LEISURE AND SMARTPHONE USE AMONG DIGITAL NATIVES: EXPLORING LIVED EXPERIENCES

by

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ABSTRACT

The purpose of this study was to explore adolescents' experiences with having and using smartphones and how those experiences influenced their leisure. Hermeneutic phenomenology guided the design of this research. Purposive sampling was used to select nine participants between the ages of 14 and 17. Data were collected through semi-structured interviews to develop an understanding of the nature and meaning of participants' lived experiences. Data analysis followed van Manen's detailed line-by-line approaches to isolating thematic aspects within the interview texts and formulating themes. The findings suggest that smartphones played a central role in adolescents' leisure. They used their smartphone more often when they were participating in unstructured leisure activities; however, when participating in structured leisure activities, their smartphone use was decreased. These adolescents also expressed being bored during available leisure time when they were not engaged in structured leisure activities (i.e., sport, theatre and school clubs). Despite the entertainment value of smartphones, the participants experienced their leisure with their smartphones as relatively unsatisfying when they were bored. Smartphone use facilitated leisure during both unstructured leisure and obligatory tasks by offering intermittent leisure. Although their smartphone distracted them during their leisure and obligatory tasks, having access to intermittent leisure may have enhanced their overall leisure experience. The findings suggest that smartphone use hindered adolescents from being able to fully engage in the activity. However, having access to their smartphone and sharing their experience with others may have enhanced their experience.

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CHAPTER ONE: INTRODUCTION

The smartphone, a hand-held personal computer, has been the most recent evolution in information and communication technology (ICT). These devices have become fully integrated into everyday life (Wang, Xiang, & Fesenmaier, 2016) including the lives of adolescents. Adolescence has been described most broadly as the stage of life between puberty and adulthood (Caldwell, 2016). The period of adolescence has also been subdivided into early (10-14), middle (age 15-17), and late (age 18 to mid-20s; Elliot & Feldman, 1990). Adolescence is considered one of the most significant time periods for physical, intellectual, personality, and social developmental changes. The introduction and widespread use and integration of smartphones into daily life means that the period of adolescence is now influenced by smartphone use.

In Canada, a significant number of adolescents own a cell phone or smartphone – 68% of those in grade 8; 83% in grade 9; 87% in grade 10; and 85% in grade 11 (Steeves, 2014). Smartphones allow adolescents to both entertain themselves and connect with others. On average, adolescents aged 13-18 are spending nine hours per day on entertainment media (Common Sense Media, 2015). Activities they are engaged in include: watching television, movies and online videos; playing video, computer and mobile games; reading; listening to music; using social media sites and surfing the internet. Meanwhile, text messaging is the most common form of communication amongst college-aged youth between the ages of 18-23, (Skierkowski & Wood, 2012) and can be accomplished on either a cell phone or smartphone.

Lepp (2014b) describes the smartphone as an "influential social object which permeates nearly every aspect of life from work to leisure" (p. 219). Smartphone use occurs primarily during leisure time, and many of the activities engaged in on smartphones are considered leisure (Barkley & Lepp, 2016). Consequently, the time adolescents spend entertaining themselves with their smartphones and interacting with others comprises part of their leisure behaviour. While smartphones have become a significant instrument of leisure for this generation of adolescents, there is limited research specifically on this age group. Therefore, this study focuses on the leisure of adolescents who have smartphones.

Background

Adolescents today are considered "digital natives" (Palfrey & Gasser, 2013). This generation of adolescents was born into a society with access to networked digital technologies, and they have grown up developing the skills to use them. Adolescents are the most adaptable and enthusiastic generation to adopt mobile technologies, and the speed at which they learn is mindboggling (Pew Internet and American Life Project, 2010). Consequently, "digital natives" are considered to be more connected and tech-savvy than previous generations (Cataylst, 2015).

Technology has influenced the way this generation learns, plays and interacts with others (Palfrey & Gasser, 2013). Digital technologies are mediating major aspects of their lives such as friendships, social interactions, civic activities (Palfrey & Gasser, 2013). Some researchers have provided evidence that there is value in adolescents being "plugged in" (Walsh, White & Young, 2010) while others view it as a distraction and argue that

making connections in the non-digital world is becoming more difficult as a result (Lepp, Barkley & Karpinski, 2014).

Technology is now a cultural norm and is integrated into everyday life amongst those in the digital native cohort (Palfrey & Gasser, 2013). The smartphone is the technological device that keeps this generation "hyper-connected" (Anderson & Rainie, 2012) or "constantly connected" throughout their day-to-day activities (Anderson & Rainie, 2012). Adolescents are so attached to their phones that they consider it "part of them" (Walsh, White, & Young, 2011).

Lepp (2014b) explains that smartphones have both positive and negative effects on leisure experiences and that the increase of smartphone use is influencing participation in other forms of leisure. Given that over 40 percent of an adolescent's day is considered to be "free time," how that time is used has significant health and developmental implications (Larson & Verma, 1999). Smartphones have the potential to influence the leisure time and the leisure behaviour of adolescents with smartphones. For example, adolescents can do the following on their smartphones and during their leisure time: browse the internet; play individual or multi-player games; stream or watch videos and sports; check in on social networking sites (i.e., Facebook, Instagram, Twitter); take, share and post photos and videos; and send and receive emails (Lepp, 2014b).

Media multitasking is now considered a trend within this generation and occurs when one is consuming multiple media at one time (Cain, Leonard, Gabrieli, & Finn, 2016). Generally, the amount of time adolescents are spending on the Internet every year is increasing (Roberts, Foehr, & Rideout, 2005). However, there is no indication that they

are spending less time on traditional media such as television or music. In the same period of time, multitasking has allowed them to consume a greater amount of media content. In Roberts et al.'s (2005) study, approximately 6.5 hours a day were spent on electronic media. However, they experienced 8.5 hours of media exposure as a result of "media multitasking". While doing their homework, many adolescents are actively multitasking with other types of media. For example, "most of the time" 30% of adolescents use instant messaging, talk on the phone, listen to music, watch television or surf the Internet when working on their homework. If they are using a computer when doing homework, they are 65% more likely to multitask, spending 50% of the time using other media. Therefore, this form of multitasking could be interrupting both their leisure and non-leisure activities.

Scholars have identified that there are consequences to heavy media multitasking. For example, this behaviour has been associated with sensation seeking (Duff, Yoon, Wang, & Anghelcev, 2014; Kononova, 2013), attentional lapses, errors and mind wandering (Ralph, Thomson, Cheyne, & Smilek, 2014), higher levels of impulsivity (Minear, Brasher, McCurdy, Lewis, & Younggren, 2013), and depression and social anxiety (Becker, Alzahabi, & Hopwood, 2012). Within the past few decades, media multitasking also has dramatically changed how families interact (Wallis, 2006). Brain imaging studies have supported that multitasking is having an adverse effect on the ability to learn new facts and concepts (Foerde, Knowlton, & Poldrack, 2006). Finally, gender has been identified as a predictor of media multitasking. For example, adolescent females are more likely to media multitask than males (Roberts et al., 2005).

The majority of literature on smartphone use is focused on college-aged students and will be discussed in the literature review. Adolescents, however, have been underrepresented in the research on smartphones use during leisure or for leisure. Because adolescence is a critical period of human development and because leisure time during adolescence can determine whether adolescents experience positive, healthy developmental outcomes or negative, risky developmental outcomes, it is important to understand how adolescents are spending their leisure time (Caldwell, 2005). Research involving smartphone use of college-aged students and adults may not be particularly relevant to adolescents. Adolescents do not experience the same independence as college-aged students and adults. College-aged students and adults have also passed through the most vulnerable and crucial stage of development. The introduction of smartphones has added another element to adolescent life and adolescent leisure behaviour – an element that lacks research. This study, therefore, brings focus to the interaction between adolescent leisure and smartphone use.

<div align="center">**Significance**</div>

Since smartphones have become a significant element of modern life and leisure, it is important to understand how they are being used and whether they enhance or detract from adolescents' leisure experiences. An exploration of leisure studies research reveals that smartphones influence: outdoor park experiences (Parks Canada, 2015; Yellowstone National Park, 2008); communication experiences (Pierce, 2009; Turkle, 2015); third place experiences (Foley, Holzman & Wearing, 2007; Memarovic et al., 2014); social inclusion and connectedness (Matthews, 2004; Wei & Lo, 2006); self-identity (Ozcan &

Kocak, 2003); and leisure experiences (Lepp, 2014b; Lepp, Barkley, Sanders, Rebold & Gates, 2013). However, the majority of research on smartphone use and leisure focuses on college-aged students (e.g. Burger et al., 2010; Burke, Wallen, Vail-Smith, & Knox, 2011; Drouin, & Landgraff, 2012; Nasar, Hecht, & Wener, 2007; Pain et al., 2005; Palfrey & Gasser, 2008; Skierkowski & Wood, 2012; Walsh, White, & Young, 2010; Walsh, White, Cox & Young, 2011; Wei & Lo, 2006). Therefore, there is very little research and understanding of how smartphones influence leisure experiences in the adolescent population.

Studying the relationship between leisure and smartphones among adolescents will contribute to the growing body of knowledge on smartphone use and leisure experiences. More specifically, this research will help develop understanding of how smartphone use is influencing existing leisure behaviours, leisure experiences, leisure behaviour patterns and the adoption of new leisure activities. It will help in developing theory about how adolescents' leisure experiences may be affected by the use of smartphones.

Smartphones are changing the way leisure activities, spaces and venues are experienced, which could have serious implications for leisure service providers in general and for those who provide programs and services specifically for youth. The findings of this study may assist recreational and leisure service providers and leaders in identifying the type of leisure activities in which adolescents are currently most interested in. The results may also help to create recreation and leisure programs that either incorporate, limit or exclude smartphone use altogether.

Purpose

Because the existing research on smartphone use and the leisure experience is primarily focused on college-aged students, broader exploration is needed. Despite the significant numbers of adolescents who are using smartphones and the potential relationship between smartphone use and leisure, research on the experiences of adolescents is limited. Therefore, the purpose of this study is to explore adolescents' experiences with having and using smartphones and how those experiences influence their leisure. This investigation will be examining how adolescents are using their leisure time; how adolescents are using their smartphones during leisure time; and what influences smartphones have on their leisure experiences.

CHAPTER TWO: LITERATURE REVIEW

Three key bodies of research literature will help provide a broader background and more enhanced understanding of the significant role leisure choices may play in the lives of adolescents and the potential influence of smartphone technology. First, research related to leisure theory will be examined. Secondly, research on adolescents and leisure will be explored. Finally, technology and leisure will be investigated to further explain the value in advancing research in this area. These areas of research are believed to be important in guiding the development of the thesis research questions.

Leisure Theory Relevant to Leisure Behaviour

Individuals have needs, and they attempt to satisfy their needs through behaviour (Deci & Ryan, 2000). A number of needs can be satisfied through leisure (e.g., need to have fun, relax, be challenged, be creative, and connect with others), and needs motivate leisure behaviour (Tinsley & Tinsley, 1986). Each individual has different leisure needs and to experience satisfaction, they choose activities according to their needs. During different periods of an individual's life, his/her needs may change resulting in current leisure activities no longer satisfying evolving leisure needs (Iso-Ahola, 1980). Therefore, individuals may choose particular leisure behaviours or patterns of leisure behaviour to satisfy their specific needs given their stage of life, roles and responsibilities they have, opportunities that may be available, or the life circumstances they are facing. Consequently, individuals add and drop leisure behaviours throughout their life span. It is important to understand how and why individuals engage in leisure behaviours and exactly what diverse experiences they encounter. The introduction of smartphone use

during leisure time may influence adolescents' leisure behaviour. Therefore, it is important to understand how adolescents use their leisure time because it may affect their development positively and/or negatively. Therefore, this section of the literature review first defines leisure, and then reviews key concepts related to leisure behaviour including leisure satisfaction, leisure motivation and leisure constraints.

What is leisure? When exploring literature on the concept of leisure, the term "leisure" has been conceptualized in many different ways (McLean & Hurd, 2015). The *classical view* of leisure originates from Aristotle's perspective that leisure was an intellectual pursuit and the highest form of life. The concept of leisure as a *symbol of social class* involves conspicuous consumption and that consumption defining social class. More recent conceptualizations have viewed leisure as *free or discretionary time* (e.g., time away from work); leisure as an *activity* during free time (e.g., playing volleyball); leisure as *a state of being* (e.g., freedom, intrinsic motivation); and leisure as a type of *spiritual involvement or expression* (e.g., inner peace, understanding of values and meaning assigned to life). McLean and Hurd (2015) define leisure in a way that encompasses a number of the key points from the various conceptualizations. For the purposes of this research, leisure will be defined using McLean and Hurd's definition: as an activity that one enjoys during his/her spare time, away from obligations and responsibilities such as school, work or home chores. Leisure is freely chosen and provides opportunities for relaxation, self-enrichment, personal reflection or pleasure. It may also involve a spiritual experience or a holistic state of being.

In Canada and the United States, the most commonly used conceptualization of leisure is discretionary time (McLean & Hurd, 2015). However, the complex idea of leisure as an experience goes beyond leisure as discretionary time. This concept refers to leisure as a self-satisfying experience that can happen at any time (Hollands, 1988). Therefore, one's perspective of leisure varies depending on what is learned from direct experiences (McLean & Hurd, 2015). Individuals may also select leisure activities that correspond with their specific needs (Tinsley, Bretett & Kass, 1977). However, their needs may vary depending on their environment and contexts. Therefore, their leisure choice may differ depending on which stage of the life cycle they are in or the circumstances they experience. For example, a child may choose to go to the beach as an experience in order to meet their need to have fun. On the other hand, a parent may go to the beach because of the need to supervise his/her child. The parent may view this experience as meeting their child's need or they may look to satisfy his/her own need to relax and unwind through reading a book or having a coffee/beer with a friend.

There are a number of factors that influence how adolescents use their discretionary time and how they experience leisure. This study focuses on smartphones. For adolescents, instant messaging, television watching and/or taking on the phone are the most common leisure activities (Caldwell, 2005). Therefore, smartphones can be thought of as a leisure activity for individuals to engage in; however, smartphones can also be used during leisure discretionary time. Some adolescents may even be experiencing a leisure state of mind during smartphone use.

