Brockman, Jago & Fox, 2011). The current study found that the presence of a neighbourhood playmate may be more important than the actual physical play space, with children choosing to stay indoors if a friend was not available for outdoor activities, as Eoin (11 years) explained:

> *I go and call to some of my friends and then, like, cycle around with them on our bikes or go-karts or something. But sometimes if my friends aren't there I just stay in and play on the PlayStation or something like that.* (Walking interview: Killamany, July 8, 2014).

Figure 5.21. "We meet here and play"
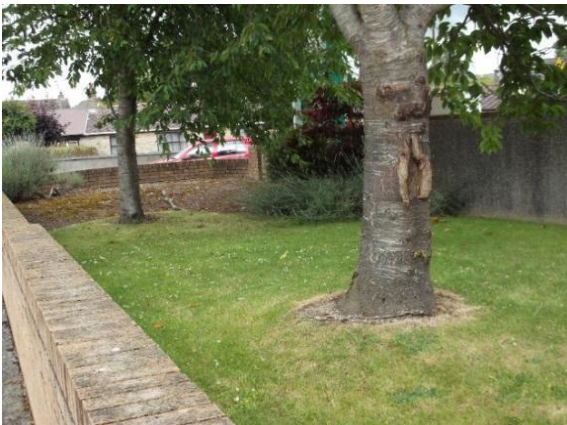
John (11 years), referring to the small green space located on the cul-de-sac street where he lives (Figure 5.21) remarked: "If my friend comes, we meet here and play, or sit down and talk. If he doesn't come, then it would be boring". While the small inner grass section and the surrounding brick area seen in Figure 5.21 provides a convenient place to meet and play, John also acknowledged that this particular place would be "boring" without the company of his friend. This finding is consistent with other studies that have examined both social and environmental characteristics of neighbourhoods and found that social factors were of greater significance for physical activity play outdoors (Aarts et al., 2010; Bringolf-Isler et al., 2010; Page et al., 2010; Veitch, Salmon & Ball, 2010; Kercood et al., 2015). The forms of physical activity play children engage in are also strongly influenced by the presence of

friends. John (11 years) conceded that he is "not that good at soccer", however he played often because, "my friends that live on the same street as me, always want to play". These examples draw attention to the significance of socialising and friendship for preventing boredom, and for facilitating children's play and recreation in outdoor neighbourhood spaces.

Children shared their reasons for valuing specific play sites, and for regarding some as favourite places. These were usually the spaces close to home where they could play, meet and spend time with friends. Eoin's (11 years) favourite place to play was the communal green space in his housing estate (Figure 5.22):

> *There's an awful lot of kids … There used to be goals there and kids from other estates would come and play. And then like every summer we do like have water fights ... We have a lot of fun in this estate.* (Walking interview: Killamany, July 8, 2014).

Figure 5.22. "We have a lot of fun in this estate"

Competitive games of soccer and traditional games of Rounders, British Bulldog and Tip the Can are played on the communal green (Figure 5.22) because they work well with a mix of age groups, genders and abilities. Age and gender mixing in children's play encourage a strong sense of social connectedness among children, while also offering opportunities for learning and development, not present in play among those close in age (Gray, 2011b).

Orla (11 years) identified a small field to the rear of her neighbour's property as her favourite place to play: "We play in the trees out back of his [friend] house. That's where we love to go because it's top secret. We're always messing there". Orla has four older siblings and her "top secret" place is somewhere she can retreat from a busy family life. As it is situated on private property, it most certainly is a secret place. Also, Orla did not invite me to visit the place she is referring to at close range. Rather, I was permitted to view it from a distance only. Several studies have noted the significance of unsupervised 'secret places' in facilitating children's play (Moore,

1986; Sobel, 2002; Thomas & Thompson, 2004). Borrowing from phenomenologists, van Manen and Levering (1996), who examined the notion of children's secret places in-depth, it may very well also be a place where childhood 'secrets are shared' (van Manen & Levering, 1996, p.59). Orla's top secret place is somewhere for "messing" – a place where playmates immerse themselves into their own private play worlds, creating their own games to play, and their own rules to play by.

5.10.2. Looking outward: the built environment and natural spaces

As children become more spatially independent, they are more likely to move their activities and preferences away from the play spaces close to home and to look outward – specifically to places in their local neighbourhood and wider built environment. Children have a functional view of the world (Heft, 1998) and perceive play spaces based on how they can or cannot be used. Purpose-built (e.g. playground equipment, soccer pitches, basketball area, park benches, cafés, shopping centre) and natural features (e.g. water, trees to climb, green spaces, fields) were identified by children as valuable for enticing them to visit specific settings.

Children were particularly knowledgeable about the public playgrounds in and around where they live. They referred to specific equipment which they found appealing such as oversized swinging baskets, climbing and balancing structures and flying foxes. Some children however felt that the playground situated closest to where they live was no longer suitable for their play needs:

> *No, I don't use this one. I'm a bit too old for it now. My [younger] brother still likes coming here. I played here when I was younger. I use the one in Maytown a lot, I like that better. And we use the Glenview one… That's good too (Eoin, 11 years).* (Walking interview: Killamany, July 8, 2014).

> *That playground is for like around 5 or 6. Sure, my little brother would go because he's 8 and he's younger (John, 11 years).* (Walking interview: Killamany, July 8, 2014).

These comments provide evidence that the public playgrounds nearest to where Eoin and John live are no longer suitable for them. Eoin relied on car transportation

(and an adult) to access the playgrounds he credited with being "good", which were located eight and ten kilometres from where he lived. John however rarely had the opportunity to visit alternate playgrounds (outside of the local neighbourhood) as neither parent drove a car. A barrier to physical activity play for both boys is the inability to access local public playgrounds suitable for their individual play needs. It can therefore be understood that public playgrounds remain a valuable place for children in middle childhood to visit, however this greatly depends on several aspects including, the availability of challenging and appropriate play equipment. The size of the actual play space is also of importance, or as Orla (11 years) remarked: "Playgrounds should just be bigger for us kids".

Local recreation parks were identified as a favoured place to play. Children mostly visited local parks in the company of friends and family members. The main local recreation park in both Killamany and Ballyway consisted of playing fields, play equipment, pedestrian and cycling routes and watercourses, and were clearly valued for physical activity play and recreational activities.

Purpose-built seating areas were identified as prominent peer gathering places. The long benches and cluster of seating structures seen in Figure 5.23 facilitated fluid and playful social arrangements among mixed age and gender groups. According to Lorna (13 years): "You don't always get a chance to talk to everyone, like the people you want to, when you're at school. So, we can come here sometimes [after school]".

Figure 5.23. "We come here sometimes after school"

Figure 5.24. "This is our place to come"

Along with the numerous social dimensions, children generally focused on the physical characteristics of the local park and the activity that could be performed there. For instance: "There's trees to climb" (Eoin, 11 years); "I like that I can cut through the park on my way home from school" (Lorna, 13 years); "We ride our bikes all through there" (Orla, 11 years); "We meet here because it's close to home" (John, 11 years); "It's nice to walk the dog along the river" (John, 11 years). The positive emotions and psychological benefits of spending time in such places were also acknowledged: "I'm happy there" (John, 11 years); "It's a peaceful place" (Susan, 13 years). Referring to a nature-rich semi-hidden area on the periphery of the park (Figure 5.24), Lorna (13 years) commented:

> *This is one of the places I thought to show you. We like it here because it's quiet and it feels like you're away from everyone. This is our place to come … Here we can just be ourselves.* (Walking interview: Ballyway, March 27, 2015).

Notably, Lorna did not explicitly reference any of the obvious natural aesthetics of the area depicted in Figure 5.24, such as the soft grass for sitting on, the green trees and shrubs providing privacy and shelter, or the relaxing sound of the river flowing gently nearby. Rather, Lorna is concerned with how the place, which is out of the direct sight of adult uses of the park, provided meaningful experiences including spending time with friends. Many studies have recognised the value of children having spaces away from the adult gaze (Spilsbury, 2005; Roe, 2007; Valentine, 2016). Such spaces depart from the Foucault's (1977) panoptic ideal of total and constant visibility that subjugates children to adult surveillance and monitoring. The place depicted in Figure 5.24 provided a "quiet" retreat for Lorna and friends. They also clearly had a strong sense of attachment and ownership toward the place as it was declared "our place to come".

Children's favourite places may change over time however the local recreational park remains a valuable resource for physical, recreational and social activities, as well as supporting children's psychological health and wellness. The findings from the current study have highlighted that favourite places to play are invariably more than just somewhere children enjoyed visiting. More aptly, they are thought of as idealized constructs of places enjoyed, revered and remembered – places which aid in regulating negative feelings and coping with perceived stress, whose emotional

benefits are enjoyed irrespective of the frequency of visits (Korpela & Ylén, 2007). Reflecting on the walk and the route we had taken, John (11 years) declared a green space along the riverbank of the local park his favourite place to play: "Ever since I was little, I loved nature. I just like the nature that's there. There's lots of flowers and animals and things. More nature is more better". It is evident that John had a deep appreciation and affection for nature from earlier childhood experiences.

There is a compelling body of evidence that examines the different ways that contact with nature contributes to the health and well-being of children (Taylor & Kuo, 2006; Lester & Maudsley, 2007; Pretty et al., 2009; McCurdy et al., 2010; Gill, 2014). John holds a similar contemporary cultural awareness regarding the importance of nature in children's lives: "More nature is more better". All children referenced the river and the natural areas situated alongside the riverbank as places they encountered frequently, and clearly possessed a knowledge of. This finding was not surprising given that large rivers flow through both Killamany and Ballyway and the proximity that children reside to these water resources. Children demonstrated an in-depth knowledge of the water resource in their neighbourhoods, as Eoin (11 years) explained: "Sometimes when the tide is right down, I can go under the bridge and look for treasures like old coins … and interesting stones". Similarly, Lorna (13 years) identified the best places along the river to engage in specific recreational activities, such as fishing, or spotting fish (e.g. trout and salmon) and other wildlife (e.g. otters, birds, butterflies).

Most urban and rural towns in Ireland have what is colloquially referred to as Main Street. Although there were notable differences (e.g. size, busyness, traffic flow), Main Street in Killamany and Ballyway were similar in layout, in that they were both linear and lined with commercial buildings and businesses representing the hub of each town. Main Street was a popular neighbourhood destination, with four out of the five children incorporating the space into their walking interviews (seen in walking routes using GPS data in Figure 5.15, 5.16, 5.18, 5.19). This finding is hardly surprising given that the primary and secondary schools in both Killamany and Ballyway were located near each town's Main Street, and that children also lived nearby. John (11 years) was the only child who did not physically pass through Main Street space during his interview (see walking route Figure 5.17) however he did

reference it on several occasions. According to John he was "not allowed to go up the town" because his parents did not want him crossing busy roads alone.

Main Street was a convenient place to meet friends especially on the completion of a school day. Susan (13 years) preferred to walk home from school via Main Street, a route which added distance and time to her journey. Susan explained: "I wouldn't see anyone if I went that [other] way….And this is the best place to meet". Main Street was a valued neighbourhood destination – a place to meet friends and also a place to be seen. Susan and I spent time together in a busy coffeehouse chain on Main Street. The coveted seating available in the coffeehouse, beside the large front windows, offered a direct view of Main Street. This was particularly important for Susan as it permitted her to see who was walking by or "hanging about". Visibility and being seen in a popular youth hangout space may have also held some value in elevating status within a broader peer system (Brown, 2011). There were no coffeehouse chains in Ballyway, and the one (new) local café was "expensive". Lorna (13 years) therefore spent time with peers in (or outside) a fast food eatery:

> *Lorna: Everyone goes there. That's all there is really.*
>
> *Researcher: When do you go there?*
>
> *Lorna: Like after school sometimes.*
>
> *Researcher: And what would you do there?*
>
> *Lorna: We might eat something… We hang out.* (Walking interview: Ballyway, March 27, 2015).

It is worthwhile noting that while spending time together in what is considered to be a commercial space, young people did not always engage in commercial or consumption activities, or as Lorna remarked: "We might eat something". The primary reasons for young people gathering in public spaces such as Main Street are meeting, connecting and interacting with peers (Tani, 2015).

The shopping centre complex was also identified as a valued place for specific recreational activities in the wider built environment such as hanging out, shopping or browsing and going to the cinema. Susan (13 years) incorporated a shopping centre into her walking interview which she considered a place of relaxation,

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convenience and somewhere to go when the weather was not good: "It's handy and I can chill out and meet my friends. And it's somewhere to come when the weather is awful out". Susan's walk through the shopping centre consisted of browsing some of her favourite shops, as well as identifying various social spaces within the complex. Prominent peer gathering places inside the shopping centre included a food court and a games area situated close to the entrance of a cinema. The public space situated immediately outside of the shopping centre was especially popular for meeting and hanging out. While not everyone led me through a shopping centre during their walking interview, all referenced it in some way. John (11 years) acknowledged the differences in the use of space between himself and older children: "We just kind of hang around here [neighbourhood]…the older kids are in the [shopping centre]". Ballyway did not have its own shopping centre complex however the 'shopping centre' was still referred to as a place to travel to, and spend time with friends (e.g. shopping, going to the cinema).

5.10.3. Place feelings and emotions

Some of the emotions and psychological health benefits associated with children's places to play have already been mentioned. The various places in children's neighbourhoods were mostly associated with positive feelings and emotions, such as feeling happy or exhilarated. However, children also expressed mixed and negative feelings towards their environment (e.g. frustration, boredom, loneliness). For instance, John (11 years) was grateful that there was little traffic on the cul-de-sac street in which he lived as this enabled him to ride his bike and enjoy the physical sensation of going "really fast". Yet, he was also dissatisfied with the insufficient amount of play space available in his immediate neighbourhood: "But we don't have any greens here to play on". Susan (13 years) appreciated where she lived due to its central location: "I like that we're so close to everything". She was also however apprehensive about the volume of cars and the traffic speed: "No one really rides their bike around here anymore. The cars come down our road very fast". Consistent with recent research of play in middle childhood, there is complexity in children's emotional experiences, with children associating play with strong positive emotions, and not being able to play with negative emotions and anxiety (Howard et al., 2017).

Most responded positively when asked whether they 'felt safe' in their neighbourhoods. The presence and familiarity of other children contributed toward a feeling of safety: "It's so safe. It's just the kids from round here that go there" (Orla, 11 years). The presence of groups of older children who engaged in "smoking" and "drinking alcohol" in (rural) park areas was also not a concern for some due to them being recognisable: "There's never any problems. We know everyone" (Lorna, 13 years). John (11 years) however expressed some anxiety toward specific "teenagers" and provided rationalisation for not walking his dog on a popular pedestrian route along the local riverbank in Killamany:

> *John: We don't really bring him down here due to teenagers. Like there would usually be a gang of teenagers and they might be mean to him … I don't trust them.*
>
> *Researcher: So, if these teenagers were around, would that affect where you might go?*
>
> *John: No, but well, yeah. I'd be careful. They usually hang around in gangs of four or five people. And they might throw stuff if I have [dog] with me.*
>
> *Researcher: Has that happened to you before?*
>
> *John: Well, not to me directly but my mum has seen it happen. And it has happened with my bigger brother.* (Walking interview: Killamany, July 8, 2015).

John's fears were expressed in relation to his mother's and brother's perceptions, demonstrating that children's perceptions of neighbourhood safety are not only influenced by past experiences but frequently echo parental/family concerns. This finding is consistent with previous studies that have shown parent and child perceptions of barriers or risks presented by the local environment, whether evidence-based or not, can influence children's neighbourhood activity (MacDougall, Schiller & Darbyshire, 2009; Shaw et al., 2012; Witten et al., 2013).

Children were curious about forbidden and unauthorised places in the local community. During fieldwork children spoke of the "haunted" and derelict old

Figure 5.25. "Everyone says it's haunted"

building part way up a hill on the edge of the town of Ballyway (Figure 5.25). Lorna (13 years) commented on the building which was surrounded by high padlocked fences and graffitied trespass warning signs: "Everyone says it's haunted…The walls are falling down inside. The place isn't safe". Ireland is a country steeped in stories, legends and myths about the supernatural. The building portrayed in

Figure 5.25 has had many incarnations; however, it was originally built as a fever hospital in the mid-1800s. Urban legend has it that former patients continue to haunt the old hospital with many different sightings reported through the years. There is a strong local attachment to the place which is imbued with rich intrigue and mystery.