Leisure satisfaction. Leisure scholars have been interested in and seeking to understand the outcomes of leisure time and leisure experiences for decades. Leisure satisfaction is a concept has been used to assess the overall experience. Leisure satisfaction is "the positive perceptions or feelings that an individual forms, elicits or gains as a result of engaging in chosen leisure activities" (Beard & Ragheb, 1980, p. 22). It is related to the leisure experience or situation and how one is satisfied or content as a result of the experience. Research shows both happiness and quality of life are outcomes of leisure satisfaction (Spiers & Walker, 2009). Therefore, overall life satisfaction is partly a result of leisure participation and leisure satisfaction (Agyar, 2013; Lloyd & Auld, 2002; Mannell & Dupuis, 2006). Participating in leisure activities can have a positive effect on both physical and mental health (Caldwell, 1995; Hutchinson, Loy, Kleiber & Dattilo, 2003), consequently playing a significant role in improving mood (Orsega-Smith, Mowen, Payne, & Godbey, 2004), alleviating stress (Iwasaki, Mactavish, & MacKay, 2005; Marafa & Yung, 2004), and improving general health, and emotional and social well-being (Mannell, 2007).

Leisure satisfaction is a result of being involved in a leisure activity and becoming more comfortable with the activity (Kim, 2009). For adolescents, leisure satisfaction will vary according to the type of leisure activity in which they participate - active, passive or social (Shin & You, 2013). Activities that include physical movement and exercise, that can be performed alone or with others, are considered active leisure. Activities that do not include physical movement such as watching TV, reading or listening to music, are referred to as passive or sedentary leisure. Research indicates that middle school aged

students who participated in active leisure experienced an increase in their leisure satisfaction which can significantly affect their life satisfaction and stress management later in life (Shin & You, 2013). However, the mobility of smartphones now allows users the possibility of being active while listening to music, exercising, or using an application such as *Zombie Run!* or *Pokémon GO* (Leaver & Wilson, 2016). These newer active applications are challenging the idea of active and passive leisure and potentially evolving the definition of leisure. Traditionally, social leisure activities involve club activities or meeting friends (Shin & You, 2013). More recently, the advancement in smartphones and applications such as Facebook and Twitter has allowed owners to be anywhere and still be able to connect with friends and family (Leaver & Wilson, 2016).

Kleiber, Larson, and Csikszentmihalyi (1986) explained that adolescents who participate in passive leisure experience short-term satisfaction. Participating in active leisure increases one's abilities to recognize his/her self-determination and freedom of choice, which results in the development of intrinsic motivation. Satisfaction that is found in activities such as learning a musical instrument or playing sports lay the ground work for experiencing satisfaction when participating in activities during adulthood (Csikszentmihalyi & Larson, 1984). Adolescents who experience intrinsic motivation and freedom when participating in these demanding activities may achieve satisfaction in all areas of their lives.

Chen, Li, and Chen (2013) found that adolescents' personal satisfaction increases when they are highly interested in leisure activities. Therefore, adolescents' satisfaction is positively influenced by their level of motivation. Research suggests that participants

experience less satisfaction and happiness when they engage in casual or passive leisure activities when compared to committed or serious leisure (Lui & Yu, 2015). Tiggemann (2001) noted that adolescents are spending less time on passive activities, such as reading books and watching TV, and more time on social leisure, such as eating out, visiting friends and chatting. Research has also suggested adolescents may not be experiencing leisure satisfaction through social leisure, and that adolescents may experience dissatisfaction and leisure boredom as a result (Gordon & Caltabianco, 1996).

While the literature on adolescents and leisure satisfaction is helpful in understanding how to program or develop programs to meet the needs of adolescents, smartphones are a new phenomenon that may affect satisfaction. There is a gap in the literature related to how smartphone use influences their leisure satisfaction raising the following questions: Does smartphone use that involves social interaction help adolescents alleviate boredom? Are adolescents using smartphones for more passive pursuits that could lessen their leisure satisfaction? Are adolescents participating in active leisure by using smartphones?

Leisure motivation. Participating in leisure for a duration of time requires both interest and motivation (Padhy, Valli, Pienyu, Padiri, & Chelli, 2015). Leisure motivation is the drive that initiates, guides and maintains an individual's involvement within an activity (Padhy et al., 2015; Petri, 1981). Beard and Ragheb (1980) have identified four main psychological and sociological motives for participation: social (e.g., need for friendship, interpersonal relationships), escape/avoidance (i.e., need for solitude or to unwind),

intellectual (i.e., need for learning or discovery) and skill-mastery (i.e., need to master, challenge or compete).

A common theory to explain leisure motivation is Self-Determination Theory (STD; Ryan & Deci, 2000). STD explains motivation as a continuum with intrinsic motivation on one end, amotivation on the other end and extrinsic motivation in the middle. This continuum signifies a difference in the level to which an individual participates in leisure for either internal or external reasons or rewards. Intrinsic motivation refers to participating in an activity for one's own benefits (e.g., to learn, to explore, to connect or to experience competence). Amotivation refers to an individual "going through the motions" and acting without intent. An individual will experience amotivation when they do not feel competent to do the activity (Bandura, 1986), when they do not value the activity (Ryan, 1995), or when they do not expect to reach the desired outcomes (Seligman, 1975). Extrinsic motivation is when an individual participates to fulfill external demands because of pressure or social reward (e.g., attending a class with a friend). Extrinsic motivation encompasses four types of motivation that decrease in degree in which their regulation is autonomous: external regulation (engage in activity to satisfy an external demand), introjected (consider perceptions of others when engaging in activity), identified (engaging in activity for a purpose) and integrated (engaging in activity to attain outcome; Deci & Ryan, 1985).

In order to maintain self-determined motivation, three psychological needs need to be satisfied: autonomy, competence and relatedness. Autonomy is the need to feel free from influence or control of one's behaviour (Deci & Ryan, 2000). For example,

adolescents may experience autonomy when given the choice to engage in a leisure activity they enjoy (Caldwell & Witt, 2011). Competence is the need to feel that one is developing a skill and experiencing a sense of mastery. For example, adolescents may experience competence when joining a club and learning how to work with others. Relatedness is the need to feel a connection with another (Deci & Ryan, 2000) which includes the need to feel loved and cared for and to love and care for others (Baumeister & Leary, 1995). For example, adolescents may experience relatedness when they develop close relations with a peer member. Understanding what needs are being met can help to understand adolescents' motivation to engage in certain types of leisure.

Research on motivations of adolescents suggest they pursue intrinsically motivated activities for their own enjoyment (i.e., dancing to music in their bedroom) or to achieve a personal and meaningful goal set by themselves (i.e., being chosen to be the captain of the school basketball team; Caldwell, 2016). Self-determination and autonomy development are associated with developing goal setting skills and initiative as well as being intrinsically motivated (Walker, 2016). Adolescents are more likely to set a greater number of goals for themselves when they have a higher level of intrinsic motivation for their after-school activities (Beiswenger & Grolnick, 2009).

Research also suggests that there is a link between leisure motivation and well-being (Padhy et al., 2015). Adolescents contribute to their well-being when they experience satisfaction and pleasure through leisure activities (i.e. exploring, learning), especially when there is less expectation of the outcome (Padhy et al., 2015). These types of activities help adolescents discover their unique qualities and be part of something that

is bigger than themselves by providing tools, space and time to do so (Dworkin, Larson & Hansen, 2003). Intrinsically motivated leisure pursuits assist adolescents in discovering and reflecting on their self-identity (Waterman, 2004). Therefore, simply participating in an activity for pleasure and satisfaction – intrinsic motives – can positively influence one's well-being (Padhy et al., 2015).

In terms of adolescents' ongoing participation in activities, research indicates that they are more likely to sustain participation in a leisure activity if they are intrinsically motivated (Caldwell, 2016). When faced with challenges (i.e., lack of skill or transportation), intrinsically motivated adolescents are more likely to persist and continue to participate in their desired activity. In addition to the benefits youth receive through their continued participation, intrinsic motivation and the associated persistence leads to adolescents developing initiative which is an important quality to help them transition into adulthood (Larson, 2000).

There are also leisure activities that adolescents participate in due to external motivation such as parental demands, peer pressure and external rewards (e.g., winning a trophy; Caldwell, 2016). Negative outcomes, such as low levels of autonomy, low levels of initiative and high levels of amotivation and boredom, are more likely to be present when adolescents perceive that their guardian(s) have excessive control over what leisure activities they participate in (Sharp, Caldwell, Graham, & Ridenour, 2006; Watts & Caldwell, 2008). External motivations are related to peer influences. For example, adolescents face poorer quality relationships within six months of them choosing their friends for external rewards such as popularity (Ojanen, Sijtsema, Hawley, Little, &

Ojanen, 2010). Other extrinsic motivations have been associated with sexual activity and substance abuse (Williams, Cox, Hedberg, & Deci, 2000). On the contrary, decreased levels of substance use have been linked to increased levels of intrinsic motivation (Caldwell, Bradley, & Coffman, 2009). Therefore, adolescents are less likely to gain significant developmental and health benefits when they are motivated by external factors (Caldwell & Witt, 2011).

As is evident, there is literature on adolescents and leisure motivation. It is important to understand the internal and external factors that motivate adolescents' leisure behaviour in order to understand the interaction between adolescent smartphone ownership/use and leisure motivation. The majority of the existing literature was developed before the popularity of the smartphone or researchers have not examined the impact on adolescents. Smartphones are a new phenomenon that may affect motivation, creating a gap around the literature and raising the following question: Does smartphone use affect adolescents' motivation to engage in particular activities (e.g., face-to-face interaction)?

Leisure constraints. Leisure constraints have been an important aspect of leisure studies over the last few decades. Previously known as "barriers" (Romsa & Hoffman, 1980; Searle & Jackson, 1985), leisure constraints are defined as factors "that inhibit people's ability to participate in leisure activities, to spend more time doing so, to take advantage of leisure services or to achieve a desire level of satisfaction" (Jackson, 1988, p. 203). Three main leisure constraints have been identified by Crawford and Godbey (1987): intrapersonal constraints, interpersonal constraints and structural constraints.

Intrapersonal constraints are the psychological state characteristics and attributes that limit an individual's preference for a leisure activity and include anxiety, depression, stress, fatigue (Crawford & Godbey, 1987); lack of interest or skill (Chick, 2015); and self-esteem, energy, motivation or discipline (Samdahl & Jekubovich, 1997).

Interpersonal constraints are an outcome of the interactions between and among individuals (Crawford & Godbey, 1887). Similar to intrapersonal constraints, interpersonal constraints can limit an individual's preference for an activity. However, they can also deter participation in activities an individual prefers. For example, interpersonal constraints may include a lack of role models (Gordan-Larsen et al., 2004); disapproval from parents and peers (Allison et al., 2005); family responsibilities (Allison, Dwyer, & Makin, 1999); and lack of suitable/available leisure partners (Gordan-Larsen et al., 2004).

Structural constraints prevent an individual from participating in their preferred activity (Crawford & Godbey, 1987). For example, structural constraints may include location and lack of transportation; the time when an activity is offered; availability of equipment/facilities/teams; and the cost of an activity (Allison et al., 2005; Gordon-Larsen et al., 2004).

Leisure constraints can affect adolescents' societal and civic competence, as well as their personal development and well-being (Caldwell & Baldwin, 2005). Research shows that leisure participation and satisfaction are affected by leisure motivation which is influenced by both leisure opportunities and constraints (Losier, Bourque & Vallerand, 1993). When adolescents are constrained from leisure activity, they are denied important

human experiences. It is important to understand the different types of constraints involved because some may inhibit the initiation of a new activity, whereas others may influence the enjoyment and the decision to terminate participation in a leisure activity (Jackson, 1997).

Thompson, Rehman and Humbert (2005) explored factors that influence physical activity in both children and youth. Results identified that physical active leisure was influenced by multiple personal, social and environmental factors. Parental influence was a common factor in elementary, junior and secondary students. These influences included students viewing their parents as role models for physical active leisure. If their parents were physically active, they were more likely to be physically active. They also viewed their parents as supporters in many different ways including purchasing equipment, transportation, investment of time, energy and money as well as attendance at practices and games (Thompson, Humbert, & Mirwald, 2003). Furthermore, parents influenced physically active leisure by enforcing restrictions on screen time such as watching TV, using the computer and playing video games (Thompson et al., 2005). By restricting screen time, parents decreased this barrier to physical activity and positively influenced their children's physical activity levels (Canadian Diabetes Association, 2002). In addition, outdoor play may be encouraged or discouraged by parents (Thompson et al., 2005). Parents who facilitated participation in outdoor play were considered enablers for physical active leisure.

Children and youth are also significantly influenced by opportunities for physically active leisure in the physical and social environments of their cities/towns

(World Health Organization, 2003). Access to parks, recreation and sport facilitates, and sidewalks influenced leisure opportunities and choices available to them. Robbins, Talley, Wu and Wilbur (2010) confirm this by identifying lack of facilities and equipment as a leisure constraint. Another influential factor was the distance to facilities (Thompson et al., 2005). Both distance to facilities and poor weather resulted in decreased active transportation. Conversely, if facilities are within biking or walking distance, they may be inadequate or insufficient in meeting the needs of participants. Additional physical influential factors include crime, traffic, crowding and air quality.

As for social environments, friends' influences were both supports and deterrents to physically active leisure (Thompson et al., 2005). Youth were also influenced by their own level of physical ability or physical self-confidence. This seemed to limit their physical activity leisure which resulted in students perceiving organized sports as limited to skilled or talented participants. Humbert et al. (2006) confirmed this by identifying perceived lack of skill or confidence as a leisure constraint. There was also a common belief that students were too old to begin a new activity (Thompson et al., 2005).

Gender also played a role in influencing physically active leisure opportunities (Thompson et al., 2005). For example, females were specifically influenced by the lack of opportunities to participate in physically active leisure. This formed a perception that female students were less active than male students.

Another significant barrier to physically active leisure is academic responsibilities which included the amount of school work students experience and the course requirements students needed to meet in order to be eligible for post-secondary education

(Thompson et al., 2005). Research on middle school aged students' constraints to participation in physical activity include: lack of time (Robbins, Talley, Wu, & Wilbur, 2010; Vu, Murrie, Gonzalez & Jobe, 2006), lack of motivation (Robbins et al., 2010; Robbins, Pender & Kazanis, 2003), and being too tired (Robbins, Sikorskii, Hamel, Wu, & Wilbur, 2009).

Smartphones as a constraint to leisure. There is no literature about leisure satisfaction and leisure motivation and smartphone use; however, there is literature on how smartphones can be a constraint to leisure. Smartphones can have various impacts, whether positive or negative, on influencing leisure behaviour and leisure experiences through leisure constraints. Smartphones have the ability to disrupt leisure pursuits when adolescents have their smartphone with them during leisure (Lepp, 2014a). Research suggests that individuals who use their smartphones more frequently are more likely to pass up a physical leisure pursuit to sit and play on their phones. Lepp (2014a) discovered that low frequency users were more likely to turn off their smartphones to enhance a leisure experience, whereas high frequency users were more likely to be interrupted because they had their phone on them at all times. Therefore, smartphones can enhance the leisure experience. However, it can also be a constraint to leisure including physically active leisure.

Smartphones have also changed how people communicate and have affected leisure activities that depend on communication (Lepp, 2014b). As text messaging is the most commonly used communication technique among adolescents, any restriction on texting is said to cause feelings of loneliness and anxiety (Skierkowski & Wood, 2012).

This way of communicating may decrease constraints and be beneficial for individuals with social anxiety or anxiety over face-to-face communication discomfort (Skierkowski & Wood, 2012). However, this form of communication may also lead to less participation in leisure activities such as visiting parks and more participation in other activities such as using the internet (Pergams & Zaradic, 2006).

Once again, little is known about how smartphone use interacts with constraints to leisure. For example, do smartphones constrain participation in particular leisure pursuits? Does smartphone use constrain the enjoyment of activities?

Summary. Adolescents have significant amounts of leisure time available to them in which they have the freedom to choice what to do. How they choose to use it can influence their satisfaction with that leisure and their life satisfaction in general. Their choice of leisure activities will be influenced by their interest in those activities, their motivation, and the types and degree of constraints that they face. Understanding these key factors is important for investigating what role smartphones play in adolescents' leisure lives.

Leisure as a Unique Developmental Context

Leisure is a "context of relative freedom that presents opportunities for preferred experiences" (Kleiber, 1999, p.5) and positive development (Caldwell, 2005). Free time is recognized as time away from necessities and obligations, and a sense of opportunity. Freedom is identified as important because certain conditions that limit freedom can dramatically impact leisure such as day-to-day responsibilities, constraints individuals face, and demands on time.

The notion of freedom is relative for youth because approximately 40% of an adolescent's day involves free time (Larson & Verma, 1999). When adolescents participate in meaningful leisure during their free time, they are more likely to experience positive development (Caldwell, 2005). Conversely, if their free time lacks meaningful leisure, they are less likely to experience positive development and more likely to have experiences that include substance use, boredom and stress that can lead to unhealthy developmental outcomes.

Positive youth development outcomes. Leisure is a unique context for facilitating developmental outcomes for youth (Caldwell, 2005; Kleiber, 1999; Osgood, Anderson, & Shaffer, 2005). There are a variety of models that have been developed to examine and measure developmental outcomes. More recent ones have taken a strength-based approach to understanding development – a concept referred to as Positive Youth Development (PYD). Two common conceptualizations of PYD outcomes discussed in the leisure and sport studies literature related to youth are the '5 Cs' model and the Developmental Assets framework (Holt & Neely, 2011).

The 5 Cs model has been identified as a set of key principles of healthy youth development (Lerner, Almerigi, Theokas, & Lerner, 2005). It includes competence, confidence, connection, character and caring (Lerner, Lerner, et al., 2005). Competence is an optimistic opinion in a specific area of one's actions. Confidence refers to one's internal awareness of global self-regard as well as positive self-efficacy and self-worth. Connection represents the positive connections one has with both people and institutions. Character encompasses one's respect for both societal and cultural rules.

Caring/compassion is one's sense of empathy or sympathy for others. This model is based on a scale wherein high scores for positive youth development result from high scores on each of the Cs. Research has suggested that recreation and sport activities and contexts provide youth with opportunities to develop the 5Cs that contribute to positive youth development (e.g., Fraser-Thomas, Cote, & Deakin, 2005).

The Developmental Assets framework from the Search Institute was released in 1990 (Benson, 1990). The framework identifies a set of experiences, skills, behaviours and relationships that empower youth to transition into successful and contributing adults (Search Institute, 2017). The more assets youth have, the more likely they are to thrive in school, in relationships, and to make healthier choices. There are 40 assets that are categorized into 20 internal assets and 20 external assets (Benson, 2007). The internal assets consist of four categories: commitment to learning, positive values, social competencies, and positive identity. The external assets also consist of four categories: support, empowerment, boundaries and expectations, and constructive use of time. Research has found, for example, that participation in extracurricular activities provides opportunities for youth to acquire both internal and external developmental assets (e.g., Forneris, Camire, & Williamson, 2015).

While it is beyond the scope of this thesis to review all of the connections between various leisure behaviours and the developmental outcomes that can result, it is important to understand that contexts and activities do impact development. Specific to this study, consideration should be given to how smartphone use could support or detract from adolescents' development. The next section offers further consideration for how

recreation and leisure contexts (including sport) could facilitate developmental outcomes.

Developmental elements of recreation and leisure. Caldwell's (2005) Leisure Activities-Context-Experience (LACE) model has identified three specific developmental elements of leisure. This model explains the combinations of activity, context and experiential quality and how they interact to foster healthy and positive outcomes or unhealthy and negative outcomes for youth (Caldwell, 2016). These elements influence each other and are codependent. When the right elements exist, positive developmental outcomes occur. This means, for example, that the quality of the leisure activity is just as important as participating in the activity. It is also important to understand the experience (i.e. positive or negative) adolescents have when participating in a leisure activity and the aspects that were present within the context in which the activity/experience transpired. Development outcomes emerge when adolescents have opportunities to bond with peers and adults, experience self-efficacy, increase competence, discover who they are (i.e., identity), develop positive beliefs about the future, experience self-determination and be recognized for their accomplishments (Caldwell, 2005).

Activity. Activities can include structured pursuits such as sport or visual arts as well as behaviours such as hanging out (Caldwell, 2005). Activities occur within a context; therefore, the activity and the context reciprocally influence one another. Considering the variety of activities available to adolescents, some are deemed to be more beneficial and produce healthy outcomes while others are detrimental and produce unhealthy outcomes.

High yield and low yield activities. A Carnegie Council on Adolescent

Development report (1992) describes the more beneficial activities as high-yield activities. These activities characteristically require commitment, persistence and continuity of participation over time; offer challenges to overcome; build skills and increase one's level of competence; require discipline and focused attention; and are goal orientated and/or creative and expressive in nature. Caldwell and Smith (2006) suggest that positive experiences are more likely to occur when there is the right amount of adult guidance and supervision, as well as the opportunities for sustained engagement in high-yield activities. Examples of high-yield activities include active participation (e.g., sports, riding a bike) and creative expression (e.g., music, arts, sports, hiking; Caldwell, 2005). These activities have a tendency to be intrinsically interesting and self-determining for youth. High-yield activities are similar to the active leisure mentioned in the Leisure Satisfaction section. Simply participating in active leisure increases one's abilities to recognize his/her self-determination and freedom of choice, which results in the development of intrinsic motivation (Kleiber et al., 1986).

However, high-yield activities can also be associated with anxiety, stress and boredom (Caldwell, 2005). Activities that are middle-yield include social or computer games and spectator events (i.e., music, museum, sports), while low-yield activities include television viewing and sedentary activities such as smartphone use. Low-yield activities seems to be similar to passive leisure which results in experiences of short-term satisfaction (Kleiber et al., 1986). Interestingly, Caldwell (2005) explains that low-yield activities such as talking on the phone, instant messaging and television viewing are the most common leisure activities amongst adolescents. Researchers have yet to determine

whether smartphone use by adolescents offers challenges or supports active participation (consistent with high-yield activities) or creates anxiety and boredom (associated with low-yield activities)

Structured vs. unstructured activities. Structured or organized activities are viewed as an important, positive aspect of youth development, whereas unstructured activities are viewed as potentially detrimental when associated with development. For adolescents, participating in structured extracurricular activities has been positively related to higher levels of academic achievement (Bartko & Eccles, 2003; Mahoney, Cairns & Farmer, 2003), positive psychosocial functioning (Bartko & Eccles, 2003) and lower levels of anti-social behaviour (Mahoney, Larson, & Eccles, 2005; Zaff, Moore, Papillo, & Williams, 2003). However, structured activities are not without their problems. For example, while research has found adolescents who participate in sport had decreased levels of anxiety and depression, they were more likely to have increased levels of delinquency and substance use (Fauth, Roth & Brooks-Gunn, 2007). Furthermore, while participation in sport increases the likelihood of attending college, it is also associated with increased alcohol use throughout both high school and college (Barber, Eccles & Stone, 2001; Eccles & Barber, 1999).

Research findings on adolescents from more disadvantaged families or communities have identified demographic factors that shape the type of program and the availability of activities chosen such as age, socioeconomic status and race/ethnicity. For example, adolescents participate in less structured activities and for a shorter time if they are from disadvantaged families or communities (Theokas & Bloch, 2006; Wimer et al.,

2006). Other research suggests that after controlling for family background, adolescents with increased academic or social competence are more likely to participate in structured activities (Mahoney et al., 2003; Marsh & Kleitman, 2002). Meanwhile, Randall and Bohnert (2012) found that participating in high levels of structured activities (i.e. over-scheduling) had a negative effect on low-income youth when compared to high-income youth. Low-income youth may experience internal and external pressures that high-income youth may not. For example, low-income youth may experience pressure to succeed as well as stress associated with financial constraints.

Unstructured activities are also important for both self-expression and healthy development (Elkins, 2003; Kleiber, 1999). These activities, which may include painting, playing music and learning a new hobby, play a role in the development of social belonging, competence, creativity, persistence and identity (Caldwell, 2016). Unstructured activities can help ease the stress adolescents experience from being overscheduled with structured activities (Elkins, 2003; Kleiber, 1999). For example, McClelland and Giles (2014) studied the social lives and behaviours of youth living on the streets. Results highlighted unstructured activities as a method to foster close bonds with those involved in the activity. Examples of the activities include artistic forms of leisure, casual pick-up sports games, going for coffee, watching movies, reading and being active in social activist groups.

Unstructured activities can also be associated with negative outcomes when described as hanging out, being sedentary and having no supervision (Caldwell, 2016). Strycher, Duncan and Pickering (2003) suggest that hanging out is positively linked to

the initiation and misuse of alcohol. Previous research shows that playing videos games and watching television are related to unhealthy outcomes such as decreased physical activity (Motl, McAuley, Birnbaum & Lytle, 2006) and weight gain (Koezuka et al., 2006). However, some smartphone game applications can be played on the go and even encourage movement (Bort-Roig et al., 2014). *Zombies, Run!* (Leaver & Wilson, 2016) and *Pokemon Go* (Nigg, Jio Mateo, & Jiyoung, 2017) are two such examples. By playing Pokémon GO, participants decreased their sedentary behaviour by 30 minutes and increased their moderate to vigorous physical activity by 50 minutes (Nigg et al., 2017). Interestingly, during the study, participants' use of television, video or DVD watching and Internet use significantly decreased. However, there was no change in their video game playing. Conversely, Middelweerd and colleagues (2014) suggest that attempts to use gaming technology to promote physical activity has had limited success in terms of uptake and effectiveness.

Specifically, for "at-risk" youth, unstructured activities lack the opportunity to face challenges, exercise concentration and exert effort over time (Larson, 2000). For example, adolescents who participate in passive leisure activities, such as watching television or interacting with friends, experience intrinsic motivation, but not in the context of concentration and challenge. Participating in structured activities, such as sports, arts and hobbies, is more likely to provide experiences of intrinsic motivation, challenge and concentration.

Adolescents engage in social activities, whether structured or unstructured, more than any other type of leisure (Kleiber, Caldwell, & Shaw, 1993). They are also the most

desired activities as they help adolescents feel a sense of belonging. Caldwell (2016) explains that this type of leisure is important for their development, and it "provides opportunities to learn empathy and develop deep relationships as well as to negotiate with peers, resolve conflict and work together for communal goals" (p. 183). Leisure activities provide opportunities to socially engage with like-minded individuals as well as foster a sense of worth and build positive social networks (Kelly Pryor & Outley, 2014; Lashua & Fox, 2006, 2007; McClelland & Giles, 2014; Mutere et al., 2014; Travis, 2013; Wang, 2010).

Smartphone use is an unstructured activity in which adolescents engage (Anderson & Raine, 2012). However, whether smartphone use is unstructured activity that supports positive experiences and fosters development, or limits development because of the lack of challenge, remains to be seen.

Context. All activities occur within a place or context such as school, work, home/family and leisure (Caldwell, 2005). "Contexts include all of the elements or things within the environment that surround and can influence behaviors in a particular setting" (Caldwell, 2005, p. 173). There are five different elements that contribute to development within a leisure context: peers; adult support and guidance; opportunities; amount and type of supervision and structure; physical and psychological attributes.

Peers can have both positive and negative influences on experience (i.e., feeling competent, feeling lonely) or behaviour (i.e., learning a new skill, drinking alcohol; Caldwell, 2005). A study on older adolescents transitioning to college identified structured activity involvement as beneficial to those with more loneliness and lower

friendship quality at baseline (Bohnert, Aikins, & Edidin, 2007). Within a sport context, quality friendships can be a positive factor that influences continued participation for girls (McDonough & Crocker, 2005). Developing both positive adult-youth and youth-youth relationships assists in decreasing stress and the sense of stigmatization by creating a meaningful and safe environment that encourages youth engagement (Lashua & Fox, 2006, 2007; McClelland & Giles, 2014; Mutere et al., 2014; Theriault, 2014).