Children access unauthorised places for recreational purposes with curiosity to explore remnants of the past (and perhaps encounter the infamous local ghost). This place however is also physically dangerous because of the dilapidated nature and unstable building structure. It may be this very feature – the feeling of potential danger or risk that is enticing for some. We know that play involving risk is closely associated with feelings of fear and thrill and the possibility of being harmed (Stephenson, 2003; Sandseter, 2009). Sutton-Smith's (2017) conceptual framework on play as emotional survival puts forward six primary emotions that are inextricably linked to most forms of play – surprise, fear, anger, disgust, happiness and sadness. For instance, anger may be found in competitive and physical games, fear in risk taking play scenarios, and happiness as peak play experience. For Sutton-Smith (2017), play helps those who participate to represent these emotions and feel some control of their own response systems. Play, for Sutton-Smith (2017), can therefore be thought of as a fundamental survival mechanism.

5.11. Summary

This chapter has reported the findings from two separate but interrelated data collection methods including child-based photography and individual child-directed walking interviews. The findings presented here help to address the research question and objectives, specifically research objective 3 and 4. The findings have specifically identified children's play spaces in urban and rural neighbourhoods, and the forms of physical activity play engaged in; as well as establishing some of the barriers and enablers to physical activity play in neighbourhoods and the wider built environment.

The home space was identified as important for the physical and sedentary behaviour of children. One-third of the photographs recorded in the child-based photography represent places within the home space (e.g. back and front garden, living room, bedroom). The back garden was the most popular place recorded in the home space, and the most popular place recorded in the study overall. The reasons for this are twofold. First, the back garden represents the place where physical activity play is most likely to occur within the home space. Second, most outdoor play for children with limited independent mobility is predominantly in a child's own garden (Prezza et al., 2001; Barron, 2013). As anticipated, children recorded most of the photographs in the back garden, and these were recorded in the spring and summer months. Children's physical activity play was supported by the provision of a wide range of play equipment (e.g. swings, slides, trampolines, goals, nets, balls, rackets, skipping ropes).

The places in the immediate neighbourhood included nearby fields, communal green areas, roads and pathways and friends' houses. This was the least recorded play space in the study (11%), which was surprising given that the literature has identified the neighbourhood as a popular location for children's play (Wheway & Millward, 1997; Rasmussen, 2004; Thomson & Philo 2004; Barclay & Tawil, 2013; Valentine, 2016). The nearby/neighbouring field was the most popular place for play identified in the immediate neighbourhood. Children in rural settings recorded the overwhelming majority of photographs here, with almost all of the images taken in the spring and summer months. Most of the photographs of neighbouring fields were recorded by young people who utilised them for independent mobility, and therefore

physical activity play. Overall, the field was valued for spending time with friends (away from adult surveillance) and for connecting with the natural environment (e.g. trees, streams) and pets/animals (e.g. dog, cat, cow, horse).

The local community was the largest play space recorded in the study (36%) and included sports grounds and facilities, school settings, local playgrounds, public parks and gardens, forestry areas, waterways, local shops and cafés. Young people recorded over one-third of their total images in the local community, which was anticipated due to the increasing levels of autonomy and independent mobility of this age cohort. Children in urban areas recorded a greater variety of places in the local community, while rural counterparts predominantly recorded images of sports grounds. The sport ground was the most popular place recorded in the local community and the second most popular place recorded in the study overall. This result was not overly surprising given the cultural significance of organised sporting activities in Ireland for children (Coyne, Dempsey & Comiskey, 2012), and the increase in children's time spent in structured activities (Woods et al., 2018). Most photographs of sports grounds were taken in the autumn and winter months when specific sports were played (e.g. Gaelic football, rugby union, soccer, hockey) with most recorded by boys. Secondary school-age girls recorded significantly less photographs of sports grounds, compared to boys of the same age group. A possible explanation for this might be the decline in participation in physical activity among secondary school-age girls (Woods et al., 2010, 2018).

One-fifth of children's photographs were recorded outside of the local community and included recreational sites of beaches and waterways, campsites, mobile homes, hotels, as well as the playgrounds on-site of these places. Most of the images recorded outside of the local community were produced in the spring and summer months, when it is more favourable to family-style outings of this nature. Children in rural settings recorded the overwhelming majority of photographs in this category. This result may be explained by the fact that children in rural areas have less access to diverse activities and locations in their immediate surroundings that they wish to photograph. Conversely, their urban counterparts may have had more mobility and a greater choice of what to represent within their own environment. The most recorded place outside of the local community was the playground on-site of tourist and holiday destinations, with primary school-age girls (from rural areas)

producing all of the photographs here. This supports an earlier finding of the child-based photography with no child over 11 years recording images of (public/tourist) playgrounds and signifies a transition in play spaces from childhood to adolescence. From children's perspective, the enablers to physical activity play in playgrounds on-site are; varied equipment, the quality of the setting, and the social aspects attached to the visit.

Just under half of total outdoor images across the four central play spaces consisted of children's deliberate intent to showcase the natural environment. The natural environment enabled unique forms of physical activity play and recreational activities (e.g. climbing/swinging in trees, play fighting with sticks, utilising natural dens/hideouts in shrubs, jumping from rock to rock over waterways, searching for insects and fairies). Most of the images of the natural environment have been recorded during the spring and summer months, which supports the view that weather/seasonality in Ireland can and does impact children's play and recreation.

Two unanticipated findings were that children in urban areas recorded most of the photographs in the natural environment and that young people recorded most of these. There are several possible explanations for these results including; young people may compose and frame images with intent to capture the natural world (Sharples et al., 2003); and, older children are more independently mobile and able to move freely to places in the natural environment they wanted to portray. Overall, the findings from this study do not support the growing concern among researchers that the child-nature connection is under serious threat (Gill, 2007b; Louv, 2008). Rather, children in Ireland appear to have a deep connection with nature, especially the outdoor spaces close to home and within local neighbourhoods.

Theme one of the walking interviews reports on children's independent and interdependent spatial mobility, and therefore opportunities for physical activity play. Children have a deep awareness of sociocultural factors that permit or restrict their independent mobility (e.g. age, road traffic, other parental fears surrounding child abduction/strangers). For some, permission to travel/play independently in the neighbourhood was only possible when places were situated within close proximity to home and easily accessible (e.g. no busy/main roads to cross). Parental permission to roam independently ranged from 200 to 3,000 metres from a child's

home. Children were active in negotiating with parents on issues surrounding their independent mobility (e.g. "I just ask my mum and see"). The presence of friends/siblings, and carrying mobile phones, were used in ways to negotiate and aid in developing greater independent mobility (e.g. "If I say my friend will be there, I might be allowed to go"). The key message in theme one is that children frequently seek opportunities for greater independence and are acutely aware of the interdependencies concerning their everyday play and mobility.

Theme two of the walking interviews examines children's place-based experiences in the local neighbourhood and wider built environment. The study has shown that playmates are more important for children's play than the actual physical space available to play. Similarly, lack of playmate availability has been identified as a barrier to physical activity play (e.g. play indoors on PlayStation). Children participated in a range of physical activity play in local neighbourhoods (e.g. soccer, Rounders, British Bulldog, Tip the Can, water fights, riding bikes and go-karts). There were a number of factors influencing children's choice of physical activity play including the number of children available to play with, the type of play space, age, gender, ability and seasonality. Purpose-built (e.g. playground equipment, park benches/seating) and natural features (e.g. water, trees to climb, green spaces) of the local neighbourhood were valued by children and young people for physical and social activities.

The study has demonstrated that public playgrounds are important places for children in middle childhood however this is dependent on numerous factors (e.g. availability of age-appropriate equipment, provision of multi-purpose play areas, accessibility). Children were cognisant of the psychological health and wellness attributed to spending time in nature-rich areas away from adult surveillance (e.g. riverbank in local park, tree area/green space on private property). Main Street places (e.g. coffeehouse, fast food eatery) and shopping centres provided popular youth hangout spaces, especially for young people. Positive emotions (e.g. feeling happy, having fun) are associated with being able to play. Conversely, lack of play, or not being able to play, is associated with negative feelings (e.g. frustration regarding traffic speed/volume, loneliness/boredom at lack of playmate availability). There was some concern regarding a local gang of "teenagers", however on the whole, the presence and familiarity of other children contributed toward a feeling of

safety in local neighbourhood areas. Unauthorised places for play, those which invoked feelings of intrigue and danger (e.g. dilapidated/haunted buildings), were enticing for hanging out and for the risky play opportunities they presented.

This chapter reported the findings from child-based photography and the child-directed walking interviews in urban and rural neighbourhoods. This concludes the findings chapters. A general discussion chapter follows, Chapter Six, whereby results from findings chapters are interpreted together. The chapter concludes with the strengths and limitations of the study, as well as recommendations for policy and future research.

Chapter 6. Discussion

6.1. Introduction

This discussion chapter will illuminate how the findings in this study are important in meeting the research question, aim and objectives. The discussion broadly mirrors the research objectives and first establishes the current forms of physical activity play that children and young people like to engage in. This is closely associated with the section immediately following which addresses the differences in physical activity play between gender and ages. The discussion on the evolving play spaces in childhood is guided by a social ecological framework. This is followed by an examination of the barriers and enablers to physical activity play in school, neighbourhoods and the wider built environment. The discussion pertaining to the research findings concludes with physical activity play in the prevention and treatment of childhood overweight and obesity. Lastly, the strengths and limitations of the study are appropriately recognised and discussed, which is followed by recommendations for policy and future research.

The aim of the study was to identify specific forms of physical activity play that children and young people engage in across urban and rural settings in Ireland. Fieldwork and participant observation conducted in primary and secondary schools over a twelve-month period identified the current forms of physical activity play that children and young people engage in during break-time. The study employed a range of rights-based and child-centred participatory methods, as well as quantitative methods, to enhance our overall understanding of children's physical activity play. The child-based photography enabled children to document their play spaces and activities on weekends and outside of school hours, across the year, using digital cameras. This was enhanced by the use of photo elicitation group interviews which provided a rich insight to children's photographs. The child-directed walking interviews enabled children to provide their views and knowledge of the spaces and places in the neighbourhood and wider built environment that are important to them for play and recreational purposes. The anthropometric data of children is important to identify the progressive trends towards sedentary lifestyles, physical inactivity and childhood obesity. The findings from this study therefore

provide a deep and holistic understanding of children and young people's physical activity play.

6.2. Contemporary Physical Activity Play

The forms of physical activity play identified in this study are long-standing 'traditional' play activities like chasing games, soccer and other ball games, rough and tumble play, dancing and clapping and singing games and wheel-based activities. These forms of physical activity play have been documented in previous studies and tell us that contemporary children participate in physical activity play broadly consistent with those of preceding generations (Opie & Opie, 1959, 1969; Sutton-Smith, 1973, 1975; Blatchford, Baines & Pellegrini, 2003; Brockman, Jago & Fox, 2011; Ridgers et al., 2012; Willet et al., 2013; Bishop, 2014, 2016). It should be reiterated here that while these forms of physical activity play are considered 'traditional', children's play was also subject to constant variation – influenced by the social context (e.g. peer group, gender, rules, adult surveillance) and the physical features of play space (e.g. playground markings/topography, constrained space, poles, trees, people). Traditional games have stood the test of time – they have survived because they have an appeal broader than that of passing innovation: 'The old games, which have prevailed and become familiar by a process of … formulas which come from the remote past, and strike the young imagination as a sort of sacred law' (Newell, 1963, p. 27). Contemporary folklorists have tried to construct a notion of tradition as a dialectical process within culture – in other words, a process of both continuity and change, stability and variation, dynamism and conservatism, both through time and across space (Bishop & Curtis, 2001).

Children pass on information and knowledge through oral culture and the enacting of the differing play forms. The skills associated with specific physical activity play were learnt through observation of others and honed through repeated participation (Bishop, 2014) (e.g. soccer, ball skills/tricks, dancing, singing, clapping, skipping). The peer transmission of play activities was especially evident on primary school playgrounds, where lively displays of children teaching others a variety of play and games took place. The finding supports the idea that the school playground is one social arena where children's play and games are passed on. As Factor (2004)

eloquently put forward, a 'school playground is not an empty slate – it has been written on in enormous detail by generations of children' (Factor, 2004, p.149).

It is important to highlight that many 'traditional' play activities identified on primary school playgrounds were also evident in secondary schools (e.g. chasing games, ball games, rough and tumble play). Nevertheless, children of different ages do present different play styles. One of the more significant findings to emerge from this study is that the physical activity play behaviour of children in middle childhood was markedly different to young people. To be more precise, the fast and frenetic play observed on primary school playgrounds were replaced with hanging out activities in secondary schools. This finding was largely anticipated as hanging out with friends is well-known to be a prevalent and important recreational activity for young people; however, contrary to the literature, hanging out was far from an 'absence of activity' (Blatchford, Pellegrini & Baines, 2016). Rather, hanging out often incorporates walking and "messing about". This study has reported young people's walking practices are equivalent to physical activity play, in that a walk on school grounds feature episodes of 'playful context' and 'physical activity' (e.g. pushing, prodding, piggybacking, chasing, running). More importantly, walking was explicitly described by young people in this study as "how we play". As will be discussed in more detail in the following section, a walk on school grounds is an opportunity to construct more elaborate play events and is an activity that is much more than it purports to be.

6.3. Gender Differences and Physical Activity Play

Gender is the most common demographic variable associated with children's physical activity play on primary school playgrounds (Ridgers et al., 2012; Stanley et al., 2014). The gender differences in play documented in previous research were also identified in this study. For instance, the fieldwork findings reported that the physical activity play of boys was observably more vigorous, competitive and space consuming, in comparison to girls (across all age groups in this study). On the other hand, girls' physical activity play was very much centred on being together with friendship groups and the social aspects of play. These findings are consistent with previous research (Thorne, 1993; Blatchford, Baines & Pellegrini, 2003; Pellegrini et al., 2004; Dudley et al., 2018).

Soccer was predominantly played by boys, as were other ball-related activities. Girls also played soccer in primary schools but with much less intensity than boys, and for much shorter bursts of time. Soccer is widely recognised in the literature as being dominated by boys, which is also associated with the available playground space required for the game (Swain, 2005; Pawlowski et al., 2016; Martínez-Andrés et al., 2017). Boys' chasing games were also fast-moving and highly physical with distinct rough and tumble play behaviour (e.g. wrestling, grappling). In comparison, girls' chasing games were often more leisurely and more likely to incorporate hide-and-seek components. Girls' chasing games can also entail occupying 'home' or 'safe' base for a large proportion of break-time – singing, dancing, talking and taunting the 'it' person.

The literature supports the view that the physical vigour and intensity associated with boys' play contributes to girls segregating themselves from boys' play groups (Maccoby, 1986). A consistent finding in the literature is that girls generally play with other girls in middle childhood, and boys with other boys (Thorne, 1993; Snow et al., 2019). In this study, girls did protest about boys being "too rough" or "too serious", with intimidation on the playground resulting in a decrease in physical activity play for some. Nevertheless, there were also many examples of girls and boys employing different strategies and tactics of inclusion (Ackerley, 2003). For instance, groups of girls stampeding playground soccer to gain control of the ball, or boys dashing in and out of girls' skipping games. As has been noted in other studies, such strategies tended to focus on disruption rather than on equal participation in playground games (Paechter & Clark, 2007).

Gender differences and preferences in children's play have been attributed to social, cultural and possible biological factors (Factor, 1988, Sutton-Smith, 1999). This is a valid proposal considering what we know about the processes of gender socialisation and the internalisation of cultural values during child development. This begins early in life with parents encouraging different forms of play to their sons and daughters (Lindsey & Mize, 2001; Richards, 2020). Gender differences are then perpetuated during childhood through the key agents of socialisation (e.g. school/education, peer groups/social networks, media).

6.3.1. Sociodramatic play in middle childhood

That much of children's physical activity play on primary school playgrounds was permeated with sociodramatic scenarios was an unforeseen finding from this study. This finding was interesting as some authors have been explicit in their claims that pretending stops by the age of seven years (e.g. Fein, 1981; Sutton-Smith, 1997; Cook & Cook, 2005). There were notable gender differences, not only in the pop-culture and media-inspired themes, but also in the physical activity of girls' and boys' sociodramatic play. For instance, girls' sociodramatic play comprised family-based games that centred around caring for a baby in some shape or form (i.e. human, animal, object). Girls were also more likely to intermingle supernatural and mythical characters (e.g. fairies, witches, wizards) into their play and spend break-time searching for natural elements (e.g. sticks, dirt/mud, grass clippings, stones, flowers, feathers) to create fairy circles and concoct fairy potions. On the other hand, boys' sociodramatic play was infused with combat scenarios and fantasy weapons or involved Marvel superheroes or WWF characters (e.g. pretending to shoot and stab one another and blow up imagined objects while chasing and hiding from each other on the playground). The boys' sociodramatic play was louder, faster and comprised more vigorous physical activity, in comparison to girls, which echoes the gender differences found in children's physical activity play more generally, as already discussed.