Adult support and guidance is associated with the type of structure and the amount of supervision in an activity (Caldwell, 2005). In almost every discussion of why programs impact participants, the importance of positive, supportive and sustained adult-youth relationships appears. This has led some researchers to refer to these relationships as the "critical ingredient" in successful programs (Rhodes, 2004). A caring adult (e.g. coach, leader or facilitator) has the responsibility to ensure that adolescents' leisure experiences are provided in a developmentally productive manner. For example, it is important for adults to facilitate meaningful activities and meaningful dialogues within a secure and safe space. This provides opportunities for youth to share stories and interests that are both appreciated and acted on (Caldwell & Smith, 2006; McClelland & Giles, 2014; Morgan, Sibthorp, & Wells, 2014; Mutere et al., 2014; Travis, 2013; Wang, 2013). Adults who create a welcoming atmosphere and engage youth are viewed as successful (Pearce & Larson, 2006). Adolescents who perceived high support from their leader reported less depressed mood while attending the program, particularly those who had poor relationships with their parents (Greene, Lee, Constance, & Hynes, 2013).

Opportunities refer to whether or not an adolescent has the option to participate in

a leisure activity (Caldwell, 2005). Opportunities give adolescents the chance to explore

activities they are interested in. Having opportunities to participate in a variety of leisure

activities can provide adolescents with the possibility of feeling a sense of belonging,

having a voice, being challenged and becoming connected. Research suggests that

adolescents participate in less organized activities and for less time if they come from a

more disadvantaged family or community (Theokas & Bloch, 2006; Wimer et al., 2006).

Programs that lack the opportunities for meaningful youth engagement, as well as lack or

limit youth engagement in both planning and implementation of the program, persist in

silencing youth (Armstrong & Manion, 2013; Theriault, 2014). This silencing may result

in social isolation and exclusion, and compromised developmental outcomes.

The amount and type of supervision and structure in a leisure context is associated

with age (Caldwell, 2005). Depending on the age of the participant, adults may provide

excessive, moderate or the right amount of supervision. The type and level of supervision

is also related to the activity. For example, risky leisure activities such as whitewater

rafting or skill-building activities may require more supervision or coaching. Hopper and

Iwasaki (2017) suggest that supervision from a caring adult helps to foster safe and

supportive relationships. These relationships create an environment for youth that

promotes meaning-making through their activities and where they feel capable to have

positive, constructive experiences.

The physical and psychological attributes of a context refer to environments that

are both indoor and outdoor (Caldwell, 2005). It is important for these environments to be

both physically and psychologically safe for youth. Within this context, youth build self-

confidence through mastering a skill. Once a skill is mastered and the challenge is overcome, adolescents seek to set more challenging goals to enhance new skills and seek out more challenging activities (Mahoney et al., 2003). This process is said to transfer from a leisure context into other contexts such as school and work (Caldwell, 2005). Research suggests that organized activities are significant contexts that help adolescents foster competencies and positively negotiate the developmental tasks of childhood to adolescence (Mahoney, Larson, Eccles, & Lord, 2005).

Recreation, leisure and sport programs encompass numerous features that foster positive youth development such as supportive relationships, opportunities for skill building, opportunities to belong, an environment of physical and psychological safety, appropriate structure, support for efficacy and mattering, integration of family, school and community efforts and positive social norms (Eccles & Gootman, 2002). To ensure positive development, more than one feature needs to be present. Unfortunately, limited contexts deliver optimal experiences that include all of the features. However, there are a large amount of organized activities that include several features. For example, organized activities characteristically propose a context for supportive relationships with peers and adults (Barber, Stone, & Hunt, 2005; Hansen, Larson, & Dworkin, 2003; Mahoney, Schweder, & Stattin, 2002; Rhodes & Spencer, 2005), safety during after-school hours (McLaughlin, 2000), and opportunities for efficacy and skill building (Larson, 2000). Other activities provide opportunities to engage in intrinsically motivating and self-determined behaviour.

The elements within a context are vital in shaping adolescents' ability to

experiment with the qualities of engagement that lead to positive development outcomes (Caldwell, 2005). However, there is not a specific formula for determining which elements should be present in order to promote healthy development. For example, different characteristics, such as gender, age, culture and past experiences, influence the contextual elements in a significant way.

Foley et al. (2007) explains how smartphone use may both empower and disempower adolescent women. Their research found that females used smartphones to transform intimidating public spaces into comfortable private spaces. By having their smartphone as a way to escape from men looking at them or checking them out, they increased feelings of self-confidence and autonomy. In addition, results revealed that smartphones were used to increase self-worth and a source of identity for females. Other research suggests that smartphone use plays a significant role in producing and maintaining interpersonal and intrapersonal benefits such as increasing social connectedness, feelings of belonging and social identity (Walsh et al., 2011).

Although there is literature on how smartphone use may both empower and disempower female adolescents in public spaces (Foley et al., 2007), there is a gap in the literature related to how adolescents' smartphone use interacts with the developmental elements of the leisure context. For example, do peers who are active and adults who encourage unplugging from devices influence the leisure behaviours of adolescents who have smartphones? Do lack of leisure opportunities in one's community influence his or her smartphone use? Understanding the elements of contexts in which adolescents are engaged may shed light on their experiences with smartphones as or during leisure.

Experience. It is important to understand how adolescents experience their leisure. Engaging in leisure activities generates an emotional response that can be either positive or negative (Caldwell, 2016). Examples of positive experiences include enjoying oneself, feeling competent, being interested while negative experiences include feeling stressed, bored, anxious, embarrassed and lonely (Caldwell, 2005). Therefore, participating in activities or engagements that generate negative emotions (i.e., stress, boredom or anger) are less likely to produce positive benefits when compared to activities that produce positive emotions (i.e., joy or stress release; Caldwell, 2016). Fortunately, the majority of adolescents suggest receiving positive emotional experiences from leisure (Caldwell, 2005) which promotes stress release, positive psychological adjustment and well-being (Mock, Mannell & Guttentag, 2016). Therefore, this emotional response is considered an important factor of developmental outcomes.

Furthermore, adolescents' internal and external compulsion to engage in a leisure activity is important to understand (Caldwell, 2016). Adolescents are more likely to reap important developmental benefits from an activity if they experience feelings of freedom and choice. As an ideal context, leisure contributes to psychological health and social-emotional competence by introducing ways for adolescents to learn how to self-regulate the emotions they might experience during a leisure activity (Johnson & Johnson, 2004).

Three specific experiences that appear in leisure are critical to adolescent development: interest, intrinsic motivation and flow (Caldwell, 2005). Research suggests that positive development is facilitated when adolescents take both interest and engagement in their own lives (Caldwell, Baldwin, Walls, & Smith, 2004; Hunter &

Csikszentmihalyi, 2003; Izard, 1991; Larson, 2000). Other research explains that being interested in a leisure activity is related to cognitive, physical and emotional benefits (Caldwell, 2005). For example, adolescents who focus their attention on and are interested in a leisure activity gain cognitive growth through the promotion of brain activity. They also gain physical benefits such as decreased heart rate (Hunter & Csikszentmihalyi, 2003), and become intrinsically motivated by participating in an activity that makes them feel good. Furthermore, competence, joy and tension release have been associated with interest (Izard, 1991).

As mentioned in the Leisure Motivation section earlier, adolescents benefit greatly when they are intrinsically motivated. However, adolescents commonly complain about being bored (Caldwell, 2005). Leisure boredom is "the perception of too much free time available with too little to do" (Barnett & Klitzing, 2006, p.148). Boredom occurs when an individual believes the leisure experience is not as thrilling, diverse or original as anticipated, or the experience is not offered as frequently as one would like (Iso-Ahola & Weissinger, 1990). This is troubling because leisure is believed to be intrinsically motivating, fun, enjoyable and self-directed (Caldwell, 2005). When adolescents face boredom during a leisure pursuit, it should activate the need to identify the source of boredom and adjust what they are doing in order to decrease boredom. While some adolescents fill their free time with positive leisure activities through programs, such as youth sports, and community parks and recreation services, others tend to fill their free time with taboo, unhealthy or unproductive activities, by consuming drugs or alcohol or even participating in vandalism (Caldwell & Witt, 2011).

The most significant predictor of relieving leisure boredom is the consciousness of leisure's psychological rewards such as feelings of self-determination and competence (Iso-Ahola & Weissinger, 1987). Individuals experiences less boredom when they have more consciousness of the intrinsic rewards leisure has to offer. Furthermore, individuals are less susceptible to leisure boredom when they are more likely to seek intrinsic rewards (Weissinger, Caldwell, & Bandalos, 1992). For example, activities that have a tendency to challenge the participant and require them to invest both effort and time tend to prevent or alleviate boredom.

The experience of flow is interrelated with both interest and intrinsic motivation (Csikszentmihalyi, 1990) and produces positive adolescent development such as competence, initiative and self-efficacy (Caldwell, 2005). Csikszentmihalyi (1990) explains flow as a state of consciousness wherein the participant becomes one with the activity and loses track of time. Situations that generate flow are associated with adolescents being the happiest (Csikszentmihalyi & Hunter, 2003). There are nine key elements of flow that can be achieved by participating in a leisure activity: no worry of failure; the activity becomes self-guiding; clear goals; being aware of surroundings; immediate feedback; lack of self-consciousness; optimal balance between skill and challenge; experience of time is distorted; and merging of action and awareness (Csikszentmihalyi, 1990). High-yield activities such as hiking, sports, music and photography are much more likely to produce flow, whereas low-yield activities, such as watching television, sedentary activities and hanging out, are much less likely to produce an environment in which flow can occur. Flow, along with positive leisure experiences,

generates feelings of internal reward (i.e. interest, excitement, competent) and has the potential to produce participation in future activities.

For youth, their overall leisure experience is more important than how they respond to a certain activity (Caldwell, 2005). For example, if an adolescent is in a constant state of boredom when participating in a leisure activity, this is a problem. They may be more likely to participate in risky behaviours such as delinquency behaviours, substance use (Mahoney et al., 2005; Osgood et al., 2005) and sexual behaviours (Miller et al., 2014). If an adolescent is occasionally bored from an activity, there is less reason for alarm. Luckily, boredom and other negative emotions are not experienced regularly in leisure. The quality of the activity (i.e., whether there is appropriate challenge and focused attention) in addition to the quality of the leisure context (whether opportunities are provided for intrinsic motivation and self-determination) helps to promote positive experiences.

Do adolescents experience flow when they are using their smartphones? Does smartphone use alleviate boredom? Does smartphone use or the use of certain features as leisure or during leisure produce positive feelings? These are the types of questions that have yet to be explored related to the experience element of recreation and leisure.

Summary. Leisure (including sport) offers a unique context in which youth can experience positive developmental outcomes. Caldwell's (2005) framework and the research related to aspects of those elements suggest that the presence of certain elements and combination of elements during recreation, leisure, and sport participation can influence the developmental outcomes youth experience. To better understand

smartphone use and leisure behaviour among adolescents, it is important to consider how smartphone use interacts with these three elements of recreation and leisure.

Leisure and Smartphone Use

The relationship between smartphone use and leisure is complex. Virtually every leisure context now has smartphones present and the features of smartphones allow the activities done on or with them to be a leisure activity itself (Lepp, Barkley, & Li, 2017). They are used to browse the internet; play individual and multi-player games; stream or watch videos and sports; check in on social networking sites (i.e., Facebook, Twitter, etc.); take, share and post photos and videos; and send and receive emails at any time during the day (Lepp, 2014a). As mentioned in the introduction, smartphones have been described as an "influential social object which permeates nearly every aspect of life from work to leisure" (Lepp, 2014a, p. 219).

Smartphone use is related to a variety of behaviours and behavioural outcomes (Lepp, 2014a). For example, smartphone use is correlated with decreased academic performance (Junco & Cotton, 2012), increased sedentary behaviour and decreased cardiorespiratory fitness (Lepp et al., 2013). Smartphone use may also interrupt leisure activities by causing a multitasking effect (Junco & Cotton, 2012; Lepp et al., 2017). Research suggests that the most rapid and eager adopters of smartphones are young adults and adolescents (Pew Internet and American Life Project, 2010). Throughout this study, gaps in research on adolescents related to smartphone use have been identified. This section is intended to bring more focus to what is known about smartphone use. To gain a better sense of the interaction between leisure and smartphone use among

adolescents, five areas of research were explored - leisure boredom, leisure time, leisure

experiences, social media, and smartphone applications.

Leisure boredom. When adolescents are bored, or have nothing else to do, they

are more likely to fill their free time with easy and accessible leisure activities, literally,

the ones at their fingertips. Smartphones offer more passive, low skill and non-

challenging leisure activities (Lepp, 2014b; Lepp, Li, Barkley, & Salehi-Esfahani, 2015)

which are less likely to create feelings of competence. As mentioned in the Leisure

Motivation section, competence is one of the three psychological needs which is

necessary to maintain self-determined motivation (Deci & Ryan, 2000). On the one hand,

it is possible that smartphone use could compromise adolescents' self-determined leisure.

On the other, if they are playing a game on their smartphone, they may be more likely to

experience competence, resulting in self-determined motivation. Smartphones are also

less likely to sustain relief of leisure boredom because they are not considered a sufficient

intrinsically rewarding activity. However, now that games are on smartphones, players

are able to take them everywhere they go (Wilson, 2015). They are also designed to be

played for a short period of time, but are engaging enough to compel players to continue

to play for long periods of time. Therefore, it makes sense that high frequency users may

be motivated to use their smartphones for relieving leisure boredom (Lepp et al., 2017).

Leung (2008) explains that when adolescents experience long periods of leisure

boredom, they are more likely to become addicted to their smartphone and experience

addiction symptoms such as the inability to control craving and productivity loss. Results

support that the most vulnerable are females who have low self-esteem, particularly older

and less educated females, whereas adolescents with a smartphone tend to experiment with roles, rules and risks when experiencing leisure boredom. Similar research discovered that attention impulsiveness mediated the significant relationship between leisure boredom and smartphone addiction (Roberts, Pullig, & Manolis, 2015).

Leisure time and technology. More and more people are spending their free time using technology, especially smartphones (Nimrod, 2016). They are used to socialize, listen to music, read, shop, watch videos, play games, etc. They are also used to plan, gain information and share experiences before, during and after participation in non-technology-based leisure activities. Nimrod (2016) explains that technology plays different roles in leisure: technology supports leisure (i.e., gadgets, aids, sharing, planning), technology is an activity in itself (i.e., tv, games), and technology is a constraint to activity (i.e., costs, technophobia – fear of modern technology, technostress – "a modern disease of adaptation caused by an inability to cope with ICT in a healthy manner"; Brod, 1984, p. 16).

Research demonstrates that 70% of university students, aged 18-34, in the United States spent the majority of their leisure time on their smartphones and that 87% were usually sitting (Barkley & Lepp, 2016). Consequently, it is understood from this research that students consider using their smartphones as a form of leisure. Barkley and Lepp (2016) discovered that high frequency smartphone users decrease the intensity of planned exercise, thereby decreasing the benefits of exercising, but potentially enhancing their leisure experience. Albrechsten (2001) explains that physical activity is being removed from our lifestyles because technology is encouraging inactive forms of leisure.

Catalyst Canada (2015) looked at three different browsing locations in which Canadians ages 18 to 65+ use their smartphones: "at home", "at work" and "on the go". Results indicated that participants used their smartphones in different ways depending on their location: content consumption and online shopping while at home; checking the weather, sports scores and social media while on the go; and looking up stock quotes, online banking and emailing while at work. The study revealed that at-home usage has increased while on-the-go activity has declined – an interesting result because one of the main advantages of mobile technology is the fact that they can be used anywhere including while on-the-go (Catalyst Canada, 2015). The term "heterotopic space" has been used when comparing numerous spaces and their merging boundaries (Bryce, 2001). For example, technology has minimized the separation between work and leisure. Time and space perceptions of leisure have been invaded by technology resulting in individuals finding it difficult being away from work during their leisure time.

Leisure experiences. Research has also investigated the relationships between smartphone use and leisure experiences. Smartphones are highly influential amongst friends and peers (Smetana, Campione-Barr & Metzger, 2006), and they foster social inclusion and connectedness (Matthews, 2004; Wei & Lo, 2006) which are significant parts of the leisure experience. With the options to personalize ring-tones and screensavers, Srivastava (2005) found that these personalizations reflect an individual's self-identity which helps to improve their status amongst peers (Ozcan & Kocak, 2003). Lepp's (2014a) research on measuring smartphone use, perceptions of leisure and perceptions of the smartphone's role in facilitating leisure suggested that "high frequency

users appear to depend more on smartphones for leisure and are less agreeable to the idea of turning the smartphone off in order to experience leisure" (p. 386). The study revealed that high frequency users text, call or update social networking sites immediately after their leisure experience compared to low frequency users who place less value on sharing their leisure experiences. It is suggested that this may actually enhance the leisure experiences for high frequency users. However, high frequency users actually relinquish physically active leisure in order to be sedentary and use their phones (Lepp et al., 2013).

Previous research has identified that good mental health and stress reduction result from participating in certain types of leisure (Iwasaki, et al., 2006; Mannell, 2007; Trenberth & Dewe, 2002). Smartphone use plays a significant role in producing and maintaining interpersonal and intrapersonal benefits such as increasing social connectedness, feelings of belonging and social identity in adolescents aged 16 to 24 (Walsh et al., 2011). However, smartphone use as a leisure activity has also been associated with depression, anxiety as well as other dealings of distress (Beranuy, Oberst, Carbonell, & Chamarro, 2009; Harwood, Dooley, Schoot, & Joiner, 2014; Rosen et al., 2014). Research suggests that leisure distress could be an outcome of fear (Caldwell, Smith, & Wessinger, 1992). For example, a fear of being alone with one's thoughts during leisure, a fear that one's skills are not up to the leisure challenge, and a fear of failing to keep oneself occupied during leisure. Research suggests that smartphone users who use their phones at a high frequency have lower rates of happiness and higher rates of anxiety when compared to those who use their smartphones at a lower frequency (Lepp et al., 2014). The increase of smartphone use during leisure and the increase of

distress from smartphone use may result in an alteration of the leisure experience by diminishing the stress coping benefits for which leisure is known.

Pierce (2009) found that adolescents are using socially interactive technology, such as smartphones, to communicate with others. This is causing social anxiety and is influencing how adolescents are using technology. It may even be serving as a substitute for face-to-face communication (Pierce, 2009). Turkle's (2015) book, *Reclaiming Conversation: The Power of Talk in a Digital Age*, focuses on the dissatisfaction with technology and helps one to understand how smartphones are influencing existing leisure behaviour. Turkle examines all aspect of conversation – with self in solitude, with family and friends, with teachers and romantic partners, with colleagues and clients – and found that normal social experiences such as having lunch with a friend now involve distracted parties who are not fully engaged in the conversations. She hypothesized that we consume others in small doses and that we use others as "spare parts" to support our fragile selves.

Third places, such as cafés, restaurants, and churches, were traditionally considered places away from home and work where people get together to meet and socialize (Oldenburg, 1989). Cafés and restaurants now need to consider having internet access for customers to enhance their third place experience (Memarovic et al., 2014). People are occupied by, and interact with their smartphone rather than with the person with whom they are physically present. Therefore, technology is changing how "third places" are defined, how people are interacting and how leisure behaviours are evolving.

Smartphones are increasingly relied on by tourists during leisure travel (Wang,

Parks, & Fesenmaier, 2012). Tourists mainly use their smartphone to instantly share experiences, store travel memories or gather information. Smartphones allow tourists to have the feeling of being away and being at home at the same time (White & White, 2007). This may limit feelings of escape from home and work life; however, it may provide feelings of familiarity, comfort and strength when traveling to different locations.

Social media. With the introduction of smartphones, social media applications or "apps" are now available on the smartphone. Adolescents are avid users - 73% of American teens who are online indicated using social networking sites (SNS; Lenhart, Purcell, Smith, & Zickuhr, 2010). However, most social networking sites have age requirements. For example, the age requirement is 13 for Facebook, Instagram, Pinterest, Tumblr, Reddit and Snap Chat, 14 for LinkedIn, 16 for WhatsApp, and 17 for Vine (Bennett, 2014). Other SNS sites require you to be 18 such as YouTube, WeChat and Kik; however, adolescents between the ages of 13-17 are able to sign up with permission from their parents. SNS such as Facebook, Twitter, Instagram, etc. provide a unique leisure experience. They provide diverse audiences with a variety of services worldwide and are now available as applications or "apps" on a smartphone. Main reasons for using SNS are to:

> maintain communication and interpersonal relationships, additional popular
> activities including updating various activities, photo sharing and archiving
> events, getting news about their friends' future activities and/or upcoming major
> events. Moreover, users can add friends, send messages and add new information

in their profiles to notify friends about new developments. (Cicevic, Samcovic &

Nesic, 2016, p. 83)

Christofides, Muise and Desmarais (2009) discovered that the majority of Facebook

users spend between 10 minutes to an hour each day. However, Cicevic et al. (2015)

explain that checking email is the most common web activity for university students

(Cicevic et al., 2015). Research shows that when individuals check up on their friends

through SNS, they are seeking social information which is directly related to social

capital (Ellison, Steinfield & Lampe, 2011; Pascarella & Terenzini, 2005). Therefore,

social capital is built through developing their social support network which leads to

feeling connected to the institution. By feeling connected, students are more likely to

commit to their academics and improve their academic performance (Cicevic et al.,

2015).

Smartphone applications. Catalyst Canada (2015) suggests that millennials aged

18-24 have the greatest increase in the six most common activities performed on a

smartphone: finding a new restaurant, getting directions, reading emails, using Facebook,

checking the weather and watching a short video. This generational cohort is also more

likely to use applications (apps) and have a greater number of apps on their phone when

compared to the older groups (Catalyst Canada, 2015). However, when compared to all

the other age groups, the youngest millennials have an average of 8.88 on their

smartphones. Game play was the most used category for apps with 85% of people

indicating that they used game apps. Consequently, a Google survey on smartphone use

in Canada revealed that the average user had 30 apps installed on their phone (The

Canadian Press, 2013). Over a one-month period, they used an average of 12 apps.

Through apps, smartphone owners create virtual communities which "have social

meaning and are spaces that enhance solidarity and well-being" (Juniu, 2010, p. 470) and

virtual leisure spaces which provide experiences such as escape, relaxation, social

interaction and development of self-identity which may potentially overlap with offline

events (Bryce, 2001).

Fox and Lepine (2013) suggest virtual leisure was viewed to lack physical, mental

and emotional activity; however, this view is being challenged due to the increasing

popularity of virtual leisure. In addition, they explain that original forms of leisure, such

as human interaction, relationships and bonding, are devalued by virtual leisure. For

example, there is an assumption that technological leisure activities are lacking in some

ways – either physically, socially, spiritually, or culturally (Fox & Lepine, 2013). There

"is a refusal to acknowledge the changing nature of physicality and socialization in

today's highly technological society" (Fox & Lepine, 2013, p. 109). Similar views of

virtual leisure found that there is a correlation between adults who play videos games and

health risks such as higher BMI, mental health concerns and lower sociability (Weaver et

al., 2009).

With the variety of games available on smartphones, more and more people are

adopting game play (Wilson, 2015). With the mobility of games, they are now being

played at any location. Games are even able to incorporate geo-location information that

allows the game to incorporate information about physical spaces and locations. For

example, *Ingree* is a game developed by Google that is able to overlay the game to the

physical world. This is becoming an issue because this type of information is traceable and can identify the location the game is being played (Leaver & Wilson, 2015). This allows for players' location be identified to other individuals who are playing the game. Consequently, certain players could potentially be a threat to adolescents' safety. There is also the social aspect of game play which is suggested to be just as compelling as the game itself (Wilson, 2015).

Summary. Research on smartphone use and leisure is being developed and offers key areas to consider in conducting further research (e.g., boredom, the role of apps, SNS). However, research specifically on adolescents and that includes the perspective/voices of adolescents is lacking. The existing research also fails to consider how smartphone use affects important aspects of adolescents' lives and developmental outcomes. The research seeks to gain these perspectives and further the existing knowledge on smartphone use and leisure.

Research Questions

After reviewing relevant concepts and theories related to leisure behaviour, literature related to youth/adolescent development in a leisure and sport context, and the research on smartphone use and leisure, the following research questions have been developed:

1) How do adolescents who use smartphones experience leisure?

2) What roles do smartphones play in adolescents' leisure?

   a. How does smartphone use influence leisure behaviour?

   b. How does leisure behaviour influence smartphone use?

3) How does smartphone use during leisure support or detract from positive youth development?

CHAPTER THREE: METHODOLOGY

The purpose of this study was to explore adolescents' experiences with having

and using smartphones and how those experiences influenced their leisure. This

investigation had three foci. First, the research examined how adolescent smartphone

users experienced leisure. Second, what roles smartphones played in adolescents' leisure

was explored with specific attention on how smartphone use influenced leisure behaviour

and how leisure behaviour influenced smartphone use. Finally, understanding was

developed related to how smartphone use during leisure supported or detracted from

positive youth development.

With limited research on adolescents' smartphone use, this study was exploratory

in nature. The goal of this research was to add to the broad body of research on

smartphone use and to gain a comprehensive understanding about adolescent smartphone

use and leisure experiences. A qualitative approach was used to achieve this. Henderson

(1990) explains that qualitative methods are the best way to understand the meanings

related to experiences within the context of leisure.

Phenomenology

There are a number of approaches to using phenomenology as a methodology

(Dowling, 2007). Canadian phenomenologist van Manen's approach (1990; 1997) was

chosen to guide this study. While his work is most popular within the nursing and health

care research (e.g., Abuidhail, Al-Motlaq, Mrayan, & Salameh, 2017; Adamshick, 2010;

Krumwiede, & Krumweide, 2012), scholars have also chosen van Manen's approach to

explore leisure and sport experiences (e.g., Cronin, & Armour, 2015; Kivel, & Kleiber, 2000; Shannon, 2015; Werner, & Shannon, 2013).

Van Manen' approach to phenomenology combines both descriptive and interpretive phenomenology (Cohen & Omery, 1994). This approach allows the researcher to acknowledge the experience of a phenomenon in its entirety as well as the role of the researcher throughout the research process (Dowling, 2007). The phenomenon I investigated was smartphone use and I considered the lived experiences of adolescents with the phenomenon before they have had a chance to reflect or interrupt their experiences. More specifically, I looked at their lived experiences (i.e., emotions, memories, perceptions) with the phenomenon within the context of leisure. Similar to Heidegger, van Manen is interested in the lived experiences of the individuals within a specific context in opposition to a universal meaning (Caelli, 2000).

Hycner, Husserl, and Moustakas use the practice of "bracketing" as a way for the researcher to put aside his/her judgement and preconceptions and view the phenomenon with fresh insight (Hycner, 1999; Husserl, 1973; Moustakas, 1994). However, comparable to Heidegger, van Manen does not use the practice of "bracketing" (Dowling, 2007). This was a deciding factor for me when choosing the phenomenological approach for this study. By using van Manen's approach, I was able to acknowledge and manage my biases (van Manen, 1997) by identifying my assumptions, beliefs, and thoughts about the phenomenon and the data through the use of a reflective journal. This allowed for my biases or personal history with the phenomenon to be part of the research process instead

of "bracketing" them to the side. This led to me being able to understand my path as a researcher and how I have interpreted the data (Koch, 1994).

According to van Manen (1997), hermeneutic phenomenology addresses the "lived-through quality of lived experience and the description of meaning of the expressions of lived experience" (p. 25). A "lived experience" is one that takes place in a person's physical surroundings and every day activities in those surroundings (known as "lifeworld") before the individual has reflected on the experience (van Manen, 1990). The lived experience must be reflected on and interpreted to find meaning. Through a phenomenological perspective, this study aimed to gain a deeper understanding of the specific phenomena of smartphone use through the lived experience of adolescents within the context of leisure.

van Manen's (1990) methodological structure was used to conduct this phenomenological research. This structure involved four methodological practices that guided the design of the research, the data collection, the data analysis, and the writing. These practices included: turning toward the nature of the lived experience; investigating the experience as lived; reflecting on essential themes; and writing and rewriting.