These findings draw attention to larger socialisation processes and gender stereotypes. Research has long shown that girls are socialised into feminine stereotypes (e.g. caretaking, nurturing) (Montgomery, 2009; Corsaro, 2015), while superhero and wrestling media discourse mostly conforms to strict gender stereotypes (e.g. men as strong, powerful, aggressive) (Kirkpatrick & Scott, 2015). Even so, this study has also reported that children's play does not always align with dominant gender discourse. Girls' sociodramatic scenarios may be understood in terms of exploring particular 'real-world' social roles; however, that is not to say that they did not also bring violent, aggressive or highly physical activity into their sociodramatic play (e.g. girls quickly forewent the care-giving role to kick the crying ball/baby across the playground). The driving force behind children's play is ultimately about having fun. Sutton-Smith (1997) reminds us that play 'must be about mockery as well as mimicry' (Sutton-Smith, 1997, p. 159).

The findings reported here add to a small number of empirical studies conducted in school settings that have provided evidence that sociodramatic play persists in middle childhood (Dunn, 2006; Willet et al., 2013). Rather than disappearing, pretending and sociodramatic play can be understood as evolving at an individual level, consistent with the physical and cognitive changes that occur during middle childhood (Smith & Lillard, 2012). These findings also have implications for understanding children's physical activity play during break-time. There are many unanswered questions about sociodramatic play in middle childhood which can, and does, involve physical activity play. The sociodramatic aspects of physical activity play may offer rich and stimulating opportunities for future research.

6.3.2. Walking-play and the 'Lap'

There were notable differences in the way in which girls and boys of secondary school-age participated in walking-play. For instance, girls walked in intimate dyad or triad groupings, frequently with arms linked around the elbows, and walked at a slower pace in comparison to boys. Girls were also more inclined to access partially hidden places (e.g. trees, shrubs, nooks and crannies on the exterior of the school building) into their walking routes. These findings acknowledge that hidden and natural places add a sense of adventure and a degree of privacy for social experiences, and are important for young people's physical activity play, especially girls. The findings also support prior research that girls prefer private or secluded spaces (Boyle, Marshall & Robeson, 2003; Pawlowski et al., 2018). Secondary school-age boys, on the other hand, were in larger and louder social groups and their walks were permeated with rough play behaviour (e.g. pushing, kicking, chasing, piggybacking). Boys were also more inclined to walk to, and hang out in, the more visible outdoor space such as sports fields. This finding resonates with many studies, most of which have been conducted on primary school playgrounds rather than secondary school settings, that maintain boys dominate large play areas for their games, while girls are on the periphery of physical activity play (Thorne, 1993; Pellegrini, 2004).

The 'Lap', a circuitous walking (and playable) route of approximately one hundred and twenty metres was a prominent example of a physical and social activity for young people in the secondary school setting. The 'Lap' was appealing as a play

and recreational activity for numerous reasons. Girls and boys regularly completed a 'Lap' subsequent to the sound of the bell indicating cessation of break-time. Completing a 'Lap' in this way draws attention to the agency of young people and the creative ways in which they transgressed adult authority and seized opportunities for recalcitrance of specific rules, such as arriving to class on time. Further, the 'Lap' was easily accessible and could be completed in the wet and wintry months, when other outdoor spaces were not as appealing due to being wet, muddy or slippery. A 'Lap' with one boy and one girl was referred to as the 'Meet' and largely conveyed couple status. A walk on school grounds may therefore be viewed as an opportunity to construct more elaborate play events and explore new social relations including young people's romantic experiences. Overall, this study has provided insight into young people's walking-play and has argued that walking is a complex phenomenon.

It is widely recognised that walking has important beneficial effects on health including the opportunity to increase children's overall physical activity levels (Mackett et al., 2005), and as this study has shown, is also a highly enjoyable form of physical activity play. Walking for play and recreation could therefore be used and promoted in policy via the Department of Health, through the Healthy Ireland framework, to reduce sedentary behaviour and as an effective and scalable treatment in the prevention and reduction of childhood overweight and obesity.

6.3.3. Rough and tumble play. Not just for younger children

A common form of physical activity play identified in this study across all groups was rough and tumble play. This is largely because rough and tumble play behaviour co-occurred with many other forms of play (e.g. chasing, soccer, sociodramatic play, skipping, walking-play/hanging out). Boys engaged in rough and tumble play to a greater extent than girls (across all age groups). This finding was anticipated as it is widely acknowledged in the literature (Pellegrini & Smith, 1998). Rough and tumble play is an extensively researched aspect of physical activity play and is said to peak between the ages of 8 – 10 years and decline in adolescence (Pellegrini & Smith, 1998). However, rough and tumble play in this study was more commonly observed, and more overt, among secondary school-age boys, where it was a persistent feature of break-time.

A limitation of past research has been the neglect of rough and tumble play during adolescence. Therefore, relatively little is known about this form of physical activity play during this developmental period. The findings of this study however may lead us to question the literature on rough and tumble play that believe it to peak in middle childhood and decline during adolescence. Rough and tumble play could also be used as a form of physical activity play to reduce sedentary behaviour. This is geared toward what young people actually participate in, as opposed to what adults think they should do.

6.4.   Evolving Play Spaces in Childhood

There is evidence of a gradual, long-term shift in the 'spaces of childhood' from outdoors to indoors, with a subsequent decline in wholly unsupervised, physical activity play and an increase in indoor play with the use of technologies (Karsten, 2005; Witten et al., 2013; Shaw et al., 2015; Holt et al., 2016). This study however has shown that children had a preference and appreciated opportunities to engage in physical activity play in outdoor spaces. Time spent outdoors has consistently been shown to be positively associated with physical activity play among children and young people (Schaefer et al., 2014; Gray et al., 2015).

Social ecological models provide a useful theoretical framework to explore children's physical activity play across differing spaces. Figure 6.1 illustrates an adapted social ecological model linking the four dominant play spaces identified in this study. Children are located at the centre of the model as active agents shaping their own play lives. The play spaces are arranged like expanding layers of nested and 'interconnected systems' developed by Bronfenbrenner (1979, 2005) and represent proximal and dominant to more distal play spaces. The model presented in Figure 6.1 draws on the work of Sallis & Owen (2015), and Lee et al., (2015) and guides the following discussion. This begins with the child's immediate setting being the microsystem (home). Moving outward on the model it examines the mesosystem (neighbourhood), and then continues onto the wider environment being the exosystem (local community) and macrosystem (outside of the local community). The model provides a useful framework to represent physical activity play by recognising the individual/child (e.g. demographic, place experiences, play preferences), behavioural (e.g. active or sedentary play), social (e.g. parental

restriction, level of independence, social aspects) and physical environmental (e.g. provision/accessibility of play equipment and play space, safety) factors that influence children's play and recreation.

Figure 6.1. Adaptation of Bronfenbrenner's Ecological Model
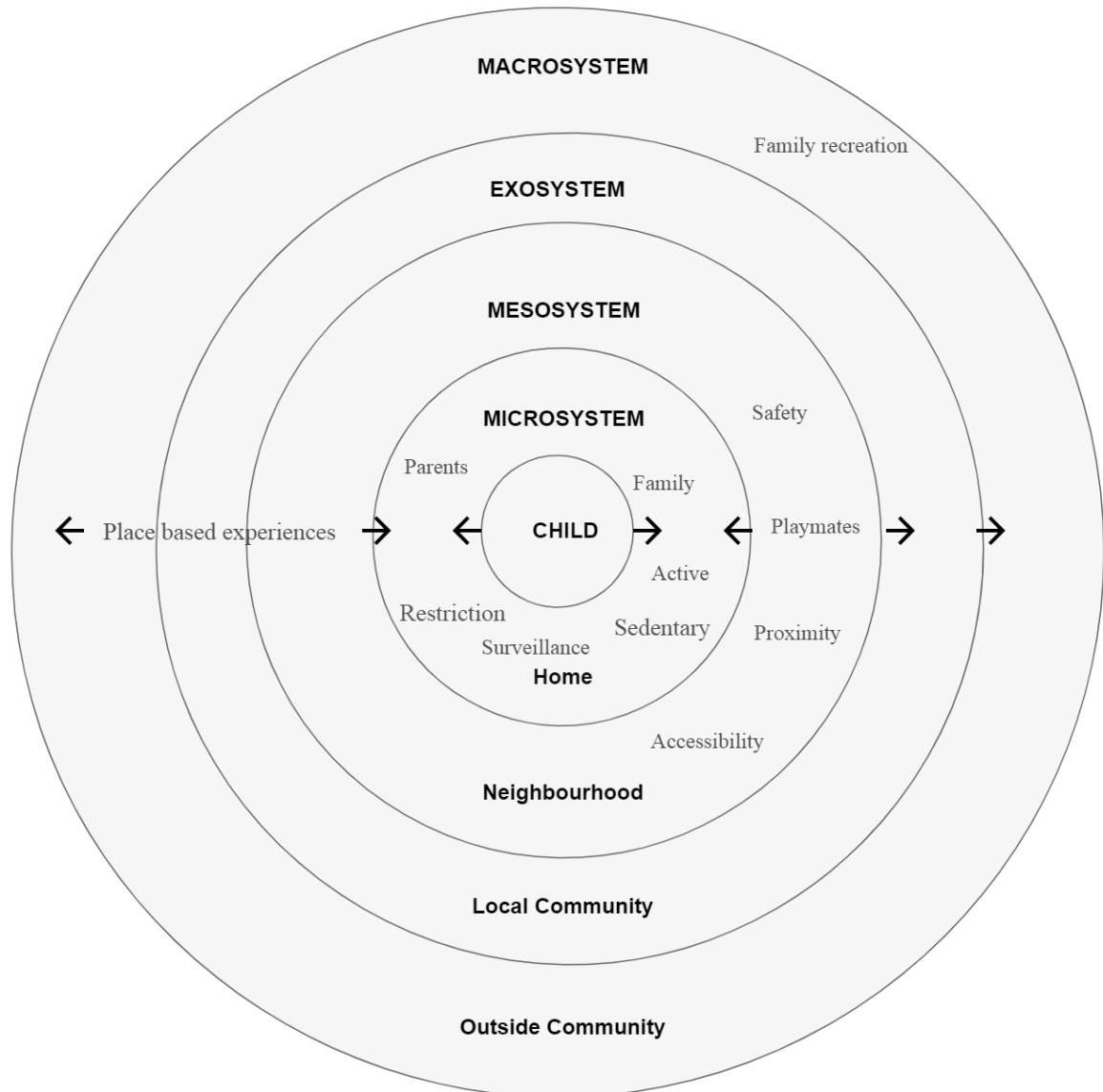
6.4.1. The home-garden

We know that time spent in the home space (microsystem) indoors is more likely to be sedentary, while time at home in the garden is more likely to be active (Sener et al., 2008; Biddle et al., 2009). Therefore, there is an important link between location within the home space and children's physical and sedentary play (Maitland et al., 2019). The child-based photography used in this study provided the opportunity for children 'to reveal what would ordinarily not be seen' (Greene, 1998, pp.128-129)

and to photograph and talk about play behaviour in private home spaces. One-third of children's total photographs produced in this study were centred on play in the home space. The most popular place recorded overall was the back garden, with most of the images recorded in the spring and summer months. This finding is not surprising considering the mean age of children involved in the photography method is 11 years, and we know that most outdoor play of children of this age cohort takes place in the child's own garden (Prezza et al., 2001; Barron, 2013). Nevertheless, the finding reinforces the importance of the home-garden for children's physical activity play. Concomitantly, a handful of studies have shown that a lack of home-garden space is a barrier to children's physical activity play (Veitch et al., 2006; Jago et al., 2009). This is concerning in light of increasing urbanisation globally and the associated shrinkage of home-garden space and increase in apartment dwellings.

Children's physical activity play in the home-garden space is enabled by the provision of fixed and moveable play equipment (e.g. swings, slides, trampolines, goals, nets, balls, rackets, skipping ropes). As argued by others (Barron, 2013; Witten et al., 2013; Loebach & Gilliland, 2016a), the upsurge of play equipment in domestic play environments and the rapid development of children's indoor media cultures are likely to constrain children's independent ability to play and travel through public space. There is also evidence in this study to show how the home-garden evolves as a play space for children as they progress through middle childhood and adolescence. For instance, the home-garden is used by young people as somewhere to spend time with siblings/pets, or as "a good place to escape to" (Jessica, 14 years). This is important considering that no study has found outdoor time to be associated with lower physical activity or increased sedentary time (Tremblay et al., 2015). Further studies, exploring the characteristics of home-garden space that support increased physical activity play of children are warranted.

6.4.2. Close to home and "favourite" places

The neighbourhood space (mesosystem) was the lowest recorded play space in child-based photography. This finding was unexpected given that the literature has long reported that neighbourhood places (close to home) are the most popular locations for children's play (Wheway & Millward, 1997; Rasmussen, 2004; Thomson & Philo, 2004; Barclay & Tawil, 2013; Valentine, 2016; Kilkelly et al.,

2016). It was also surprising given that children and young people involved in the walking interviews regarded spaces in the neighbourhood as their "favourite" place to play. These results are likely to be related to the number of young people involved in the child-based photography who chose to depict most of their play and recreational activities in the local community (exosystem) followed by the home space (microsystem). There were also a number of children in the study who lived in one-off housing in rural areas who were more likely to play within the home space (microsystem). Also, children in rural areas recorded the overwhelming majority (98%) of the photographs in recreational sites outside of the local community (macrosystem) while day-tripping or vacationing, which will be discussed shortly.

The most popular play space in the neighbourhood identified in this study was the nearby field. However, this was because of the higher number of children in rural settings (56%). These results are consistent with those of Kilkelly et al., (2016) who also reported that children in rural settings in Ireland were more likely to play in gardens and nearby fields.

The roads and pathways of children's neighbourhoods were clearly valued for facilitating specific forms of physical activity play. For instance, over a third of children's photographs depicting neighbourhood roads and pathways, produced in the photography method, portrayed wheel-based physical activity play. These findings support the work of Biddulph (2011) and remind us that the hard surfaces provided by the roads and pathways, are valued by children for physical activity play. Modern changes in the built environment mean roads and residential streets are now busier, with the danger of traffic most often cited as the reason children's independent physical activity play has decreased so dramatically (Shaw et al., 2015). Roads and residential streets are now problematised as 'dangerous' for children, with fewer children using the streets for play than a few decades ago (Living Streets, 2009; Allen et al., 2014). There is a strong argument however that children's street play has immense value. Tranter (2016) has reasoned that the loss of access to streets 'has significantly reduced children's opportunities for creative, self-directed, spontaneous, and interactive play, with negative consequences for their health and well-being' (Tranter, 2016, p.211). This is directly linked to reduced physical activity and associated health problems.

Children shared their reasons for valuing specific play space, and for regarding some as "favourite" places. These were usually the spaces close to home where they could play, meet and spend time with friends. Favourite places were consistently green and natural spaces (e.g. communal green space, green corridors, natural nooks and crannies, fields). Boys in the study were more likely to use the communal green for soccer, chasing games and rough and tumble play. Girls, on the other hand, played on the fringes of communal green space, or in the hidden and natural nooks and crannies (e.g. climbing trees, walking-play with friends, sibling and/or dog). These findings support the existing literature, which has predominantly been conducted on school playgrounds, that boys use large play areas, while girls occupy the peripheries of space (Thorne, 1993; Pellegrini, 2004; Pawlowski et al., 2016).

The current study also found that boys and girls of differing ages played together in neighbourhood spaces. The walking interviews provided deep insight into how communal green spaces in urban and rural housing estates were used – with a variety of physical activity play identified specifically because they work well with a mix of age groups, gender and abilities (e.g. soccer, Rounders, British Bulldog, Tip the Can, water fights, skateboarding). It has been proposed that boys and girls are more likely to play with each other in local neighbourhoods than they are in school settings (Thorne, 1993; Meire, 2007). Having fewer friends to choose from in neighbourhoods helps to break the binaries that are held so strongly in other arenas such as school (Thorne, 1993). The literature has also acknowledged that age and gender mixing in children's play encourages a strong sense of social connectedness and opportunities for learning and development (Gray, 2011b). Yet, there is relatively little research on gender or age mixing in children's play in neighbourhoods. The findings from this study provide some insight into how children perceive play with other children of varying age, gender, interests and abilities. As Eoin (11 years) posited: "There's an awful lot of kids… We have a lot of fun in this estate".