The first step in van Manen's (1990) methodological practice involved turning toward the nature of the lived experience. This included orienting to the phenomenon, formulating the phenomenological question and explicating assumptions and preunderstandings. As the researcher, I identified an interest in understanding the experience with the phenomenon being explored. My orientation to smartphone use was

that I am not only a user, but an observer of smartphone use by those around me. I have articulated my experiences with the phenomenon in a reflective journal.

Next, I formulated the phenomenological question. The questions were formulated through a process of "living" and "becoming" (van Manen, 1990). My interest in smartphone use evolved from constantly seeing people use their phone including youth. I began to wonder how using smartphones during leisure time would affect adolescents' leisure behaviour as well as their development. My interest and my review of existing literature resulted in the emergence of three phenomenological questions: how do adolescents who use smartphones experience leisure; what roles do smartphones play in adolescents' leisure; and how does smartphone use during leisure support or detract from positive youth development. This type of qualitative research involved me, as the researcher, acknowledging and managing biases (van Manen, 1997) by identifying my assumptions, beliefs, and thoughts about the phenomenon and the data. This process has ensured that I was not bracketing my pre-conceptions of the phenomenon. All presuppositions have been maintained in a reflective journal.

The second step was an existential investigation of the phenomenon which included exploring the phenomenon (i.e., gathering data) and consulting phenomenological literature. van Manen (1990) suggests that "all recollections of experiences, reflections on experiences, descriptions of experiences, taped interviews about experiences, or transcribed conversations about experiences are already transformations of those experiences" (p.54). van Manen proposes that exploring the phenomenon has five different paths that must be followed when accessing experiences

that have had minimal adulterations. The five paths are: using personal experiences as a starting point; tracing etymological sources; searching idiomatic phrases; obtaining experiential descriptions from subjects; and locating experiential descriptions in literature, art, etc.

Shared experiences of the phenomenon may result in the researcher orientating his or her self to the phenomenon (van Manen, 1990). For example, the participants' experiences may become the researcher's experiences. My personal experience with smartphone use gave me an understanding of general smartphone use; however, my previous education on youth development has inspired me to learn about adolescents' smartphone use from a developmental perspective.

Tracing etymological sources refers to how words have evolved and the fact that there may not be a common understanding of them. It was important to understand how words were being used and how they were being interpreted. Idiomatic phrases have also evolved and "…they are born out of lived experiences (van Manen, p. 60). The phrase "smartphone use" is relatively new. It was important to identify what meanings participants attached to this phenomenon and how it may have evolved over time (e.g., from smartphone use being for calling parents to smartphone use as a way of keeping up with talk).

To obtain the participants' experiential descriptions, in-depth, semi-structured, face-to-face interviews were used. This helped in developing a comprehensive understanding of the lived experiences of adolescent smartphone users. Within phenomenological interviews, it was important to remember that the interviewer (me) and

the interviewee (participant) work together through the process of discovery. However, before the interviews began, phenomenological literature was consulted. For example, Academic Search Premier, Communication & Mass Media Complete, ProQuest Nursing & Allied Health Source, and PsycINFO were used to search for phenomenological studies related to smartphones in an effort to capture what is known about adolescents' lived experience of smartphone use during or as an instrument of leisure. Studies were found that included leisure and phenomenology however, no studies were found that included adolescents' lived experience of smartphone use during or as an instrument of leisure. In addition to the phenomenological studies, non-phenomenological studies were discussed in the literature review to inform my understanding of the phenomenon.

The third step in the methodological process involved reflecting on essential themes and included progressing from data collection to data analysis using van Manen's (1990) process of phenomenological reflection. This included uncovering thematic aspects in lifeworld descriptions, isolating thematic statements, composing linguistic transformations, and collecting thematic descriptions through artistic sources. A thematic analysis of the transcripts assisted in both order and control of the data. Van Manen's (1990) detailed or line-by-line approach was used to code the text as a starting point for uncovering thematic aspects of the descriptions of participants' everyday experiences. After coding was completed, essential themes were then developed. These questions were asked when determining essential themes "Is this phenomenon still the same if we imaginatively change or delete this theme from the phenomenon? Does the phenomenon without this theme lose its fundamental meaning?" (van Manen, 1990, p. 107).

Finally, the last step in van Manen's (1990) methodological practice was phenomenological writing. This included attending to the speaking of the language, varying the examples, writing and rewriting. It was important for the research to stay true to the style of language that participants used. A variety of examples were used to help the reader understand the lived experiences and have a clear understanding of the phenomenon described. The process of writing helped to create a clear understanding of the phenomenon through the participants' experiences. The process of rewriting allowed me to reflect on my orientation to the world.

Selection of Participants

Consistent with phenomenology, participants were selected using purposeful sampling (van Manen, 1997). This sampling technique was used to ensure the selection of individuals who were willing to share their experiences (i.e., feelings, memories, perceptions) with the phenomenon and had extensive knowledge about the phenomenon. This helped to generate new conceptual understandings of adolescents' leisure experience and smartphone use.

Purposeful sampling was used to recruit adolescents, male or female, between the ages of 14 and 17 who owned a smartphone (i.e., iPhone, Android) for at least one year, within the Fredericton area. In addition, because this study sought to explore how smartphone use could influence and be influenced by adolescents' leisure experiences, adolescents were required to use their smartphones in multiple ways. More specifically, they had to: be active in using their smartphone to text message and call, be using at least one social media application (i.e., Facebook, Instagram, Twitter, YouTube, etc.), and be

using at least one other type of application everyday (i.e., email, maps, weather, camera, etc.). Having had a smartphone for at least one year ensured that participants were familiar with the device, but have moved beyond the stage where it is novel (which may have influenced use).

A recruitment letter was sent out to organizations serving adolescents (e.g., YMCA, Boys and Girls Club, City of Fredericton). The letter outlined the purpose of the study, the time commitment involved, the criteria for participation, an explanation of consent because I was recruiting adolescents under the age of 18, how confidentiality was going to be protected, and how participants could contact me if they wished to participate. Posters were also displayed at locations on the University of New Brunswick campus such as the Lady Beaverbrook gymnasium and the Currie Center as well as other locations off campus where adolescents tend to spend time (e.g., YMCA, Nashwaaksis Field House, Boys and Girls Clubs). The information on the posters and in the email included a description of the study, criteria for participation and my contact information. When I was contacted by a potential participant, a meeting time was scheduled at a place of their choosing. An information letter was sent out to the participants along with a consent form for the participant and his/her parent to review and sign prior to participation.

Nine participants (4 male and 5 female) ranging from age 14 to 17 participated in my study. All of the participants were Caucasian and attended school in the Fredericton area. I was unsuccessful getting participants from recruitment letters and posters. Instead, I engaged my social network (i.e., parents, teachers, coaches) within the Fredericton area

to distribute recruitment information. Once recruited, participants were contacted to ensure they met the requirements. All of the participants met the requirements of age and of having more than one application on their phone. The age of the participants, the type of apps they used and the extracurricular activities they participated in have been displayed in a chart below.

Table 1

Participant Age, Apps Used and Extracurricular Activities

Pseudonym	Age	Main Apps Used	Extracurricular Activities
Sarah	17	Facebook, Instagram, Snapchat, What's App, camera, music, text messaging, email	Dance, volunteer with a charity, food support volunteer
Victoria	15	Snapchat, text messaging, Instagram, YouTube, Facebook, Netflix, camera	Theatre, music lessons, volunteer with international organization
Russell	14	Text messaging, YouTube, Netflix, Snapchat, Instagram, Xbox app, email, music	Plays three sports
Joe	16	Netflix, games, text messaging, Snapchat, Instagram, email, camera, music, YouTube	Soccer
Mark	17	YouTube, Netflix, Snapchat, music, Instagram, text messaging, Facebook, email, games	Volleyball
Charlie	17	Facebook, text messaging, Snapchat, YouTube, Netflix, Pinterest, Instagram, camera, Hunting and Trapping NB, Bible	Coaches a sport, youth Group, volunteering
Meghan	17	Facebook, Instagram, text messaging, camera, email, Snapchat, Twitter	Volleyball, volunteer with programs that support individuals with disabilities
Lisa	17	Instagram, Snapchat, text messaging, YouTube, Netflix, Pinterest, games, maps	Plays two sports, Best Buddies, Grads without Boarders
Barbra	15	Music, Instagram, YouTube, games, text messaging, email	Plays two sports, Girl Guides

van Manen (1990; 1997) does not offer a specific sample size for his approach to phenomenology and there are mixed opinions on the appropriate sample size for research using a phenomenological approach. Creswell (1998) recommends between five and 25

participants, Morse (1994) suggests a minimum of six, and Starks and Brown Trinidad (2007) state the typical sample sizes in phenomenology range from 1 to 10 participants. I had set a range of between 8 and 12 participants after viewing sample sizes in other qualitative studies that focus on leisure experiences (Kivel, & Kleiber, 2000; Shannon, 2015; Werner, & Shannon, 2013). This range was a starting point as I recruited and interviewed participants until saturation was reached.

The term saturation, as it relates to research, has evolved and changed over time. Theoretical saturation was originally developed as part of the grounded theory approach (Guest, Bruce, & Johnson, 2006). Within qualitative methods, the concept has varied in both terms and conceptualizations of the terms to include thematic saturation (Guest et al., 2006), data saturation (Francis et al., 2010; Guest et al., 2006), and saturation (Starks, & Brown Trinidad, 2007). Within the literature, different explanations of saturation were noted. For example, Green and Thorogood (2004) suggest that the collection of data should continue until there is nothing new emerging; when there are no longer surprises and when there are no more patterns generated in the data (Gaskell, 2000). Other researchers explain that saturation is when the data are both rich and thick (Fusch & Ness, 2015). Rich refers to the quality of the data as multi-layered, complex, nuanced, and detailed. Thick refers to the quantity of the data and means, most simply, that the there is a great deal of data. It is possible to have rich data, but a smaller amount of it; conversely, it is possible to have a large amount of data that is not rich. The key is to have both. Therefore, I understood that I may have interviewed 12 participants, but not have the rich data I need to comprehensively understand the phenomenon. In this

situation, I would continue to recruit participants and collect data. After recruiting and interviewing 9 adolescents, I believe that saturation was reached.

Data Collection

Guided by van Manen's (1999) approach, in-depth, semi-structured, face-to-face interviews were used to gain access to the lived experiences of adolescent smartphone users. An interview guide was developed that allowed for conversations to be concentrated around the research questions and the knowledge participants had about the phenomenon (i.e., smartphone use). These pre-determined questions ensured that each participant was asked the same questions (Patton, 2002). The interview guide consisted of four sections that focused on gaining background information on the participants (e.g. tell me about yourself; describe your free/spare time), understanding adolescents' leisure experiences and behaviour (e.g. describe how you feel when you participate in your leisure activities; describe what motivates you to participate in your leisure activities), understanding the influence of smartphone use on leisure behaviour (e.g. describe your smartphone use; can you talk about what you specifically use your smartphone for) and understanding how smartphone use during leisure influences positive youth development (e.g. describe what would happen if you lost or broke your phone; describe the benefits you seek or experience from using a smartphone). Specific questions under each section were followed with probing questions. Four different types of probes (i.e. transitional, situational, emotional and personal) were used, when necessary, for clarifying points, refocusing the participant, amplifying answers, or getting at feelings or thoughts (Henderson, 2006). Interviews were conducted at a quiet, but convenient place (i.e.,

participants' homes, participants' schools, UNB's facilities) for the participant and lasted between 50 minutes to 80 minutes.

A reflective journal was maintained throughout the data collection and data analysis process. This journal was used as a tool to support me in acknowledging and managing my biases (van Manen, 1997) by identifying my assumptions, beliefs, and thoughts about the phenomenon and the data. For example, I initially thought that smartphone use was negative for adolescents. By identifying my biases I was able to keep that in mind during my data analyses and not have it influence the findings.

This process helped to "bring the unconscious into the consciousness" (Ortlipp, 2008, p. 703) and brought as much visibility and transparency as possible throughout the data analysis process (MacNaughton, 2001). Within the journal I kept track of my initial thoughts of analysis, my reactions to participants' responses, and any way I found myself relating to the participants. The goal of using a reflective journal was to make sure that my "decisions, and the thinking, values, and experiences behind those decisions" (Ortlipp, 2008, p. 687) are evident to both myself and the reader.

The practice of "bracketing" has been used in phenomenology when the researcher suspends his/her understandings, prejudices and previous knowledge of the phenomenon under investigation in order to include the views of the respondents and approach it with fresh insight (Husserl, 1973). Husserl's view of bracketing is not embraced by van Manen within hermeneutic phenomenology. Instead, van Manen focuses on developing awareness of biases rather than necessarily setting them completely aside. van Manen (1990) asks "if we simply try to forget or ignore what we

already 'know', we might find that the presuppositions persistently creep back into our reflections" (p. 47). This approach allowed me

> to come to terms with our assumptions, not in order to forget them again, but rather to hold them deliberately at bay and even to turn this knowledge against itself as it were, thereby exposing its shallow or concealing character. (p. 47)

Therefore, this process attempted to both acknowledge and manage my prior experiences and biases.