6.4.3. Sports grounds, public playgrounds and parks

The local community (exosystem) represents the largest recorded play space in this study with over one-third of children's total photographs depicting places for play

and recreation, with secondary school-age children recording almost 40% of their total images there. This finding reflects the increasing levels of autonomy and independent mobility of young people. Children and young people in urban areas (especially girls) recorded more images in a variety of places in the local community (e.g. indoor sports, café, shopping centre), in comparison to their rural counterparts, who predominantly recorded images of sports grounds. Children in rural settings have less access to a diversity of activities and locations (Valentine & McKendrick, 1997; Matthew et al., 2000; Tucker & Matthews, 2001; Powell, Taylor & Smith, 2013). A lack of appropriate spaces for children and young people in rural areas to play, meet and socialise in, is widely regarded to constrain their social networks and contribute to social isolation, which is also likely to impact on their health and well-being (Atterton & Brodie, 2014; McKendrick, McHardy & Kelly, 2018).

Sports grounds were the most popular play space recorded in the local community. Most of the photographs were taken in the autumn and winter months when specific sports are played (e.g. Gaelic football, rugby union, soccer, hockey). These results accord with the cultural significance of organised sporting activities for children in Ireland (Coyne, Dempsey & Comiskey, 2012). Overall, this was the second most popular place recorded in this research with most of the images recorded by boys, and unsurprising given that gender is a key factor influencing participation in sports in Ireland (Woods et al., 2018). The decline in girls participation in sports may be associated with the lack of physical activity options that secondary school-age girls would favour. The crucial factors identified in the literature for (less active) secondary school-age girls to participate in physical activity is that it should involve 'fun' with friends, be 'informal' and 'unstructured' in its nature, and purely for 'enjoyment's sake' (Whitehead & Biddle, 2008). Sport, however, is not an equivalent to physical activity play and should not be seen as a substitute for it (Freeman & Tranter, 2011).

Public playgrounds were also a popular place for play in the local community (exosystem). This study reported that public playgrounds were used by children only, with no child over 11 years old recording photographs of this space. This finding signals a clear transition in play spaces from childhood to adolescence. Children did not go to the playground independently and were always accompanied by an adult or older sibling. This finding was not surprising considering the low levels

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of independent mobility for children in Ireland, especially those under 11 years (Shaw et al., 2015). Most of the photographs of local public playgrounds were recorded in the autumn and winter months. This is significant because the cooler months are when family members (parents, siblings, cousins) emerge as prominent in children's physical activity play, when the daylight hours are less conducive to play outdoors with friends close to home. Children appreciated public playgrounds for numerous reasons including challenging and appropriate play equipment, the provision of multi-purpose play areas, the quality of the setting, and for the social aspects. These results support previous research into children's physical activity play which links similar playground features with increased visitation (Jansson, 2008; Chaudhury et al., 2019).

Many photographs of public playgrounds depicted children using play equipment in unintended or riskier ways to achieve challenge in their play (e.g. climbing over the top of high tunnel slide structures, children doubled up on flying fox/cableway play equipment). Also, many children in both urban and rural settings were reliant on car transportation, via adults, to visit public playgrounds with equipment suitable for their play needs – the playgrounds they deemed "good" and "better" (Eoin, 11 years). We know that older children are often overlooked in playground design and infrastructure, which is compounded by playground guidelines which typically focus on safety standards rather than providing good design for play (Lynch et al., 2020). Restrictive (and excessively risk-averse) design guidelines reduce opportunities for physical activity play and create significant barriers to children's health and well-being (Spiegal et al., 2014; Brussoni et al., 2015). The most consistent point in the literature is the need to include children and young people in consultations regarding the planning and design of play spaces to help ensure their voice is heard (MacDougall, Schiller & Darbyshire, 2009; Nicholson et al., 2014; Lynch, Moore & Prellwitz, 2018).

Recreational parks in the local community (exosystem) were also a significant space identified in this study for children's physical activity play. Along with the numerous social dimensions, children generally focused on the physical features within the park and specific play/recreational activities that could be performed there (e.g. "We ride our bikes all through there"; "It's nice to walk the dog along the river"). It was however the green and natural features of the park that were especially prized. For

example, trees for climbing and specific places along the river to search for "treasures" (e.g. old coins/interesting stones), or spotting fish and other wildlife. Natural areas in the park and alongside the river were appreciated for "quiet" retreat and meaningful social experiences with friends, particularly for young people. In this study it was widely recognised that positive emotions ("I'm happy there") and psychological benefits are derived from spending time in natural park spaces, which were closely interwoven with personal histories and meanings and a sense of place ("our place to come").

These results add to the rapidly expanding body of evidence reporting that exposure to natural environments (such as parks) is associated with better health and well-being of children (Taylor & Kuo, 2006; Lester & Maudsley, 2007; Pretty et al., 2009; McCurdy et al., 2010; Gill, 2014). There is substantial scope for enhancing children's health through the active use of parks, however there is also a need to better understand the factors that influence park visitation, other than availability and accessibility (Veitch et al., 2021).

6.4.4. Family recreation

One-fifth of children's photographs in this study were taken in recreational sites outside of the local community (macrosystem) while day-tripping or vacationing with family and/or friends. Most of the photographs were produced in the spring and summer months, when daylight hours are longer, warmer and more favourable to family-style recreation of this nature (e.g. beach and inland waterway visits, hill walking/trekking). Children in rural settings recorded the overwhelming majority of photographs in this space (macrosystem). This result could be explained by the fact that children in rural settings have less access to a diversity of activities and locations that they feel warrant a photograph in their immediate surroundings, which links to an earlier finding in the local community (exosystem), and as already mentioned, is supported in the literature (Valentine & McKendrick, 1997; Matthew et al., 2000; Tucker & Matthews, 2001; Powell, Taylor & Smith, 2013). Rather, parents constructed play and recreational opportunities for children in rural settings on a regular basis, and these were the ones they chose to represent. In comparison, children and young people in urban settings may have had more mobility and/or a greater choice of what to represent within their own environments.

6.5. Urban-Rural Differences and Similarities

Most play research has focused on children in urban or suburban areas. This study however considered the physical activity play and recreational activities of children and young people in both urban and rural settings. As mentioned in the literature review, rural areas have changed significantly over the past few decades with their differences from urban areas decreasing (Matthews et al., 2000; Woods, 2007). 'Rural' can no longer be considered as in decline, poor or agriculture-based (Hill & Karlsson, 2007). A specific objective of the current study was to identify the differences and similarities in play spaces between schools and neighbourhoods in urban and rural settings. These differences and similarities are addressed at various points throughout this discussion, however, are synthesised here.

6.5.1. School play spaces

The physical shape of the two primary schools (urban and rural) and the play spaces differed. Despite design differences, there were more similarities on primary school playgrounds than differences. The similarities lie in the use of school play spaces, in both urban and rural settings, that were governed by rules, adult surveillance and 'prescriptive spaces', those which are demarcated by markings and/or equipment and designated for specific activities. This was also supported with playground rotas permitting specific play activities for individual class groups on certain days (e.g. soccer and basketball activities, skipping). As Thomson noted, the school playground has always been, in one form or another, a territory of adult surveillance and intervention, in which 'children have less free range of movement and fewer areas to extend their physicality' (Thomson, 2005, p.77). Thomson's view is supported by the work of Blatchford (1998) and Baines & Blatchford (2019) who warn that the increased interventionist stance (of adults) at break-time risks overrunning children's freedom in the playground. The deliberate management of children at break-time will be addressed in further detail in the following section. There are important changes which could be made in primary schools to improve children's opportunities for physical activity play, one of which is to rethink how space is currently used. Permitting access to a wide variety of space including grass areas/playgrounds throughout the year and integrating natural elements and natural

areas, where possible, is likely to enhance physical activity play for a majority of children.

There were also more similarities than differences in secondary school play spaces, when comparing rural and urban schools. Secondary school sites were larger in comparison to primary schools with outdoor play areas, rarely crowded spaces during break-time. The main reason for this was that young people had greater freedom of movement throughout the school site and were permitted access to a variety of indoor and outdoor spaces during break-time. Both Killamany and Ballyway Secondary Schools had a variety of outdoor play areas including substantial grass playgrounds, tarmac courts with markings for games (e.g. soccer, basketball), and other tarmac and green areas hugging the exterior of school buildings. Both schools also had large indoor social areas which were popular places for sedentary (and social) activities during break-time. The natural characteristics of the external school environment influenced young people's physical activity play in both urban and rural secondary schools. For instance, grass slopes/irregular playground topography were enticing for rough and tumble and for creating risky play scenarios; while tree and shrub areas provided privacy and spatial autonomy for walking-play and social experiences.

It is clear that undertaking physical activity play during break-time, engaging with nature and experimenting with social play away from adult surveillance, will result in young people leading better and healthier lives overall (Gray, 2011a; Gill, 2014). There is a strong argument that schools should support risk taking in play, in all its forms, as a way of reducing the negative risk behaviours associated with the adolescence developmental period more generally (Robinson, 2014). Future research in this area is warranted, as is promoting broad societal understanding of the importance of risky play (including rough and tumble play) for the overall health and well-being of children and young people.

6.5.2. Childhood overweight and obesity

There were notable differences in this study in the overall prevalence of overweight and obesity according to geographical markers (i.e. urban or rural school location). The prevalence of overweight and obesity for children and young people in the

urban study sample is 16.20% (girls 16.00%, boys 16.40%) and in the rural sample is 30.70% (girls 35.70%, boys 25.50%). Secondary school-age girls who attend school geographically situated in the rural setting (Ballyway) have significantly higher levels of overweight and obesity than their urban counterparts (rural 36.1%, urban 16.81%), as do secondary school-age boys (rural 26.7%, urban 15.8%). This result should be interpreted with caution as it is based on school location rather than the geographical location of where children live.

It is difficult to explain this result because the differences in the rates of overweight and obesity among children based on geographical markers are unclear. Based on the literature and some of the findings in this study, it seems plausible that these results could be related to reduced opportunities to engage in spontaneous group play activities in low residential density. There is also evidence of reduced potential for physical activity due to the lack of, or greater distance to reach recreational facilities in rural areas, limited transportation options/dependency on parents for providing transport, and barriers to active commuting in rural areas (Tucker & Matthews 2001; Woods et al., 2010; Walia & Liepert, 2012; Powell, Taylor & Smith, 2013). Notably, there is an urban-rural difference in Ireland, whereby children and young people in rural areas have reported less active commuting (e.g. walking, cycling) to school than their urban counterparts (Woods et al., 2010; Harrington, 2014). Furthermore, the age-related declines seen in other types of physical activity do not exist in active commuting (Woods et al., 2010). Further investigation into the depth of health disparities between children and young people in rural and urban areas of Ireland would be a valuable piece of research and provide strong meaningful insights for policy development in the coming years.

6.5.3. Neighbourhood and community play spaces

There were both differences and similarities in children's play spaces in urban and rural neighbourhoods. An obvious difference was that children in rural settings were more likely to play in nearby fields (mesosystem). The finding is explained by the fact that the neighbourhood of a child living in a rural setting differs to that of a child in an urban area. Children in rural settings have fields nearby for their play and recreation as compared to their urban counterparts. The lack of access to fields for children in urban settings highlights the importance of other green and natural space

(e.g. communal green space, green corridors, natural nooks and crannies) in neighbourhoods. This finding may also help us understand how children in rural settings forge some independence in their play lives as they move beyond the spaces of direct adult surveillance. As mentioned elsewhere in this discussion, these results are consistent with those of Kilkelly et al., (2016) who also reported that children in rural settings in Ireland were more likely to play in home gardens and nearby fields.

A similarity in this study relating to urban and rural settings was that the local community (exosystem) was the largest recorded play space overall (urban 46%, rural 31%). The difference being that children and young people in urban areas recorded their physical activity play and recreation in a wider variety of places in the local community (e.g. indoor sports, public playground and park, café, shopping centre) in comparison to their rural counterparts, who predominantly recorded images of sports grounds. Another significant difference in play space was that children in rural settings recorded the vast majority of photographs in recreational sites outside of the local community (macrosystem), while day-tripping or vacationing with family and/or friends. These combined results tell us that children in rural settings may have less access to a diversity of activities and locations in their immediate surroundings, which is also supported in the literature (Valentine & McKendrick, 1997; Matthew et al., 2000; Tucker & Matthews, 2001; Powell, Taylor & Smith, 2013). The results also draw attention to the role of parents in providing play and recreational opportunities for children in rural settings. In comparison, children and young people in urban settings may have had more mobility and/or a greater choice of what to represent.

6.6. Barriers and Enablers to Physical Activity Play

An objective of this study was to establish the barriers and enablers, from children's perspective, to physical activity play. There are a range of factors influencing children's physical activity play in schools, local neighbourhoods and the wider built environment. Understanding what enables children's physical activity play is complex. It requires understanding the multiple influences that act in interdependent ways to either support or hinder children's play (Lee et al., 2015). For this reason,

the examination on the barriers and enablers of physical activity play can also be situated within the adapted social ecological model presented in Figure 6.1.

A significant finding to emerge from this study is the importance of other children/playmates for enabling physical activity play across all spaces including the home (microsystem), neighbourhood (mesosystem), local community (exosystem) and outside of the local community (macrosystem). This was evidenced by the fact that most of the photographs produced in this study depict play and recreational activities with friends and siblings. This result aligns with previous studies which have shown that the presence of other children is an important determinant in a child's decision to engage in physical activity play and recreational activities outdoors (Veitch et al., 2006; Brockman, Jago & Fox, 2011; Kilkelly et al., 2016; Barron & Emmett, 2020).

The current study reported that the presence of friends may be more important that the physical space, with children staying indoors ("on the PlayStation or something like that"), or declaring a place "boring", if a friend was not available for play outdoors. This result broadly supports the work of other studies that have examined both social and environmental characteristics of play space and found social factors were of greater significance for children's physical activity play (Aarts et al., 2010; Bringolf-Isler et al., 2010). The presence of other children was also used to negotiate greater autonomy and independent mobility with parents, and therefore opportunities for physical activity play ("If I say my friend will be there, I might be allowed to go there"). Friends and siblings therefore not only provide companionship for play and mobility but are also important in parent-child negotiation in terms of reassurance and a sense of safety (Mikkelsen & Christensen, 2009; Nansen, et al., 2015).

This study reported that children and young people used smart/mobile phone devices as an aid in developing greater independent mobility and for keeping in contact with parents when participating in play and recreation in neighbourhoods. At first glance, the increased ownership and use of smart/mobile phone devices are more likely to be viewed as a barrier to physical activity play. This study has in fact reported that the use of electronic devices (including smartphones) in the context of

secondary school settings[16] may increase sedentary activities in some young people, and act as a barrier to physical activity play during break-times. Nevertheless, other studies have also reported that the advances in mobile phone technology (and the fact that it is now possible to monitor children's movements away from the home environment) is linked to greater independence in the neighbourhood (Nansen et al., 2017; Chaudhury et al., 2019). The finding also echoes the data obtained in the Shaw et al., (2015) international comparison study of 16 countries, which reported mobile phone ownership was significantly associated with '*allowed to go places within walking distance alone*' for four countries only, including Ireland, France, Australia and South Africa. In an Irish context, over two-thirds of 8-to-13-year-olds now own their own smartphone (Cybersafe Ireland, 2019). It would be interesting to monitor this going forward in order to provide evidence on how possessing and using a mobile phone supports children and young people's autonomy and independence in the broader context, and, by association, increases their opportunities for physical activity and play. This has the potential to add balance to the growing debate regarding the potential side effects of mobile phone use of children and young people.