Data Analysis

Using a hermeneutic phenomenological design, data analysis occurred concurrently with data collection (Cohen, Kahn, & Steeves, 2000). With permission from participants, the interviews were audio recorded and transcribed verbatim. The data was analyzed using van Manen's (1997) process of phenomenological reflection. The first step in this process was conducting a thematic analysis. Individual transcripts were read and re-read to ensure familiarity with the data and to acquire a sense of the lived experience in its entirety (Cronen, & Armour, 2015; van Manen, 1997). Van Manen's (1990) detailed or line-by-line approach was used to code the text as a starting point for uncovering thematic aspects of the descriptions of participants' everyday experiences. For example, when participants spoke about how much time they spent using their smartphone, I coded it as "amount" whereas when participants who spoke about using their smartphone when they were bored I coded it as "bored". Qualitative data management software, NVivo 9, was used to help with the organization of the codes. Next, noteworthy statements and phrases within the transcripts were identified (i.e.,

descriptions of feelings and thoughts, interpretations and responses) to create meaning units. For example, participants spoke about using their smartphone a lot and how they used their smartphone less on days when they participated in structured leisure. These statements were categorized as "frequency of smartphone use" and "smartphone use mediated by structure". Meaning units that were related to the research questions and reoccurred were clustered into themes. For example, the meaning units "frequency of smartphone use" and "smartphone use mediated by structure" were then clustered to create the theme "'I Use it a Lot': Smartphone use as Central in Adolescents' Lives. I repeated this process for each transcript. Next, the meaning units of each transcript were examined to identify essential themes that spoke to the shared experience of the phenomenon.

Ensuring Trustworthiness of the Data

To ensure the trustworthiness of the data, numerous steps were taken. First, "member checks" were used to ensure credibility of the interpretations and findings (Ely et al., 1991; Erlandson et al., 1993; Glesne & Peshkin, 1992; Lincoln & Guba, 1985; Miles & Huberman, 1994). Generated themes were sent to the participants so they could provide feedback on the accuracy and credibility of the interpretations. Therefore, data was validated by the research participants (Elliott & Timulak, 2005). Lincoln and Guba (1985) consider this technique to be "the most critical techniques for establishing credibility" (p. 314).

Second, as discussed as part of data collection, a reflective journal was maintained throughout the process. Maintaining this journal throughout the data collection and data

analysis process helped me to manage my bias. I have included an excerpt from my journal.

> Most, if not all, of the participants have sport or recreation in their lives. Some of them also volunteer. There seems to be commonalities between participates that are "busy". For example, a lot of them speak about how they don't really care about posting things online. Perhaps if adolescents are "busy" and participating in sport and other activities that provide them with skills, knowledge and many other things they have a higher self-esteem and do not need gratification from social media. If this is the case, perhaps adolescents who are not busy and not getting the benefits from participating in positive leisure experiences would be more likely to have less self-esteem and care more about their online appearance? Leisure activities help fill up their weekdays and weekends and provide them with ways to build their confidence in real life so they don't need social media to create confidence in the online world?

An ongoing dialogue with my thesis supervisor also took place. Van Manen (1990) suggests that these steps help ensure that meaning units and themes from the thematic analysis are echoing the lived experience of the participants as opposed to reflect potential biases of the researcher.

Lastly, intercoder reliability was used to ensure consistency of coding during data analysis (Bryman, 2001). A graduate student in Kinesiology from the University of New Brunswick was asked to code five of the transcripts. Once the transcripts were coded, I

met with the other coder to discuss and to evaluate the extent to which the data were coded/interpreted similarly (Kurasaki, 2000; Lombard, Snyder-Duch, & Bracken, 2002).

Ethics

Ethics approval was requested from the University of New Brunswick's ethics review board because this study involved human participants. Once approved, adolescents who chose to participate were given a comprehensive briefing on what the study entails. A consent form was reviewed and signed prior to the interview. Adolescents that were under the age of 18 were required to have their parent or guardian sign a consent form giving them permission to participate in the study. Participating in this study was completely voluntary; therefore, participants were informed that they were able to withdrawal from the study at any time.

As soon as participants agreed to be part of the study, I protected their identities by using pseudonyms. A pseudonym was assigned to each participant and used within all written and verbal documentation of the collection, analysis and reporting of the data. Only I was aware and had access to the true identity of the participants. A locked filing cabinet contained the signed consent forms of the participants. These forms were the only documentation that had the true identity of the participants. A separate locked filing cabinet was used to store the hard material, such as the transcripts. Audio recordings were stored on a computer with a password protected code.

CHAPTER FOUR: FINDINGS

The purpose of this study was to explore adolescents' experiences with having and using smartphones and how those experiences influenced their leisure. Three main research questions directed this study. The first research question explored how adolescents who use smartphones experience leisure. The second research question examined what roles smartphones play in adolescents' leisure. More specifically, how smartphone use influences leisure behavior and how leisure behavior influences smartphone use was explored. The final research question examined how smartphone use during leisure supports or detracts from positive youth development.

Throughout the data analysis process five major themes were developed that best reflect the essence of how smartphone use influenced or is influenced by the leisure experiences of the adolescents in the study. The first major theme, "'I use it a lot': Smartphones as central in adolescents' lives", illustrates how smartphones were central aspects of the participants' lives. The second major theme, "'Something to do when I'm bored': Smartphones as entertainment" highlights how adolescents used their smartphone to alleviate their boredom. "'I just want to check my phone': Smartphones as a distraction and an attraction" emerged as the third major theme. This theme emphasizes how smartphone use prevented full engagement in leisure at times. The fourth major theme, "'Want to come over to my house?': Smartphones as a facilitator and instrument of leisure" demonstrates how adolescents used their smartphone to organize social leisure. There are three sub-themes within this theme: i) scheduling leisure, ii) enhancing leisure and iii) social leisure and ongoing connection. The final theme, "'I don't have time':

Smartphone use as less of a leisure commitment", illustrates how smartphone use did not take the same commitment as other leisure activities.

"I Use it a Lot": Smartphones as Central in Adolescents' Lives

Throughout the data analysis, it was evident that smartphones were central aspects of adolescents' lives. The majority of participants identified that they were spending "a lot" of time on their smartphones. Charlie explained that he spends "close to 3 or 4 hours" on his phone a day while Meghan spent "like 4 in total" and Lisa spent "probably like 3 hours maybe". Meghan stated,

> I use my smartphone a lot…well, I mean like when I can. But usually
>
> like, I always have it with me pretty much. Like…well…I won't always
>
> be on it, but it's usually always with me except when I'm home or
>
> whatever. If I'm like downstairs and I need to go upstairs, I won't bring
>
> my phone.

Sarah explained that she uses her smartphone so much that she has to charge it after school before she goes to her dance class.

> I go on my phone a lot. I charge it overnight and then the battery is
>
> pretty low when I get home from school so sometimes I have to charge
>
> it again before I go to dance. I'm on it a lot. I would say even during
>
> class [at school].

Victoria discussed that she uses her smartphone so much that her parents get annoyed with her: "My smartphone use…well… like it's buzzing right now. I

use my smartphone a lot…I'd say. Like to the point where my parents will say something and like probably get annoyed."

Participants who were permitted to use certain functions of their smartphones during the school day indicated that this affected their overall usage. For example, Nicholas was asked how often he uses his smartphone during the day and he responded with, "In school, because they let us in school, probably like a lot because I…they allow us to listen to music…".

While the participants indicated that their smartphone was central to their lives and that they were using it "a lot", smartphone use was mediated by the structure that was present in their daily lives. For example, participants described using their smartphone at school for communicating with their friends or parents, listening to music or looking up information for class. However, during a structured school day, participants used their smartphone less than they would in the evening and on weekends. In the absence of that school day structure, adolescents had more opportunity to choose what to do with their time, and this resulted in them using their smartphone more often. Generally, participants tended to use their smartphones more when they were less "busy" (e.g., with homework or projects) and had more leisure time or time to relax. For example, Joe was asked if his usage varies from weekdays to weekends. He stated, "Probably yeah cuz like weekends I have like just relax so I would be on my phone more. But if I'm doing something on the weekend, it would probably be the same [as weekdays]". Victoria explained that she is

on her phone more on weekends because she has "more free time and then…so like I'll go on my phone".

In addition to the structure of the school day, organized leisure activities provided structure that influenced the amount of time the participants used their smartphones. Barbra described that she used her smartphone more during evenings when she has "nothing at night".

> In a day I can use it to a total like two hours. Not two hours, no. It depends on the day. Sometimes if I have nothing at night I'll be on it for two hours at night or an hour and a half at night, but when there's sports and stuff I could be on it for a total of a day, an hour…probably averages, the whole week probably averages out an hour or two hours a day. Something like that.

When Mark was asked if his usage varies from weekdays to weekends, he answered with, "Yeah like I would say weekends I'm on it more unless I have like a volleyball tournament or something. But weekends yeah…it would probably be like 3 hours a day". When Meghan was asked to describe how the leisure activities she participates in influence her smartphone use, she explained,

> I think that like how busy I am makes me use my phone less which kind of influences why I don't care that much about social media I guess because I don't have the time. So like I'm not that type of person that is constantly picking up their phone I guess. So I think like if I wasn't as busy, I'd probably spend more time on my phone.

It was clear that participants acknowledged that they were engaged by or with their smartphones "a lot" on a daily basis. Participants' use of their smartphones was mediated by structured activities such as school or leisure activities suggesting smartphone use might be a default leisure activity in the absence of structure. In the absence of that structure, participants were likely to be using their phone up to 4 hours per day. The next two themes offer more insight into why and how the adolescents in this study were using their smartphones during their available leisure time.

"Something to Do When I'm bored": Smartphones as Entertainment and Stimulation

Understanding how a smartphone influences adolescent leisure behaviour was one of the aims of the study. One of the key findings was that participants described their smartphone use as alleviating boredom during their leisure time as well as during leisure experiences.

One of the ways the boredom the participants' described was alleviated was by entertaining themselves on their smartphones by accessing a variety of apps. The main apps that were identified included social media apps (Instagram, Snapchat, and Facebook), YouTube, Netflix as well as apps for music and games. The participants used these apps to communicate with friends; play games; watch videos, TV shows, or movies; or look up information or listen to music.

Adolescents described using their smartphone as a way to kill, pass, or fill time which was a way for them to alleviate boredom while they are waiting for another,

perhaps more engaging, leisure activity to happen. Their smartphones became a default or

passive leisure choice to entertain themselves. For example, Barbra said she used her

smartphone to "entertain myself yeah when I have nothing to do". Joe explained that he

used games on his smartphone during times when he was bored or waiting. Similarly,

Mark used his smartphone to "kill time" by playing the one game that he liked to play: "I

do play Tap to Riches… I do mostly use that like game just because I don't have to think

and I'm just swiping and stuff and trying to kill time". Nicholas spoke about how he

used his smartphone as a way to access "funny videos" on Instagram if he was bored.

Smartphones had become a way for adolescents to constantly be entertained

during car rides. For example, Sarah, Joe and Mark discussed how they listen to music,

play games, watch movies or videos or go on social media to help pass the time. Sarah

discussed how her smartphone keeps her "busy on long car rides". Joe explained that

"during long drives, I like to play games and stuff to pass time. I go on Snapchat quite a

bit and YouTube and stuff", while Mark discussed how he makes sure to have game apps

or movies on his smartphone before leaving on a long drive.

> I would play the apps that I mentioned earlier or like I would like
>
> download movies on my phone and stuff so like on long drives. Like
>
> when we go to Bathurst or something I would download a movie on my
>
> phone or like I would make sure I would have an app that I would play
>
> to like…to make the time go by.

It is interesting to note that there were always others in the vehicle during these

car rides, but rather than engaging with the others in the vehicle – having

conversations – participants chose to use their smartphones as their form of engagement.

While most of the examples participants gave of how they used their smartphone to alleviate boredom were to pass or kill time, Charlie explained using Pinterest on his smartphone to "look at cool ideas to build stuff if I'm in the garage and bored". In this way, Charlie was actively seeking ways to be engaged or stimulated during his leisure time, and his smartphone provided him easy access to ideas. Barbra offered another example of taking the initiative to alleviate her own boredom by communicating with others, "Just being able to connect with people…yeah just contacting and something to do when I'm bored".

Smartphones also seemed to have the potential to alleviate boredom without participants actively initiating it. For example, notifications on participants' phones would draw their attention and had the potential to entertain them or more fully occupy their minds. However, these notifications were unpredictable both in terms of when they might come, whether they would be enough to alleviate feelings of boredom, and for how long it would occupy participants' minds. An example of this was evident in Victoria's explanation of how notifications made her feel, "Sometimes it can be…it's like when you are really bored it's like 'Oh yay! Finally!'". In this situation, Victoria was not actively seeking to alleviate her own feelings of boredom, but a notification popping up on her phone gave her something to do.

As discussed above, it was clear that in a number of cases, participants were seeking to alleviate boredom during their leisure time. However, participants also used their smartphone as a way to multitask when they were bored with or not stimulated enough by their leisure activities. As an example, when Mark was asked, "What if you were watching a movie, would you use your phone as well or would you just watch the movie?" he spoke about looking at his phone when he was bored with the movie he was watching.

> I don't know. It depends on how like…how much I'm interested in the movie I guess. If I'm really engrossed into the movie, like paying attention, then I wouldn't look at my smartphone. But if it's a boring movie and I'm not really feeling it or interested in it, I may take a couple peeks at my smartphone just to see what time it is or if I got any notifications. Stuff like that.

A final point is that participants did not describe the choice to use their smartphones to relieve boredom as particularly satisfying. Sarah articulated this well: "It [her smartphone] kind of gives me something to look at. You're still really bored, but then you're looking at something and you can talk to people I guess so… I'm a little less bored, but still not really fun." Sarah was admittedly less bored, but not enjoying herself. Similarly, Victoria, in describing her use of Instagram, did not appear to find it satisfying or meaningful. "It's just like kinda….something to kill time basically. That's probably why Instagram was invented – to kill time. You're just looking through other people's lives. It's almost like you're living vicariously through friends and things like that". This

seemed to lead to mindless engagement that takes up a lot of their leisure time leading to

less time for other leisure activities that may be more developmental in nature or

satisfying. For example, Mark stated:

> You get caught up in like a Netflix series and like, not like waste a lot
>
> of time but a lot of time will go by if you do binge watch or like just
>
> keep clicking new videos on YouTube it can take up time. So it can
>
> take up time you may have slotted for other things.

"I Just Want to Check My Phone": Smartphones as a Distraction and an Attraction

As mentioned briefly in the previous theme, participants sometimes used their

smartphones when they were not sufficiently stimulated during leisure activities.