A consistent finding in this study was the parental rules and restrictions (in the microsystem) that constrain children's access to specific places in neighbourhoods and the wider built environment (mesosystem, exosystem, macrosystem). From children and young people's perspectives, parents specifically had safety concerns with respect to road traffic, child abduction/strangers and older children/gangs. For instance, permission to engage in physical activity play in the neighbourhood for some children was possible only when places were situated close to home and easily accessible (e.g. no busy/main roads to cross). This finding was not surprising considering parents' safety concerns are well-known to be a primary barrier to children's independent mobility (up to 13 years), and therefore physical activity play opportunities (Carver et al., 2010; Carroll et al., 2015; O'Keeffe & O'Beirne, 2015; Loebach & Gilliland, 2016b; Francis et al., 2017). Children in middle childhood in this study had a strong awareness that parental restrictions were eased with increases in children's chronological age ("My older brother goes out a lot now that he is a teenager. I'd like to ride my bike up the town, but I'm not allowed. Only my

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[16] Electronic devices including mobile phones were not permitted to be used in the primary schools in which fieldwork for this study took place.

brother can go"). This is also widely supported in the literature and is a response to parents recognising increasing physical and cognitive capabilities as children age (Shaw at al., 2015). Parental restrictions and safety concerns in this study were similar for children in both urban and rural settings, supporting studies that have questioned the 'myth' of the rural childhood idyll (i.e. the idealised/romanticised construct that presents rural areas as a perfect place to live) (MacDougall, Schiller & Darbyshire, 2009; Powell, Taylor & Smith, 2013).

The influence of seasonality and weather conditions on children's physical activity play has been relatively overlooked in the literature. It has however been observed that children's activity levels exhibit a seasonal pattern in many settings including Europe (Gracia-Marco et al., 2013; Atkin et al., 2016), the USA (Beighle et al., 2008) and Australia (Cleland et al., 2008). In most cases, reduced physical activity is generally associated with winter, when dark evenings and wet weather is thought to inhibit activity (Chan & Ryan, 2009). This study was designed to account for seasonal variation and found that the weather was perceived by most children and young people to be a barrier to physical activity play in school, local neighbourhoods and the wider built environment. This finding echoes the results from a national consultation with children and young people who identified the cold, wet weather, lack of sunshine, and the fact that they cannot go outside to play when the weather is 'bad' as the second worst thing about living in Ireland (Coyne, Dempsey & Comiskey, 2012).

This study has reported that children in primary schools remained in their individual classrooms when it was deemed (by adults) too wet to play outside, with limited freedom to engage in physical activity play. As discussed, access to specific play space in some school settings was also largely determined by weather and seasons. For instance, the "summer field" was out of bounds during the wet and winter months and only used from September to October and from April to June (when school breaks for the summer). A clear finding from this study is that children wanted to make their own decisions regarding where they spend their break-times, and the activities they engaged in, regardless of the weather and the school's wet play policy. Interestingly, a recent study in Ireland found some evidence that children may not be deterred by wet weather at school providing they had rain-proof clothing (Kilkelly et al., 2016). Permitting children to play outdoors during wet break-time,

with rain-proof clothing, may lead to playing in wet weather becoming more culturally acceptable in Ireland overall, as it is in some Northern European countries (Harrison et al., 2017).

In child-based photography, most of the photographs depicting play and recreation and the natural environment were recorded during the warmer months of the year (spring, summer). These results further illustrate that the weather in Ireland can and does impact children's play and recreation, and how they relate to the environment. We cannot change the weather, however knowledge of how seasonality and weather conditions affect children's physical activity play could help policy makers adopt recommendations to mitigate its effects (Chan & Ryan, 2009). Future work should therefore consider how children in Ireland may overcome the barrier of wet weather for play purposes, which is also likely to support children's health and well-being overall. Ireland has fundamentally re-examined its relationship with the outdoors during the global Covid-19 pandemic presenting an opportunity for children's play and recreation to benefit as much as other sectors of society.

It was beyond the scope of this study to report in detail on the extracurricular activities that occurred during break-time to varying degrees at the four schools in which fieldwork was conducted (e.g. sports' practice, drama, music). It is however important to acknowledge how these practices act as a barrier to children's physical activity play in school settings. Baines and Blatchford (2019) report that the 'interventionist' view is gaining dominance in the UK, involving more deliberate management of students at break-time. As break-time is the main forum for children and young people's social life in school, this approach risks affecting the positive social opportunities experienced during break-time (Baines & Blatchford, 2019). The management of children and young people through extracurricular activities during break-time demonstrates a lack of understanding around the very concept of play, which is principally concerned with having free time and autonomy to undertake activities of their own choosing. This suggests a role for Irish policy and practice, via the Department of Education, to promote the importance of break-time as free recreational time, offering academic, cognitive, emotional, physical, and social benefits, which should not be diminished for any reason (Ramstetter, Murray & Garner, 2010), and as a fundamental right for all children.

6.7. Physical Activity Play in the Prevention of Childhood Obesity

Anthropometric studies relating to different age groups do exist in Ireland; however, there are limited studies covering middle childhood through to adolescence, which is the estimated age in which physical activity levels are known to decline, especially in girls. To answer one of the research objectives (research objective 5), the body weight and height measurements of 941 children, aged 8 – 17 years, were used to determine BMI and the prevalence of overweight and obesity of children and young people.

Using the IOTF cut-off points of BMI, the prevalence of overweight and obesity in the total dataset was 22.5% (girls 25.2%, boys 20.0%). The prevalence of overweight and obesity in children was 22.3% (girls 24.3%, boys 20.4%) and in young people was 22.60% (girls 25.50%, boys 20.0%). These results tell us that just over one in every five in the data set was overweight or obese, with girls more likely than boys to be overweight or obese across most age groups, especially during adolescence. These findings are consistent with those reported in the COSI study (Bel-Serrat et al., 2017) and the GUI longitudinal study (William et al., 2018). This study also reported notable differences in the overall prevalence of overweight and obesity according to geographical markers (i.e. urban or rural school location). These results have been discussed elsewhere in this discussion and will therefore not be repeated here.

There is consistent evidence that physical activity play is a major contributor to children's overall physical activity (Clark, Spence & Holt, 2011; Janssen, 2014; Schaefer et al., 2014; Gray et al., 2015). While attempting to increase the physical activity of children, research has primarily focused on organised and structured forms of physical activity and has mostly ignored physical activity play (Janssen & Leblanc, 2010). Childhood obesity is high in Ireland by international standards (Bel-Serrat et al., 2017). There is clearly a need to advocate for increases in physical activity and decreases in sedentary behaviour for the present and future health of children and young people (Tremblay et al., 2011). Physical activity play can be an important strategy in the fight against the global epidemic of childhood obesity (Janssen, 2014). Wider societal recognition of the value of the rights provided for in

Article 31 (UNCRC, 1989) may be all that is required for increasing children's physical activity.

6.8. Strengths and Limitations

This study has both strengths and limitations. A clear strength is the direct involvement of children and the ability to forefront their views and ideas regarding their play experiences in school and neighbourhood settings. This is in line with the 'new sociology of childhood' which states that children's cultures are 'worthy of study in their own right' (Prout & James, 1990, p.8), while also emphasising the necessity of children and young people's participation in matters that affect them (UNCRC, Article 12). This strength is compounded by the ethnographic approach and the use of child-centred participatory methods. The variety of methods used in this study enhanced the richness of the data by facilitating in-depth communication between myself and the child participant, enhanced trust and rapport, and children's explicit and tacit knowledge. This approach helped to empower children in the research process and acknowledged their rightful positions as 'experts' about their own lives and culture (James, 2001). Another strength of this study is the four school settings in which fieldwork was conducted. This ensured a large and representative sample of children and young people across urban and rural areas in Ireland. This also helped to bolster good sample size for the child-based photography and anthropometric measurement components of this study, ensuring validity and a range of variation of experience and perspective (Dewalt & Dewalt, 2011).

This study also has limitations, the recognition of which is imperative for credible research (Shipman, 2017). One lies in the higher representation of children in comparison to young people. It is well known in the literature that there are inherent challenges in research participation among young people (Skelton, 2008; Fox, 2013). The reasons for this are varied; however, as already discussed, young people were often busy during break-time with other commitments (e.g. sports, drama, music). Moreover, break-time is the main forum for young people's social life in school (Baines & Blatchford, 2019), and I was especially mindful of intruding on their social opportunities and their free time. My presence in secondary schools was largely viewed with disinterest and as just another adult figure within a large and busy school environment. It was only through perseverance, patience, and

reciprocating invitations to attend events outside of break-time that subsequently developed rapport and enabled the fieldwork relations crucial for valid research. Being reflexive in the research setting in order to enhance the process of building and maintaining trust has been cited as the most important facet when conducting research with young people (Tickle, 2017). An ethnographic approach over a sustained period of time, therefore, has the clear advantage of establishing the trust necessary to help empower young people to participate in research (James, 2001; Tickle, 2017).

Another limitation of this study was gender imbalance. The unequal gender split was evident in the child-based photography where the sample who recorded photographs of their play and recreation outside of school hours was 60% girls. Although a balanced gender sample in the child-based photography may have been optimum, the study did not specifically seek a particular quantity of either gender. This research was conducted within the parameters of the school and participation was broadly open to those who had volunteered and had appropriate consent, irrespective of gender. Children have a right to have their voice heard and these are the children who are represented in this study. Nevertheless, it should also be reiterated that the analysis of data from the various methodological sources was a reflexive and ongoing process that continued long after exiting the field. This required me to examine, and then re-examine the data, to think about the study limitations, and to seek ways to minimise any potential weakness. In this way, I consciously sought to balance the contributions from both girls and boys, and not to omit one gender over the other.

The study was also limited by the low number of child-directed walking interviews. This was unfortunate as a greater number of walking interviews would have facilitated a more detailed description of children's play and recreation in local neighbourhoods and the wider built environment. Many children expressed an interest in participating in the walking interviews. Despite my best efforts, the walking interviews proved difficult to schedule (or rather re-schedule after inclement weather, child illness, holidays etc.) with parents outside of school hours, particularly in rural areas. Although small in number the walking interviews were invaluable for gaining rich insights and viewpoints from children and young people, and for the cross-validation of conclusions by comparing them with multiple data sources.

Another limitation of this study is the time elapsed since the period when data were collected during the period September 2013 to June 2015. As mentioned earlier in this chapter, there has been a substantial growth in mobile phone use in recent years, with most 8-to-13 year-olds in Ireland now owning their own smartphone and social media profile (Cybersafe Ireland, 2019). During the Covid-19 pandemic there has been a significant increase in the use of technology among children in Ireland (Milosevic, Laffan, O'Higgins Norman, 2021). There is also a potential linkage between the Covid-19 pandemic and an increase in body weight and BMI in school-age children (Darmody, Smyth & Russell, 2020). Although there is a risk that some data has changed, it is important to reiterate that most of what was observed during fieldwork were traditional forms of physical activity play. We can be confident of the validity of the findings reported in this study because children's play and games have stood the test of time, generation after generation.

6.9.   Recommendations

There is much to be gained by facilitating and investing in children and young people's physical activity play. In agreement with the guiding principles of Healthy Ireland: The National Physical Activity Plan (Department of Health, 2016), the intent is to make the healthy choice easy. This could be achieved by increasing children's opportunities for physical activity play in all settings – at home, at school, in child care, neighbourhood and natural environments and by addressing the key barriers to children's physical activity play (Tremblay et al., 2015). Children's physical activity play needs to be resurrected as a focus across all areas of children's policy.

Policy

- There is a need to develop a renewed national policy on play and recreation in extensive consultation with children and young people. The National Play Policy (NCO, 2004) and the National Recreation Policy (OMCYA, 2007) have long expired and there are significant deficits in current national policies focused on children's play and recreation. Better Outcomes, Brighter Futures: The National Policy Framework for Children and Young People, 2014 – 2020 and, Healthy Ireland: The National Physical Activity Plan (Department of Health, 2016) have a strong focus on children's exercise, sports participation and structured organised activities while largely ignoring

physical activity play. Unlike sports participation however, the majority of children and young people do engage in physical activity play to varying degrees. Children in Ireland have also consistently cited play as one of the most important aspects of their lives (NCO, 2000; Department of Health, 2016; Kilkelly et al., 2016).

- The Department of Health, through Healthy Ireland, should promote the role of physical activity play in the prevention of childhood overweight and obesity. The forms of physical activity play for children and young people that should be supported in policy are long-standing 'traditional' play activities such as chasing games, ball games, rough and tumble play, wheel-based activities, skipping and walking-play. This should also include playing in playgrounds, open spaces and natural environments. Public health initiatives and government policies and strategies aimed at addressing childhood obesity by increasing physical activity would likely be unsuccessful if a physical activity play component were not included (Janssen, 2014). Physical activity play should therefore be prioritised at policy level to ensure national impact on children's health and well-being. This would have the knock-on effect of reducing sedentary lifestyles, physical inactivity and childhood overweight and obesity. It would also help to promote wider societal recognition for the value of the rights provided for in Article 31.

Schools/Education

- The Department of Education has a responsibility to promote greater awareness of the importance of break-time in schools as a child's personal time offering academic, cognitive, emotional, physical and social benefits (Ramstetter, Murray & Garner, 2010). This could be achieved by devising a formal play policy for schools reflecting the value of play at break-time. This study has demonstrated the importance of the school setting, and break-time specifically, for the physical activity play of children and young people.

- A key barrier to physical activity play is the increasing amount of extracurricular activities scheduled during break-time (e.g. sports, drama, music). This practice demonstrates a lack of understanding of the rights of

children and young people as provided for in Article 31. There has been a significant reduction in the length of break-time over the past two decades (Baines & Blatchford, 2019), which has been associated with negative consequences for children's development, health and well-being (Brussoni et al., 2015; Gibson, Cornell & Gill, 2017). Extending break-time duration throughout the school day would enable more time for physical activity play, increase physical activity levels and contribute to the overall health and well-being of children.

- Primary school children are generally denied physical activity play opportunities when it is deemed too wet to play outside. Government departments should support primary schools in the implementation of physical activity play during break-time in wet weather conditions (e.g. the provision of rain-proof clothing). This has the potential to increase physical activity levels and contribute a larger cultural shift in perception about playing outdoors in wet weather, as is the norm in some Northern European countries (Harrison et al., 2017). Cultural and societal changes are necessary to protect the health of future generations.

- The value of play space in school settings should be highlighted by the Department of Education. Schools have an important role in disseminating knowledge about healthy lifestyles and increasing physical activity levels. They should also have a pivotal role in facilitating physical activity play during break-time. This can be achieved by rethinking how spaces are currently used in school settings. Permitting access to a greater number of spaces (outdoors and indoors) and integrating natural elements and natural areas where possible would increase physical activity play for all children and young people. Creating walking paths with a mix of green/natural and built elements in proximity to school buildings with options of varying distances will specifically support young people's walking-play and socialising activities in secondary school settings.

Home, neighbourhood and wider community

- Planners, policy enablers and local authorities should involve children and young people in consultations in relation to the development of housing development plans and neighbourhood environments, including parks and playgrounds.

- The home is a significant influence on children's play. The home-garden has been identified as an important place for enabling children and young people's physical activity play. This supports the need to include adequate garden space into new residential housing development plans.

- Local authorities must ensure the provision of suitable places for children's play in neighbourhoods. This is especially important for children with limited independent mobility who need safe places to play with other children close to home. Children prefer green and natural local spaces where they can play, meet and spend time with friends. Roads and pathways in neighbourhoods are valued by children for facilitating specific forms of physical activity play. The WHO Global Action Plan on Physical Activity 2018 – 2030 (WHO, 2019) has proposed actions for member states such as lower speeds and traffic calming in urban areas, including 30 km/h speed restrictions in residential neighbourhoods, as well as other traffic calming strategies. Parents' safety concerns with respect to road traffic are a key barrier to children's physical activity play. When streets become safer parents are more likely to permit children to use them for physical activity play purposes (Tranter, 2016).

- Restrictive or excessively risk-averse playground guidelines are a barrier to children's physical activity play and have negative consequences for their health and well-being. Research-informed guidelines for the design of public playgrounds should be created and embedded within revised national play and recreation policies (Lynch et al., 2019). This will help to ensure local authorities provide equitable play opportunities for children in Ireland (Lynch et al., 2019).

- Parents influence children's physical activity play in many ways. Family-style recreation, which are easily and affordably accessed, should be promoted by the Department of Health for population increases in physical activity.

Research

The results of this study help to identify multiple areas for future research. Children have a right enshrined in international law to have their views heard on issues that affect them (UNCRC, Article 12). First and foremost, any future research should incorporate child-focused research methods where appropriate.

- There are many unanswered questions about sociodramatic play in middle childhood which can, and does, involve physical activity play. The sociodramatic aspects of physical activity play may offer rich and stimulating opportunities for future research.

- The findings from this study leads us to question the literature on rough and tumble play that believe it to peak in middle childhood and decline during adolescence. Future research should consider the intrinsic value of rough and tumble play during adolescence, especially for boys.

- Future research is required to investigate how schools could best support risk taking in children and young people's physical activity play.

- Understanding the influence of the home space on children's physical and sedentary play is an important issue for future research. Studies exploring the characteristics of the home-garden that support increased physical activity play of children are warranted.

- Future research should consider ways for children in Ireland to overcome the barrier of wet weather to physical activity play.

- It would be interesting to conduct research associated with children's mobile phone use and increased opportunities for physical activity play (outside of the school setting). This may bring some balance to the growing debate about the potential side effects of mobile phone use of children and young people. Equally, the move towards young people spending break-time using personal electronic devices for screen-based play is an area that also requires more research.

- There is substantial scope for enhancing children and young people's health through the active use of parks. Future research should deliver a deeper comprehension of the factors that influence park visitation, other than availability and accessibility.

- Further investigation into the depth of health disparities between children in rural and urban areas of Ireland would be a valuable piece of research and provide strong meaningful insights for policy development in the coming years.

6.10. Concluding Comments

This thesis set out to explore the physical activity play and recreational activities of children and young people in urban and rural settings in Ireland. As there is a global gap in knowledge regarding physical activity play, this study brings some unique findings to children's play research not just relevant in Ireland, but also internationally. The study set important research objectives and has achieved its aim by addressing the objectives mostly through the use of a child-centred ethnographic approach. In doing so it has ensured the authenticity of the child's voice and shed valuable insight into the complexity and multifaceted nature of physical activity play.

The societal and behavioural changes over time that have influenced how children play, and are allowed to play, are reflected on the experiences of contemporary childhood in fundamental ways. They have also created major barriers to children's engagement in physical activity play today. For example, the lack of recognition of

the importance of play and recreation to and for children; resistance to children's use of public spaces; balancing risk and safety; overly structured and programmed schedules; growing role of technology and electronic media – all of which constitute a global threat to play (UNCRC, 2013). Despite this, it is evident from this study that all children and young people do engage in physical activity play to varying degrees.

There is substantial evidence supporting the value and benefits of physical activity play for children's development, health and well-being. The importance of physical activity for overall health and mental well-being was a dominant theme of the Covid-19 pandemic. Throughout this period, with many private and public amenities inaccessible, a thorough reassessment was made of the importance of private open space at home and public open space in the neighbourhood. When public playgrounds shut, the green areas of the park took on much greater significance. One of the reckonings from Covid-19 may be a deeper appreciation of these public open spaces and future policy thinking should be informed by this.

A recalibration of attitudes and policies is required to enhance children's opportunities for physical activity play in all settings including schools, neighbourhoods and the wider built environment. This will result in healthier and happier children and protect the health of future generations, which is clearly worth working towards. It is hoped that the findings reported here will stimulate discussion, research, action and policies around the physical activity play and recreation of children and young people.

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Appendices

Appendix A. School Principal Note

Dear Principal

I really appreciate you taking the time to meet with me to discuss my PhD research: ***Physical activity play and the play spaces in which young people (8 – 16 years) growing up in Ireland actively engage.***

As discussed, I have put together an information pack for your records. The pack includes the following:

1. Governing Body Information Letter.
2. Letter of Support from DCU.
3. Protocol for Dealing with Distressed Students.
4. Child Protection Statement.
5. DCU Counselling Service for Children and Young People.

If you have any queries in relation to this study, please feel free to contact me on 0879313131/01-7007706 or via email: karinda.tolland2@mail.dcu.ie. Alternatively, please contact my Supervisor, Dr Carol Barron on 01-7007928 or email: carol.barron@dcu.ie.

I am delighted that you have shown a genuine interest in this research and look forward to finalising details with you.

Kind Regards,

Karinda Tolland

PhD Research Postgraduate

School of Nursing and Human Science

Dublin City University

Appendix B. Governing Body Information Letter

Dear Governing Body

Thank you for taking the time to consider the following PhD research proposal within your school. The research study is an investigation of: ***Physical activity play and the play spaces in which young people (8 – 16 years) growing up in Ireland actively engage.***

Traditionally, physical activity in young people has been examined through participation in structured sporting activities and ignored the role of physical activity play and recreation. This research will identify children and young people's preferences for physical activity play within the school setting as well as their local neighbourhood.

Throughout the year I will be observing and taking notes of children/young people playing in the school setting, predominantly in the school playground. Part of this research also gives students the opportunity to become actively involved. A small number of students who choose to take part and have signed parental consent will be given a digital camera to take home for a week in the winter and summer months. The 'photographs' phase of the research hopes to establish what and where children themselves like to play – this may differ to the ideas of adults. The student will then be invited to talk about their photographs in a general group discussion with others from the same year who also took photos. This discussion group will take place straight after school and will be 45 - 60 minutes.

In addition to this, a small number of children who choose to take part and have signed parental consent will be involved in a walking interview (or 'walk about') around the local neighbourhood. This form of walking interview permits the student to show rather than simply describe the spaces that are significant to them in regard to physical activity and play.

Finally, this study would like to find out more information regarding the Body Mass Index of children/young people. The weight and height measurements of consenting children and young people will be collected in schools by trained researchers. Measurement of weight and height are simple and unobtrusive methods used to

calculate Body Mass Index (kg/m2). The collection of this data contributes to understanding the weight status of Irish children and how their weight changes as they mature.

I will send out information letters and consent/assent forms to parents and students regarding the study. If any student returns the form saying they do not wish to take part, I will exclude them from observations.

This research adheres to the highest levels of confidentiality, unless there are clear overriding reasons (most importantly, when there is a child protection issue). All personal data will be kept in a safe and secure environment and destroyed at a reasonable time after the study. All data will be used for academic purposes only.

I am committed to protecting the children/young people I research with and have certificates in Safeguarding & Protecting Children, as well as regularly undergoing Garda clearance to work with children. Every effort will be made to ensure that the involvement and participation of young people in this research project is safe, respectful, meaningful and beneficial. The student is free to withdraw from any aspect of the research at any time.

If you have any queries in relation to this study, please feel free to contact me on 0879313131/01-7007706 or via email: karinda.tolland2@mail.dcu.ie. Alternatively, please contact my Supervisor, Dr Carol Barron on 01-7007928 or email: carol.barron@dcu.ie. Should you wish to speak with an independent person please contact: The Secretary, Dublin City University Research Ethics Committee, c/o Research and Innovation Support, Dublin City University, Dublin 9. Tel 01-7008000.

This research is funded by the School of Nursing and Human Sciences at Dublin City University (DCU).

Kind Regards,

Karinda Tolland
PhD Research Postgraduate

Appendix C. Letter of Support from Supervisor/Dublin City University

Dear Governing Body/School Principal

Thank you most sincerely for taking the time to consider accepting Ms Karinda Tolland as a research student within your School during the School year 2013/2014. I can confirm that Ms Tolland is a PhD student under my supervision in the School of Nursing and Human Science, Dublin City University (DCU).

Ms Tolland is undertaking a fully funded PhD research programme, part of which is a year's data collection in the following area: ***Physical activity play and the play spaces in which young people (8 – 16 years) growing up in Ireland actively engage***.

Please be assured that Ms Tolland has a full Garda clearance to enable to her to work with children and that this is a low risk project and will be completed within the framework of *Children First: National Guidance for the Protection and Welfare of Children* (DCYA, 2011) and *Guidance for Developing Ethical Research Projects Involving Children* (DCYA, 2012). If you have any queries in relation to this study, please feel free to contact me on 01-7007928 or via email carol.barron@dcu.ie.

Yours sincerely

Dr. Carol Barron PhD, MSc, BA, Dip Pharm, RNT, RGN, RSCN
BSc Nursing, Programme Chair
School of Nursing and Human Science, Faculty of Science and Health
Dublin City University
Dublin 9   Tel:+01 -7007928

Appendix D. Garda Clearance

Ollscoil Chathair Bhaile Átha Cliath
Dublin City University

DCU

9th May, 2013

To Whom It May Concern

Please be advised that Karinda Tolland completed the Garda Vetting process in 2013 for the purpose of her academic programme of study at Dublin City University.

If you have any queries, please do not hesitate to contact me on 01 700 5564.

Yours sincerely

Nocleen Smullen

Nocleen Smullen
Senior Administrative Assistant
Registry
Dublin City University

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Appendix E. Child Protection Statement

The Principal Investigator is committed to a child-centred approach in working with young people. Every effort will be made to ensure that the involvement and participation of children and young people in this research project is safe, respectful, meaningful and beneficial. I adhere to the recommendations of 'Children First: National Guidance for the Protection and Welfare of Children', published by the Department of Children and Youth Affairs (2011).

Code of Behaviour for Working with Young People

I. Respect all young people participating in the study

II. Do not use offensive or inappropriate language towards young people

III. Do not single out a particular young person for unfair focus or attention

IV. Do not hit or physically chastise young people

V. Inappropriate touching of any form is not allowed

Should a young person participating in the study disclose details that indicate their safety and welfare might be at risk from family, peers or other persons the researcher will follow the reporting procedures outlined below.

Procedure for reporting concern for safety of a young person

1. Listen carefully and supportively to the young person disclosing the information.

2. Confidentiality cannot be promised with regard to the disclosure if a young person's safety is at risk.

3. Details of the disclosure will be recorded including date, time and people involved as soon as possible and retained securely. Information recorded will only contain facts disclosed.

4. Details of the disclosure will be reported as soon as possible to the Designated Liaison Person in the school for child protection or to the school principal.

5. Allow the school to act via their child protection procedure.

6. Follow-up the outcome and actions taken with the Designated Liaison Person in the school to ensure the case has been correctly investigated in line with 'Children First: National Guidance for the Protection and Welfare of Children' (2011).

Appendix F. Counselling Service for Children

HLC Healthy Living Centre

To whom it may concern

This letter is to confirm that Ms. Karinda Tolland has counselling services available to her if required to support the research project

An ethnographic investigation of physical activity play and the play spaces in which young people (8 – 16 years) growing up in Ireland actively engage.

Counselling services will be provided by the Healthy Living Centre, School of Nursing and Human Science, Dublin City University.

Yours Sincerely

Dr. MaryRose Sweeney

DCU

Appendix G. Protocol for Dealing with Distressed Students

Should any participating student become distressed, upset or stressed during any phase of the research study, and if the researcher is made aware of this, she will follow protocol outlined here.

1. Withdraw student from activity in question.

2. Cease activity for other students present if necessary (e.g. focus group).

3. Ask the student if he/she would like to discuss their concerns privately.

4. Advise student that we must report the incident to the relevant person in the school.

5. Record the facts of the incident.

6. Report the facts to the School Principal or Designated Liaison Person.

7. Allow the school to follow local protocol in offering support to the student (e.g. school counsellor, reporting to parents).

8. Schools will also have contact details for the counselling service at DCU in the Healthy Living Centre for any participants wishing to avail of the service.

Appendix H. Information Letter for Teachers

Dear Teacher / Classroom Assistant

I am a PhD student with Dublin City University and am currently conducting research in your school in relation to the specific forms of **physical activity play** that children and young people growing up in Ireland actively engage. I am interested in **what and where they like to play**. I will be observing and taking notes of children playing in the school setting, predominantly in the school playground. I will distribute information letters and consent/assent forms to parents and students regarding the study. The mode of distribution of forms to parents is via the student. Only students who return the form will be included in observations or any other aspects of the study.

This study would like to better understand the weight status of Irish children and how their weight changes as they mature. For this reason, I would like to record students' weight and height measurements. Measurement of weight and height are simple and unobtrusive methods used to calculate Body Mass Index (kg/m2). With the exception of removing shoes for height measurement, all children will be measured fully clothed.

Part of this research gives students the opportunity to become actively involved. A small number of students who choose to take part and have signed parental consent will be given a digital camera to take home for a week. The 'photographs' phase of the research hopes to establish **what and where children** themselves **like to play** – this may differ to the ideas of adults. The student will then be invited to talk about their photographs in a group discussion. This will take place straight after school on the school premises and will not last any longer than 60 minutes. A gatekeeper will be in the vicinity of the group discussion but not too close to where data collection occurs (within view or calling distance, but not able to overhear what is being said).

In addition, a small number of students who choose to take part and have signed parental consent will be involved in a walking interview (or 'walk about') around the local neighbourhood. The walking interview permits children to show rather than simply describe the **spaces** that are significant to them in regard to **physical activity play**.

This research aims to have a minimum impact on school routine and activities. I will be observing and speaking with students during break-time or observing during their PE lesson. Any other data collection will be conducted outside of class hours.

This research is being conducted across four schools in urban and rural settings across Ireland which includes two primary and two secondary schools. This spread allows for a representational view of how students engage in physical activity play in differing spaces in schools and neighbourhoods. It also identifies geographic variation in weight status among children and young people.

This research adheres to the highest levels of confidentiality, unless there are clear overriding reasons (most importantly, when there is a child protection issue). All data will be used for academic purposes only.

Every effort will be made to ensure that the student's participation in this research is safe, respectful, meaningful and beneficial. The student is free to withdraw from any aspect of the research at any time. Parental consent does not override student assent.

If you have any queries in relation to this study, please feel free to contact me on 0879313131/01-7007706 or via email: karinda.tolland2@mail.dcu.ie. Alternatively, please contact my Supervisor Dr Carol Barron on 01-7007928 or via email: carol.barron@dcu.ie. Should you wish to speak with an independent person please contact: The Secretary, Dublin City University Research Ethics Committee, c/o Research and Innovation Support, Dublin City University, Dublin 9. Tel 01-7008000.

Kind Regards,

Karinda Tolland
PhD Research Postgraduate

Appendix I. Preliminary Themes and Codes

Ballyway Primary School	Rural
Theme: Play Activities	**Theme: Play Space**
Codes	**Codes**
Dancing: Singing, performance	Segregation: Differing play spaces
Clapping games	Restricted movements. Out of bounds
Soccer: Unstructured, structured, performance	Playground rules
Skipping: Single rope, long rope games	Adult surveillance
Chasing games, hide-and-seek	Playground markings
Gymnastics: Practice, performance	Playground Rota: Play activities, organised sports
Basketball: Unstructured, structured	Physical features: Natural areas
Ball play: Skills/tricks, pretend play	Physical features: Built environment
Sociodramatic play as physical activity play	Safety: Tears, knocks, injuries
Wet play: Indoor play	Seasonality: "Summer Field"
Rough and tumble play	Restricted time
Loose play/sports equipment	Dominance: Territory
Hanging out as physical activity play	
Prohibited playground games	
Card trading/swapping: Soccer/football, Pokémon	
Theme: Social Context of Break-time	**Theme: School Culture**
Codes	**Codes**
Peer group: Friendship, popularity	"Active breaks"
Gender. Single-gender, mixed-gender play	Break-time: Extracurricular activities
Solitary play	"Super Troopers": Health homework
Pop culture: Media influence	Break-time: Restriction, Punishment
Technology talk: Screen-based activities	W.O.W: Walk to School Wednesday
Perception of play: Changes overtime	Playground monitors (6th class students)
Peer transmission of play	Active transport to school (walking, cycling)
Perception of cost: play objects, extracurricular	
Competition: On the playground	
Parody in play	
Affection: On the playground	

Appendix J. Photography Method. Age-Appropriate Plain Language Statement and Student Assent/Parent Consent (8 – 11 years, Primary School) & (12 – 16 years, Secondary School)

A. (8 – 11 years, Primary School)

PHYSICAL ACTIVITY PLAY STUDY

Would you like to help me with my project?

P H O T O G R A P H S

I am interested in finding out about children's physical activity play. You can help by taking photographs of WHAT and WHERE you like to play.

WHO CAN GET INVOLVED?

A number of children from 4th, 5th and 6th class who have their parents signed consent can get involved.

WHY SHOULD I GET INVOLVED?

This gives you the chance to show me **WHAT** and **WHERE** you like to play in your school and neighbourhood. I hope you will find taking photographs **FUN.**

WHAT DO WE HAVE TO DO?

You will be given a digital camera and shown how to use it. Take the camera home and take pictures of **WHAT** you normally like to play and **WHERE** you like you play outside of the school.

HOW LONG CAN WE KEEP THE CAMERA?

Keep the camera for one week. Take all your photographs and then return it to the school on the following Monday.

WHAT HAPPENS NEXT?

I would like you and your parents to review the photographs and to delete any of the images from the digital camera that you do not wish to be included in the research.

WHEN DO WE TALK ABOUT OUR PHOTOS?

You will then be invited to talk about your photographs in a small group with the other boys/girls in your class who also took pictures. This will take about approximately 45 minutes and will be done one day straight after school. The talk will be voice recorded using my iPhone to make sure that nothing you say is forgotten.

WHAT HAPPENS TO OUR PHOTOS?

I would like to use some of your photographs for reports and presentations. I would never use any of your photographs without your permission.

DO I HAVE TO PARTICIPATE?

No. If for whatever reason you don't want to participate in this study, I will respect your wishes. I won't mind at all.

I WOULD LIKE TO ASK QUESTIONS?

Great... I am always very happy to answer any of your questions. You will find me in the school playground at break-times. You are also most welcome to call me on 0879313131 or to email me on karinda.tolland2@mail.dcu.ie.

TO BE COMPLETED BY STUDENT

I would like to take photographs as part of the Physical Activity Play study and agree to the following:

1. I, _____, would like to take photographs of what and where I like to play outside of the school.

2. I will keep the digital camera for one week only.

3. My parents and I will delete any images from the digital camera that we do not wish to be included.

4. I agree to take part in a small group conversation with other boys/girls in my year about the photographs I took.

5. I understand that Karinda will record the group conversation using her iPhone to make sure that nothing we say is forgotten.

6. I understand that Karinda may use my photographs and/or my comments in a study (called a PhD).

7. I have been promised that anything I tell Karinda is highly confidential.

8. I know that I don't have to take part in this study even if my parents are okay with me taking part. No one will be annoyed if I decide to stop at any time.

9. I know that I can ask questions at any time, now or later.

Name of Student: _____ **(BLOCK CAPITALS)**

Year: _____

Signature of Student: _____

Date: _____

TO BE COMPLETED BY PARENT/GUARDIAN

I would like my child to take photographs as part of the **Physical Activity Play** study. I agree to the following:

a) I have read the information letter and understood the information provided.

b) My child may be given a digital camera to record what and where he/she play's over a one-week period.

c) We will delete any images from the digital camera that we do not wish to be included in the research.

d) I give consent to my child taking part in a group discussion and being audio recorded.

e) I give my consent for photographs and/or comments to be reproduced for educational and/or non-commercial purposes, in reports, presentations, publications, connected to the Physical Activity Play study.

f) I understand that my child's identity in this study will be treated as highly confidential.

Name of Parent/Guardian: _____ (BLOCK CAPITALS)

Signature of Parent/Guardian: _____

Date: _____

Please sign the attached form and return it directly to me. I will be in your PE class or in the school yard at break-times.

B. (12 – 16 years, Secondary School)

Dear Student

You have indicated your interest in taking photographs as part of the **Physical Activity Play and Recreation Study** being conducted in your school. The aim of this activity is for you to take photographs of the places in your neighbourhood where you are physically active and/or where you like to play. This will give you an opportunity to show me **what you like to play** and **where you like to play** rather than simply describing it to me.

You will be given a digital camera and shown how to use it. You will keep the camera for one week only. At the end of the week you and your parents should review the photographs you have taken and delete any of the images from the digital camera that you do not wish to be included in the research. You will return the camera to me at the school on the following Monday.

WHEN DO WE TALK ABOUT OUR PHOTOS?

I will then invite you to take part in a group discussion with others from your year who also took photos. This will take place straight after school on a day that is convenient for you and will take approximately 45 - 60 minutes. I would like to audio record the group session using an iPhone to ensure the accuracy of your views and experiences. It is important that you treat all participants in this group discussion with dignity and respect and that you do not disclose information about any other student who has taken photographs.

WHAT HAPPENS TO THE PHOTOGRAPHS?

Your photographs are very important to this study. I would like to use some of your photographs (in electronic or print form), in reports, presentations, publications and exhibitions arising from the project. I would never use any of your photographs without your permission. Any information supplied by you is highly confidential and anonymous. Confidentiality cannot be promised with regard to information disclosed that indicates a students' safety or welfare is at risk. All photographs will be securely stored by the researcher and destroyed at a reasonable time after the study.

DO I HAVE TO PARTICIPATE?

No. If for whatever reason you decide you no longer wish to participate in taking photographs, I will respect your wishes. Participation in this study is entirely voluntary and you are free to withdraw at any time. Parental consent to participate will not override your wish to withdraw.

I WOULD LIKE TO ASK QUESTIONS?

Great... I would be very happy to answer any of your questions. Please feel free to speak with me directly or contact me on 0879313131/01-7007706 or via email: karinda.tolland2@mail.dcu.ie. Should you wish to speak with an independent person please contact: The Secretary, Dublin City University Research Ethics Committee, c/o Research and Innovation Support, Dublin City University, Dublin 9. Tel 01-7008000**.**

WHAT NEXT?

I would be grateful if you and your parents would agree to consent to you taking photographs as part of the **Physical Activity Play and Recreation Study.**

TO BE COMPLETED BY STUDENT

I would like to take photographs as part of the Physical Activity Play and Recreation Study and agree to the following:

a)   I have read the information letter and understood the information provided.

b)   I agree to take photographs using a digital camera to record what and where I play over a one-week period.

c)   I agree to participate in an audio recorded group discussion with other students of the same age who also took photographs of what and where they play over a one-week period.

d)   I give my consent for photographs and/or comments to be reproduced for educational and/or non-commercial purposes, in reports, presentations, publications, connected to the **Physical Activity Play and Recreation Study**.

e)   I agree to abide by the confidentiality arrangements of this research and to treat all participants with dignity and respect.

f)   I understand that I am free to withdraw from this research at any time. Parental consent to participate will not override my wish to withdraw.

Name of Student: _____ **(BLOCK CAPITALS)**

Year: _____

Signature of Student: _____

Date: _____

I would like my child to take photographs as part of the **Physical Activity Play** study. I agree to the following:

a) I have read the information letter and understood the information provided.

b) My child may be given a digital camera to record what and where he/she play's over a one-week period.

c) We will delete any images from the digital camera that we do not wish to be included in the research.

d) I give consent to my child taking part in a group discussion and being audio recorded.

e) I give my consent for photographs and/or comments to be reproduced for educational and/or non-commercial purposes, in reports, presentations, publications, connected to the **Physical Activity Play and Recreation Study**.

f) I understand that my child's identity in this study will be treated as highly confidential.

Name of Parent/Guardian: _____ (BLOCK CAPITALS)

Signature of Parent/Guardian: _____

Date: _____

Please sign the attached form and return it directly to me. I will be in your PE class or in the school yard at break-times.

Appendix K. Photography Method. Parent Information letter

Dear Parent/Guardian

As you are aware, research into **physical activity play** that children and young people growing up in Ireland actively engage in is being conducted in your child's school. Part of this research gives your child the opportunity to become actively involved. This phase of the research hopes to establish **what and where children like to play**. A small number of children who choose to take part and have signed parental consent will be given digital cameras to take home. They will be asked to take pictures of places/objects/games they normally like to play outside of the school environment over a one-week-period.

Before returning the camera to me, I would like for you and your child to review the photographs and to delete any of the images from the digital camera that you do not wish to be included in the research. The children will then be invited to talk about their photographs in a general group discussion with other children from their same year who also took photographs. This group discussion will take place straight after school on (day and date) and will take 45 - 60 minutes. The group discussion will be audio recorded to ensure accuracy of transcription.

This research adheres to the highest levels of confidentiality, unless there are clear overriding reasons (most importantly, when there is a child protection issue). All photographs will be securely stored by the researcher and destroyed when no longer required for the purpose of this study (within a maximum set period of 5 years). Photographs will be used for academic purposes only.

Participation in this study is entirely voluntary and you are free to withdraw your child at any time without any negative consequences attached to this decision. Furthermore, if, at any time, your child withdraws their assent, parental consent will not override this wish.

Every effort will be made to ensure that your child's participation in this research is safe, respectful, meaningful and beneficial. Please could you complete the attached consent form and return it via your child as soon as possible if you would like your

child to take part in this phase of the study. I will be collecting consent forms during PE class or in the school yard at break-times.

If you have any queries in relation to this study, please feel free to contact me on 0879313131/01-7007706 or via email: karinda.tolland2@mail.dcu.ie. Alternatively, please contact my Supervisor Dr Carol Barron on 01-7007928 or via email: carol.barron@dcu.ie. Should you wish to speak with an independent person please contact: The Secretary, Dublin City University Research Ethics Committee, c/o Research and Innovation Support, Dublin City University, Dublin 9. Tel 01-7008000.

This research is funded by the School of Nursing and Human Sciences at Dublin City University (DCU).

Kind Regards,

Karinda Tolland
PhD Research Postgraduate

Appendix L. Walking Interview. Age-Appropriate Plain Language Statement and Student Assent/Parent Consent (8 – 11 years, Primary School) & (12 – 16 years, Secondary School)

A. (8 – 11 years, Primary School)

PHYSICAL ACTIVITY **PLAY** STUDY

Would you like to help me with my project?

'WALK ABOUT'

I am interested in finding out about your physical activity play. You can help by walking me around your neighbourhood and showing me WHAT and WHERE you like to play.

WHO CAN GET INVOLVED?

A number of children from 4th, 5th and 6th class who have their parents signed consent can get involved.

WHY SHOULD I GET INVOLVED?

By taking part in the **WALK ABOUT** you are giving me valuable information about the play spaces in your neighbourhood. I'm sure the **WALK ABOUT** will be FUN.

WHAT DO WE HAVE TO DO?

You will choose where the walk begins and where the walk ends - we can go wherever you would like to show me. During the **WALK ABOUT** I will ask some questions about where we are going and about the places you mention

WHAT ELSE?

As we walk around your neighbourhood, you are free to take photographs using my digital camera. I would also like to audio record the **WALK ABOUT** using an iPhone to make sure that nothing you say is forgotten.

WHEN WILL THE WALK ABOUT TAKE PLACE?

The **WALK ABOUT** will take place one day straight after school. I will contact your parents to organise a convenient time that suits you and your family.

WHAT HAPPENS TO OUR PHOTOS?

I would like to use some of your photographs for reports and presentations. I would never use any of your photographs without your permission.

DO I HAVE TO PARTICIPATE?

No. If for whatever reason you don't want to take part in the walk about, I will respect your wishes. I won't mind at all.

I WOULD LIKE TO ASK QUESTIONS?

Great... I am always very happy to answer any of your questions. You will find me in the school playground at break-times. You are also most welcome to call me on 0879313131 or to email me on karinda.tolland2@mail.dcu.ie.

TO BE COMPLETED BY STUDENT & PARENT/GUARDIAN

1. I, _____, would like to take part in a walking interview as part of the Physical Activity Play study.

2. I understand that Karinda will record our walk using her iPhone to make sure that nothing I say is forgotten.

3. I understand that Karinda may use my photographs and/or my comments in a study (called a PhD).

4. I have been promised that anything I tell Karinda is highly confidential.

5. I know that I don't have to take part in this study even if my parents are okay with me taking part. No one will be annoyed if I decide to stop at any time.

6. I know that I can ask questions at any time, now or later.

Name of Student: _____(BLOCK CAPITALS)

Class: _____

Student Signature: _____

Name of Parent/Guardian: _____(BLOCK CAPITALS)

Parent/Guardian Signature: _____

Telephone contact details (to confirm date and time of walking interview):
_____

Date: _____

Please sign the attached form and return it directly to me. I will be in your PE class or in the school yard at break-times.

B. (12 – 16 years, Secondary School)

Dear Student

You have indicated your interest in taking part in the walking interview phase of the **Physical Activity Play and Recreation Study** being conducted in your school. The aim of this activity is for you to show me the places in your neighbourhood where you like to play. We can go wherever you would like to show me and take whatever route you think is appropriate. As we go around, you are free to take photographs using my digital camera. I would also like to audio record the walking interview using an iPhone to ensure the accuracy of your views and experiences.

During the walking interview I will ask some questions about where we are going and about the sorts of places and activities you mention. As we walk around, I would like you to think about the following:

- Where do you like to go to play?
- Where would you not go?
- Where might you meet people you know?
- Do any of your friends live in the area?
- What do you like and not like about the area?
- Where are your favourite places for physical activity play?
- Where are your least favourite places?

By taking part in this study, you will have the chance to contribute valuable information about the play and recreational spaces in your area. **Your views and experiences are very important to this study.** Every effort will be made to ensure that your participation is fun, respectful, meaningful and beneficial.

I would be very grateful if you and your parents/guardian would agree to take part in the walking interview phase of this research. Please sign the attached form and return it (along with your parent's consent form) directly to me. I will be in your PE class or in the school yard at break-times. **Participation in this study is entirely voluntary and you are free to withdraw yourself and your recordings at any time.** Parental consent to participate will not override your wish to withdraw.

The research will be completely confidential. All voice recordings will be destroyed as soon as the research is finished.

If you have any questions in relation to this study, please feel free to speak with me directly or contact me on 0879313131/01-7007706 or via email: karinda.tolland2@mail.dcu.ie. Should you wish to speak with an independent person please contact: The Secretary, Dublin City University Research Ethics Committee, c/o Research and Innovation Support, Dublin City University, Dublin 9. Tel 01-7008000.

TO BE COMPLETED BY STUDENT:

I would like to take part in the walking interview 'walk about' as part of the Physical Activity Play and Recreation Study. I agree to the following:

a) I have read the information letter and understood the information provided.
b) I will be given a digital camera to take photographs of where I like to play.
c) I give consent to being audio recorded during the walking interview.
d) I give my consent for photographs and/or comments to be used for educational purposes, in reports, presentations, publications, connected to the **Physical Activity Play and Recreation Study**.
e) I understand that I am free to withdraw myself or my recordings from this research at any time. Parental consent to participate will not override my wish to withdraw.

Name of Student: _____(BLOCK CAPITALS)

Class: _____

Student Signature: _____

TO BE COMPLETED BY PARENT/GUARDIAN:

I would like my child to take part in the walking interview as part of the Physical Activity and Recreation study. I agree to the following:

a) I have read the information letter and understood the information provided.
b) My child will be given a digital camera to record images of the places where they like to play.
c) I give consent to my child being audio recorded during the walking interview.
d) I give my consent for photographs and/or comments to be reproduced for educational and/or non-commercial purposes, in reports, presentations, publications, connected to the **Physical Activity Play and Recreation Study**.
e) I understand that my child's identity in this study will be treated as highly confidential.

Name of Parent/Guardian: _____(BLOCK CAPITALS)

Parent/Guardian Signature: _____

Telephone contact details (to confirm date and time of walking interview):
_____

Date: _____

Please sign the attached form and return it directly to Karinda. I will be in your PE class or in the school yard at break-times.

Appendix M: Walking Interview. Parent Information Letter

Dear Parent/Guardian

As you are aware a **Physical Activity Play and Recreation Study** is being conducted in your child's school. Part of this research gives your child the opportunity to become actively involved. A small number of children have indicated their interest in taking part in the walking interview phase of the research. This is where the researcher walks alongside the child around their local neighbourhood talking about the spaces they like to play or conduct physical activity. The walking interview allows your child to show rather than simply describe the spaces and places that are significant to them. Your child will choose where the walking interview begins and where it ends as well as the routes we will follow.

The walking interview will be audio recorded to ensure accuracy of transcription. We will also use a digital camera to capture images of where they like to play. The walking interview will take place outside of school hours and will take approximately 45 - 60 minutes**.**

Your child's identity in this study will be treated as highly confidential. All personal data will be kept in a safe and secure environment and destroyed at a reasonable time after the study. **Participation in this study is entirely voluntary and you are free to withdraw your child at any time without any negative consequences attached to this decision.** Furthermore, if, at any time, your child withdraws their assent, parental consent will not override this wish.

Every effort will be made to ensure that your child's participation in this research is safe, respectful, meaningful and beneficial. Please could you complete the attached consent form (including your telephone contact details) and return it via your child as soon as possible if you would like your child to take part in a walking interview. I will be collecting consent forms during PE class or in the school yard at break-times. I will then contact you directly to organise a convenient time to conduct the walking interview.

If you have any queries in relation to this study, please feel free to contact me on 0879313131/01-7007706 or via email: karinda.tolland2@mail.dcu.ie. Alternatively, please contact my Supervisor Dr Carol Barron on 01-7007928 or via email: carol.barron@dcu.ie. Should you wish to speak with an independent person please contact: The Secretary, Dublin City University Research Ethics Committee, c/o Research and Innovation Support, Dublin City University, Dublin 9. Tel 01-7008000**.**

This research is funded by the School of Nursing and Human Sciences at Dublin City University (DCU).

Kind Regards,

Karinda Tolland
PhD Research Postgraduate

Appendix N: Breakdown of Preliminary Themes

Theme: Children's spatial mobility and independence	Theme: Social interaction
Codes	**Codes**
Independent mobility and geographic distance	Peer gathering places in built environment "place to meet up" "best place to meet"
Independent mobility and parental permission	Peer gathering places in natural environment "we like it here because it's quiet"
Control, autonomy, rights "once you're 18 you're in charge of yourself"	Legitimate designated spaces versus incidental social space
Independent mobility = social	Shared ownership of place
Social aspects of safety: fear of dangerous people or situations	The availability and presence of other children encourages play outdoors
Active transport (walkability, bike) to play space and school	Socialising prevents boredom
Mobility without adult but accompanied by peers or older siblings	Meaningful experiences: social interaction and relax with friends
Discovery of place with increased levels of mobility	Playmates influence type of play activity
Mobile phone ownership = higher level of independent mobility	Gender: same gender friends and mixed-gender play
Mobile phone used as a tool to organise activity	Street play: traditional games, soccer, hanging out, bike, go-kart
Possible parental surveillance with mobile phone ownership	Overcoming physical barriers to access playmates and play spaces
Theme: Children's play experiences in spaces and places	**Theme: Miscellaneous**
Codes	**Codes**
Children's favourite places: "we have a lot of fun in this estate" "top secret"	Adaptation/transformation of play spaces to suit other activities
Personal play likes	Differing play activities linked to age and life stages
Nature enhances life: "more nature is more better"	Rules and regulations regarding screen-based activities
Sense of ownership and connection to places "our place to come"	Seasonality, weather and play
Knowledge of spaces and places	Structural aspects of the environment: space and time availability for play
Features/characteristics of place: natural & purpose built	Play and sports in supervised/adult-directed settings
Family influence of place and activity	Financial barriers to participate, high cost of organised sports and summer camps
Sporting spaces and places	Parents (behaviour modelling, encouragement, transportation)
Place feelings and emotions and physical sensations	Health benefits to play: to keep fit (participant), to keep them busy and healthy (parent)
Risky play: dilapidated site, trespassing	Level of competence in activity (low and high): "I do like playing but I'm not that good"
Physical aspects of safety: "The building isn't safe"	Children enjoyed being consulted: talking about and showing me their play preferences
Play resources and differing levels of satisfaction: "I'm a bit too old for it now"	Indoor play: TV, PlayStation, Xbox

Appendix O. Participant Observation and Physical Measures. Age-Appropriate Plain Language Statement and Student Assent (8 – 11 years, Primary School) & (12 – 16 years, Secondary School)

A. (8 – 11 years, Primary School)

PHYSICAL ACTIVITY STUDY

Would you like to help me with my project?

My name is Karinda Tolland and I am doing a study looking at how children growing up in Ireland like to **PLAY.** I will be in your school throughout the year and interested in speaking with you about your **PHYSICAL PLAY ACTIVITIES** within the school and local neighbourhood.

WHY SHOULD I GET INVOLVED?

This gives you the chance to tell me what you like to play and where you like to play. I hope you will find the different aspects of this study **FUN.**

WHAT DO WE HAVE TO DO?

TALK: I will be in the school playground at break-times watching how you play. Please come and speak with me. What you tell me will be **very important** and I don't want to forget anything so I would like to record some of our conversations on my iPhone.

MEASUREMENTS: During one of your PE classes I would like to record your weight and your height. You will have to remove your shoes so that we can get an accurate height measurement.
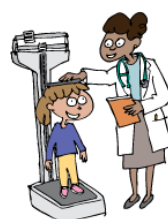
WHAT HAPPENS TO THE INFORMATION COLLECTED FOR THIS STUDY?

The information that I collect from you is confidential. No one will ever know what we have talked about. I will be writing a long essay (called a PhD) about what you tell me, but I won't mention your name. I won't even mention the name of your school!

DO I HAVE TO PARTICIPATE IN THIS STUDY?

No. If for whatever reason you don't want to participate in this study, I will respect your wishes. I won't mind at all.

I WOULD LIKE TO ASK QUESTIONS ABOUT THIS STUDY?

Great... I would be very happy to answer any of your questions. You will find me in the school playground at break-times. You are also most welcome to call me on 0879313131 or to email me on karinda.tolland2@mail.dcu.ie

TO BE COMPLETED BY STUDENT & PARENT/GUARDIAN

1. I, _____, am happy to take part in this study and to talk with Karinda about where and what I like to play.

2. I understand that Karinda might record our conversation using her iPhone to make sure that nothing I say is forgotten.

3. I have been promised that anything I tell Karinda is highly confidential.

4. I agree to give consent to have my weight and height recorded by a trained researcher.

5. I know that I don't have to take part in this study even if my parents are okay with me taking part. No one will be annoyed if I decide to stop at any time.

6. I know that I can ask questions at any time, now or later.

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I REALLY WANT TO TAKE PART IN THIS PROJECT.

Name of Student:_____(BLOCK CAPITALS)

Class: _____

Student Signature: _____

Please return this form to the box located in the School Office. Or directly to me.

B. (12 - 16 years, Secondary School)

Dear Student

I am carrying out a study looking at the how children/young people growing up in Ireland take part in **physical activity play and recreation**. I am interested in finding out **what** and **where you like to play** in the school and the neighbourhood. I will be observing and speaking with students during break time and/or observing during your PE class. I am interested in speaking with you about the types of physical activity play you take part in. The topics I would like to discuss include:

1. What forms of physical activity play do you enjoy? Why?

2. What forms of physical activity play would you like to take part in more?

3. What are the barriers to physical activity play in your school? In your neigbourhood?

4. Do you think physical activity play has an impact on your health? How?

I would like to record some of our talks using an iPhone to ensure accuracy of what you are telling me. **Your views and experiences are very important to this study**.

This study would like to better understand the weight status of Irish children and how their weight changes as they mature. For this reason, I would like to record your weight and height measurements in one of your PE classes. This will take less than 5 minutes of your time and you will be asked to remove your shoes to ensure an accurate height measurement.

WHY SHOULD I GET INVOLVED?

By taking part in this study, you will have the chance to contribute valuable information about play and recreational spaces in your area. Every effort will be made to ensure that your participation is **fun**, respectful, meaningful and beneficial.

WHAT HAPPENS TO THE INFORMATION COLLECTED FOR THIS STUDY?

Any information supplied by you is highly confidential and anonymous. No information that identifies any student will ever be shared or published. Confidentiality cannot be promised with regard to information disclosed that indicates a students' safety or welfare is at risk. All voice recordings will be destroyed as soon as the research is finished.

DO I HAVE TO PARTICIPATE IN THIS STUDY?

No. If for whatever reason you don't want to participate in this study, I will respect your wishes. Participation in this study is entirely voluntary and you are free to withdraw at any time. Parental consent to participate will not override your wish to withdraw.

I WOULD LIKE TO ASK QUESTIONS ABOUT THIS STUDY?

Great... I would be very happy to answer any of your questions. Please feel free to speak with me directly or contact me on 0879313131/01-7007706 or via email: karinda.tolland2@mail.dcu.ie. Should you wish to speak with an independent person please contact: The Secretary, Dublin City University Research Ethics Committee, c/o Research and Innovation Support, Dublin City University, Dublin 9. Tel 01-7008000.

WHAT NEXT?

I would be grateful if you and your parents would agree to take part in this research. Please sign the attached form and return it to the box located in the School Office or directly to me.

This research is funded by the School of Nursing and Human Sciences at Dublin City University (DCU).

I would like to take part in Physical Activity Play study and agree to the following:

1. I have read the information letter and understood the information provided.
2. I understand that this research is highly confidential and anonymous however confidentiality cannot be guaranteed with regard to information disclosed that indicates a students' safety or welfare is at risk.
3. I understand that my conversation with Karinda may be recorded to ensure the accuracy of my views.
4. I agree to give consent to have my weight and height recorded by a trained researcher.
5. I understand that I am free to withdraw from this research at any time. Parental consent to participate will not override my wish to withdraw.
1. I know that I can ask questions at any time, now or later.

Name of Student: _____(BLOCK CAPITALS)

Class: _____

Student Signature: _____

Please return this form to the box located in the School Office. Or directly to me.

Appendix P. Parent Information for Anthropometry and Consent

Dear Parent/Guardian

A research team from Dublin City University will be in [school name] on [date] to record children's weight and height measurements during PE class. This is part of a **Physical Activity Play and Recreation Study** where measurements will be used to determine Body Mass Index (BMI), which is defined as weight in kilograms divided by the square of height in metres. This will contribute to an understanding of the weight status of Irish children and how their weight changes as they mature. With the exception of removing shoes for height measurement, all children will be measured fully clothed.

This research adheres to the highest levels of confidentiality and anonymity. All data will be used for academic purposes only and will be kept in a safe and secure environment and destroyed when no longer required for the purpose of this study. All members of the Dublin City University research team regularly undergo Garda clearance to work with children.

We would be very grateful if you would agree to take part. **Participation in this study is entirely voluntary. Children are free to withdraw at any time without any negative consequences attached to their decision.** Furthermore, parental consent to participate will not override a child's wish to withdraw.

If you have any queries in relation to this study, please feel free to contact me on 0879313131 or via email: karinda.tolland2@mail.dcu.ie. Alternatively, please contact my Supervisor Dr Carol Barron on 01-7007928 or via email: carol.barron@dcu.ie.
This research is funded by the School of Nursing and Human Sciences at Dublin City University (DCU).

Kind Regards,

Karinda Tolland
PhD Research Postgraduate

1. I confirm that I have read and understood the information letter provided for this research.

2. I understand that my child's identity in this study will be treated as highly confidential. Personal data will be used for academic purposes only.

3. I understand that participation in this study is voluntary and that I am free to withdraw my child at any time. Parental consent will not override a child's wish to withdraw.

4. I understand that I am free to contact the researcher at any time to answer any questions I may have.

5. I agree to give consent for my child to have their weight and height measurements recorded by a trained researcher.

Name of Parent/Guardian: _____ **(BLOCK CAPITALS)**

Signature of Parent/Guardian: _____

Name of Child:_____

Appendix Q. DCU Ethics Approval

Ollscoil Chathair Bhaile Átha Cliath
Dublin City University

DCU

Dr. Carol Barron
School of Nursing & Human Sciences
13th June 2013

REC Reference: DCUREC/2013/129

Proposal Title: An Ethnographic Investigation of Physical Activity Play and the Play Spaces in which Children and Young People (8 – 16 years) Growing up in Ireland Actively Engage.

Applicants: Dr. Carol Barron, Dr. Fiona Murphy, Ms. Karinda Tolland

Dear Carol,

Further to expedited review, the DCU Research Ethics Committee approves this research proposal. Materials used to recruit participants should note that ethical approval for this project has been obtained from the Dublin City University Research Ethics Committee. Should substantial modifications to the research protocol be required at a later stage, a further submission should be made to the REC.

Yours sincerely,

DCU Research & Innovation   Dónal O'Mathúna

Dr. Donal O'Mathuna
Chairperson
DCU Research Ethics Committee

Appendix R. Information Letter for Parents/Guardian and Consent

Dear Parent/Guardian

As part of my PhD studies I am investigating the forms of **physical activity play** that children/ young people like to engage in, as well as the **places they like to play** in. Your school has kindly agreed to get involved in this research which will take place from [date]. For this reason, I will be in the school playground at break-times observing how children/young people play. With your permission, I would like to talk with your child at some point during the year about the types of physical activity they like to take part in at school and within the wider community. This research aims to have minimum impact on school routine and activities.

Questions and topics to be discussed include:

1. What forms of physical activity play do you enjoy? Why?

2. What forms of physical activity play/recreation would you like to take part in more?

3. Do you have a favourite place for physical activity play/recreation?

4. What are the barriers to physical activity play in your school? In your neighbourhood?

5. Do you think physical activity play has an impact on your health? In what ways?

I am committed to protecting the young people I research with and regularly undergo Garda clearance to work with children. This research adheres to the highest levels of confidentiality, unless there are clear overriding reasons (most importantly, when there is a child protection issue). All personal data will be kept in a safe and secure environment and will be destroyed when no longer required for the purpose of this study (within a maximum set period of 5 years). All data will be used for academic purposes only.

Every effort will be made to ensure that your child's participation in this study is safe, respectful, meaningful and beneficial.

I would be very grateful if you would agree to your child taking part in this research. Please sign and return the attached form via your child if you do not wish for your child to take part in. I will be collecting consent forms during PE class or in the school yard at break-times. **Participation in this study is entirely voluntary and you are free to withdraw your child at any time without any negative consequences attached to this decision.** Furthermore, if, at any time, your child withdraws their assent, parental consent will not override this wish.

If you have any queries in relation to this study, please feel free to contact me on 0879313131/01-7007706 or via email: karinda.tolland2@mail.dcu.ie. Alternatively, please contact my Supervisor Dr Carol Barron on 01-7007928 or via email: carol.barron@dcu.ie. Should you wish to speak with an independent person please contact: The Secretary, Dublin City University Research Ethics Committee, c/o Research and Innovation Support, Dublin City University, Dublin 9. Tel 01-7008000.

This research is funded by the School of Nursing and Human Sciences at Dublin City University (DCU).

Kind Regards,

Karinda Tolland
PhD Research Postgraduate
School of Nursing and Human Science

Dublin City University

…………   …………………………………………………………………………..

I **do not** wish for my child to take part in this research and therefore do not give my parental consent. This is deemed sufficient to assure that my child will not take any part in the research explained in the information sheet.

Name of Parent/Guardian: _____ **(BLOCK CAPITALS)**

Signature of Parent/Guardian: _____

Name of Child: _____

Date: _____

Please return to the school office if you do not want your child to take part in the research explained in the information sheet.

Appendix S. Pearson Chi-Square test

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	17.013[a]	2	0.000
Likelihood Ratio	17.337	2	0.000
Linear-by-Linear Association	0.018	1	0.892
N of Valid Cases	941		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 20.95.

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	2.412[a]	2	0.299
Likelihood Ratio	3.183	2	0.204
Linear-by-Linear Association	0.010	1	0.920
N of Valid Cases	103		

a. 2 cells (33.3%) have expected count less than 5. The minimum expected count is .97.

Appendix T. ANOVA (Analysis of Variance)

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	11.923	0.693		17.216	0.000
	AgeYrs	0.696	0.050	0.413	13.835	0.000
	Gende1	-0.454	0.204	-0.066	-2.226	0.026
	locati1	-0.907	0.207	-0.131	-4.387	0.000

a. Dependent Variable: BMI

Appendix U. Children's Spaces for Play and Recreation

GIRLS									
	A/W	S/S	Total	Urban	Rural	Total	PS	SS	Total
Home Space	165	314	**479**	207	272	**479**	380	99	**479**
Neighbourhood	19	131	**150**	38	112	**150**	108	42	**150**
Local Community	105	272	**377**	183	194	**377**	291	86	**377**
Recreational Sites	151	190	**341**	8	333	**341**	333	8	**341**
Total	**440**	**907**	**1347**	**436**	**911**	**1347**	**1112**	**235**	**1347**
%	**33**	**67**	**100**	**32**	**68**	**100**	**83**	**17**	**100**

BOYS									
	A/W	S/S	Total	Urban	Rural	Total	PS	SS	Total
Home Space	94	130	**224**	100	124	**224**	174	50	**224**
Neighbourhood	27	66	**93**	55	38	**93**	68	25	**93**
Local Community	271	135	**406**	165	241	**406**	299	107	**406**
Recreational Sites	0	85	**85**	0	85	**85**	1	84	**85**
Total	**392**	**416**	**808**	**320**	**488**	**808**	**542**	**266**	**808**
%	**49**	**51**	**100**	**40**	**60**	**100**	**67**	**33**	**100**

| **Overall Total** | **832** | **1323** | **2155** | **756** | **1399** | **2155** | **1654** | **501** | **2155** |

A/W (Autumn & Winter). S/S (Spring & Summer)

PS (Primary School). SS (Secondary School)

Appendix V. Demographic Breakdown and Results

Date	Gender	Participant	School	Age	Photographs	Distance (kms)	Time (mins)
17/04/2015	F	Susan	Urban Secondary	13	34	4.3	54.35
08/07/2014	M	John	Urban Primary	11	29	2.54	36.07
08/07/2014	M	Eoin	Urban Primary	11	19	4.35	58.51
27/03/2015	F	Lorna	Rural Secondary	13	81	4.18	68
26/06/2015	F	Orla	Rural Primary	11	30	3.4	45
					193	**18.77**	**261.93**