However, smartphone use was also described as preventing full engagement in leisure at

times. For most of the participants, their leisure experiences seemed to be interrupted by

the constant distraction of their smartphone. Many spoke about participating in their

leisure activities such as dance, club activities, sport, youth group, practicing scripts for

an upcoming play, or being on vacation, and how their smartphone distracted them from

being focused on those leisure activities. Therefore, they described being physically

present while participating in their leisure activity; however, they were not always fully

engaged. Sarah explained that she was "not completely focused" on her leisure activities

when she is expecting an "important" notification. She stated:

> If I am waiting for like an important, well what I think is important
>
> notification, like or if I am waiting for notifications or something, of a
>
> message, then like maybe when I'm at dance or a club I'm really

tempted to check my phone. I just keep thinking that I just want to check

my phone. And so I'm not completely focused on what I'm doing

because I just want to check my phone.

Meghan explained that her volleyball coach asked her team to shut off their smartphones during the day of tournaments. She discussed how having their smartphones shut off helped to insure that they were focused on volleyball instead of other things.

I think there is a specific reason because like, it depends on the person,

but like there are some people on my team that are like addicted to like

everything. So like, it's a distraction. So if you are not completely

focused on like…if you were warming up and you have music in your

ears, sure it could help you. But if you get a notification you are going

to look at it. So, I guess that's the reason, and I think it has an impact

for people like even like at the gym and stuff. You always see people

on their phones when they are working out like between sets. They will

like scroll on their social media, and I think like before that existed like

people were more focused on everything.

Other comments emphasized similar feelings of being distracted and that smartphone use prevented full engagement in other obligatory tasks such as homework. Victoria's comment exemplified this:

And I'll use it, it's like when I should be doing homework or I should

be practicing for like voice or piano or reading through the scripts and

trying to memorize songs and things. That's definitely a big distraction.

So, I could spend an hour on it instead of doing that. It's like

procrastination and like I'll end up getting to bed late and it's just like

a horrible cycle all over again.

Smartphone use during these activities extended the length of time it took Victoria to

complete a task related to her leisure activity and/or her homework. An important point is

that smartphones were a welcomed distraction (or an attraction) in many cases and

resulted in participants' experiencing intermittent leisure that occurred in snippets of time

during the completion of other tasks. This meant, in some cases, that participants had less

time to access other leisure activities.

Other participants acknowledged how their smartphone challenged their full

engagement in the leisure activity. Mark explained that his smartphone negatively

affected his level of enjoyment when he was on vacation.

Yeah like if I'm like…say going for a walk in the park or like if I'm

just doing something on vacation or whatever, and I would be like on

my phone like playing a game or something when I could be like

walking around and exploring more and enjoying the vacation a little

bit more.

Mark's example suggests he lacked the self-regulation or awareness in the moment to

manage his smartphone use even though he appeared to be able to reflect, later, on how

his experience was affected. Mark emphasized the difficulty of regulating his engagement

with his smartphone compared to regulating engagement when he is playing a sport:

When you like play video games or like YouTube, you just kind of

keep going. When you are like playing or like doing working out or like

playing a sport your body kind of tells you when to stop. But with

video games and Netflix there is no really like time limit on your body.

Marks suggests that physical activities have built-in regulators whereas smartphone use

does not and can therefore contribute to more use – including use that may distract one

from being fully engaged with other leisure opportunities.

Along similar lines, Meghan seemed to appreciate that smartphone use could

distract from accessing the full benefits of a leisure experience. "I would say it probably

distracts people I guess because like…you…there is always something to look at I guess.

So like instead of relaxing your mind, you are still focused on that".

Smartphone use was also viewed by the study participants as a social

expectation. This expectation encouraged participants to constantly "check"

their notifications for text messages and social media to know what was going

on. Sarah explained that she checks her social media "several times" during

school hours and that she does a "rotation" of all her social media apps. "Every

time I go on my phone I go on all them". Therefore, the expectation to be

connected, to share information and to respond were some of the factors that

attracted these adolescents to their phones several times a day.

They also seem to be attracted to their ability to control what they share online

and how they are portrayed. Victoria explained that there are certain expectations to live

up to at school (e.g., how to look, how to act) and that using social media makes it easier to live up to those expectations because of the opportunity to portray yourself online.

> I just feel like…like school give expectations of people and they try to
>
> have to…they try to live up to it and the easiest way to do that is on
>
> social media where you can control everything that people see.

Charlie spoke about how his leisure experience is enhanced by his ability to post on Facebook about where he is travelling for vacation.

> Oh if I was going to vacation, I would brag about where I was and stuff
>
> like that. If I was going to go to Boston and see a game, see a hockey
>
> game or something, I'd post like a check-in when I got there. Or if I'm
>
> going on a…like this Christmas I'm going on my graduation present
>
> trip where I'm going down to Florida with all my…cuz there is three of
>
> my cousins and I'm the third, so there is three of us all graduating. So
>
> we are all going down. So I would post about that. Make a check-in
>
> when I got there to like Disney or whatever.

Victoria was asked about whether she posts on Instagram and she replied saying that she "hardly posts on that and that's something my friends get really mad at me about". When she was asked to explain why she does not post on Instagram, she explained:

> I don't really know. I think it's because like, I feel like I have to
>
> like…really, really, really have to like a picture or, like, make sure the
>
> picture is perfect, because like, you have to like… you have a good
>
> amount of followers on your Instagram account…some of which you

don't know very well and you kind of want to give off a… like a good

look of what your life looks like. And so if you just post things willy

nilly I guess…you just worry that people think ill of you I guess.

Sarah discussed that what people think influences what she does and how she acts online.

Like you'd want like, you kinda like base what you post on like "oh

what will people think if I posted this". Would they think it's weird? Do

they think it's a good picture, would they think it's a bad picture, do

they think it's weird like, you kind of wonder what they think?

Charlie also addressed how different notifications influence how he feels. He receives a

positive feeling when people are liking his posts or requesting to follow him.

Yeah, I like getting Instagram notifications because it's nice to know

people are…it's nice to know people are liking what you post or people

want to follow you or something like that. It's always a good feeling to

have. I wouldn't say I like crave those moments, but it's nice to have

those moments for sure yeah.

There can also be negative feelings associated to notifications. Charlie explained

how he would be "a bit upset" if no one liked the picture he posted and that he would

"get rid of it" and be "less likely to post something like that for a long time".

I'd obviously be a bit upset but I'd probably be, like, ok, this isn't the

stuff people would like to see or I…either… be like I don't care or

whatever. Or I would get rid of the picture - nobody likes it, so I'd just

get rid of it.

If I posted something and nobody liked it for like a week or like ever,

I'd probably be less likely to post something like that for a long time.

Although there is this attraction to adolescents to share information online, there also

seems to be a downside where there is a need to share information online and an

expectation to live up to.

Victoria mentioned how her mother's friend said that adolescents today are always

connected even when they are at home.

So I think…I think my mom's friend said something really important.

She said like back in her day, if you went to school and you…you had

to deal with people you didn't like then you could go home and you

wouldn't have to deal with then anymore. But now you have to go

home and they can still talk to you because it's social media…everyone

knows what everyone else is up to.

"Want to Come Over to My House?": Smartphones as an Instrument to Facilitate Leisure

Smartphone use was a way for participants to easily organize social leisure. They

used their smartphones as an instrument to facilitate leisure such as making plans with

their friends or family and sharing details about their plans with their friends or parents.

Conversations and connections were also made and maintained through their smartphone

use. Smartphones provided a way for the adolescents in this study to communicate

outside of places, such as school and leisure activities, where they were face-to-face with

their peers. Most participants expressed that they preferred communicating through text

messaging and Snapchat over calling. However, they were also using different forms of

social media such as Instagram and Facebook to communicate. Emailing was primarily

used for communicating information about leisure activities, school/school work and job

schedules or shift changes. Therefore, in this way smartphone use was seen by

participants as an instrument that helped to facilitate leisure. When asked what she

normally does on her phone during class at school, Victoria spoke about how her

smartphone allows her to communicate with her friends "to make plans for lunch" or "to

like go out to Starbucks or something". Nicholas spoke about how he and his friends

make plans in person to hang out during their leisure time and how they confirm the

information by either texting or Snapchatting later.

> But most plans like usually we would make in person and just text or
>
> Snapchat the information. Like what time…we would be like at school
>
> "want to come over to my house". Yeah I was like "what time? Oh, I
>
> have something tonight. Talk to you later". I'd say "Alright". That
>
> basically… like the talk to you later is easy. The talking when we are like
>
> texting each other the information. Like what time they can come over
>
> at.

Therefore, smartphones are also an instrument that facilitates social leisure after school or

on the weekends. Nicholas explained that his smartphone benefits his experience by

providing the opportunity to "have conversations with people even after school. Even if

I'm not seeing them".

Scheduling leisure. Most participants discussed how without a smartphone their

ability to communicate with friends and parents would decrease. Some participants had

become dependent on their smartphones as an instrument to facilitate communication during leisure or for leisure. Smartphones allowed participants to easily access their friends and family at any time during the day giving them a way to constantly connect with others. Therefore, smartphones allowed participants to facilitate leisure plans or make changes to plans that had already been organized.

The majority of participants discussed how smartphones helped to conveniently communicate information related to leisure. Participants spoke about if they lost or broke their smartphone, they would have to put more effort into informing their parents about when and where to pick them up, updating them on practice time being changed or cancelled and asking them for permission about leisure activities. Therefore, the adolescents in the study viewed their smartphone as an instrument to facilitate leisure, and perceived that without a smartphone, they would face a greater challenge to facilitate their leisure. Lisa explained how not having a smartphone to text her mother about practice being cancelled "would be a hindrance to everything," while Barbra explained her smartphone allows for easy updates about her teammates or the team in general. "Like 'oh this person is not coming' or 'this has been moved to this time' or 'you should be this early.' Those kind of things." Sarah discussed how not having a smartphone would change the way she currently communicates with her friends about leisure activities and acquiring permission from their parents.

> We usually make plans over social media so we would have to make all
> our plans like in person which isn't as bad. But like usually we would
> have to ask our parents and so we can't like make it on the spot. And so

we have to wait until the next time we see each other or something to

call, to call them I guess to figure out what to do.

Smartphone use has also increased adolescents' ability to constantly be connected. It was interpreted that participants' smartphones were used as an instrument that encouraged the facilitation of leisure activities during unstructured leisure activity time. Victoria spoke about how she received notifications about last minute rehearsals with the production club she is part of which leads to less time for other things such as school projects. It seems because of smartphones and the expectations that adolescents are connected all the time, last-minute plans are made or short notice is given.

Sometimes I'll get like notifications like on Facebook about like…like

a TNB meeting, like a rehearsal that's kind of last minute when I

wanted free time or something. So that's not always great. Or like I'll

get a Facebook notification, like a last minute CISV [Children's

International Summer Villages] meeting that's probably going to take a

couple of hours and I won't have time to do that project or something.

And so those…those notifications kind of all tie into like extracurricular

activities.

Enhancing leisure. Smartphones were described as having the ability to enhance leisure experiences. The adolescents in this study explained that having access to music and social media applications (e.g., Instagram, Snapchat) on their smartphone enhanced their existing leisure experiences. For example, most participants spoke about how they were "always listening to

music," and how being able to access music on their smartphone enhanced their experience either at school, when they were doing homework or during leisure time. Meghan explained that music has a positive effect on her "and like I listen to music all the time".

> For volleyball, I can't [use her smartphone,] and I don't when I'm playing piano. But like if I'm at the gym, usually there is music playing there, but like sometimes if I want to listen to like my own music, I'll have my own on me while I'm doing my workout. So I think that makes it better because I can listen to my own music. But yeah.

Barbra used her smartphone to combine a leisure experience (listening to music) with doing her homework.

> …sometimes it helps if I'm doing homework I'll listen to music and it just helps when it's like…when it's quiet I can't think cuz I start thinking about other stuff and it's just my mind goes everywheres.

> Mark was asked what benefits he seeks or experiences from his smartphone when compared to the benefits he seeks from other leisure activities such as volleyball or reading. He responded saying that sport can be "repetitive" and that the novelty of smartphone use provides "something new" every day as well as the opportunity to look up information or download a new game.

> I guess volleyball and reading…like…well not so much reading because there are a lot of books out there but volleyball it is the same

sport. So like it's the same thing and that's not to say it's boring or

whatever, but it is repetitive because it is just one thing. But for the

phone, you can look on Facebook or like social media and something

new is happening everyday just because you are following so many

people and so many people's lives change and stuff like that. But…and

you can find new things that you may be interested and you may search

that up and you might find a new game that you like on social media or

on your phone. So that definitely would help.

Social leisure and ongoing connection. Participants spoke about how

smartphones were an instrument to facilitate social leisure and a way for them

to keep in touch or stay in touch with others. Nicholas discussed how he does

not see "the point in Instagram or Snapchat," but that he got them anyway

because his friends have them. "I guess I just want to keep in touch. This

summer I got Instagram and Snapchat just to keep in touch with them". Others,

such as Victoria and Meghan spoke about how smartphones allow them to stay

in touch with friends they had met through summer employment, leisure

activities or exchange programs at school. For example, Victoria worked at a

summer camp the previous year with people from different parts of the country

and continent. She described using her smartphone to "keep in touch" with

people from camp as well as people from different schools she does not get to

see often.

I try to keep in touch with people from camp who I know don't live here, and I try to keep in touch with people like…sometimes at school I don't always get to see people that go to different schools I try to talk to as many people as I can.

Meghan explained that her smartphone makes her feel good because it helps her to "stay in contact with people". She spoke about how she stays in contact with people she has met through volleyball and exchange students she has met at school.

Participant (P) – Staying in contact with people. So like people that I've meet from other places and like countries. You can stay in contact with them.

Interviewer (I) – Ok. You mentioned keeping in touch with people from different countries. Where have you met those people?

P - So I have a friend in Germany and Columbia and Peru. So like I met one of them through volleyball and I met the other two, they were exchange students.

I – Ok. How do you normally keep in touch with them?

P – Usually either texting, but sometimes texting doesn't work with people that are in other countries. So…there is a What's App or what's…yeah something like that. It's used to contact people from other places. Or Facebook.

I – How long have you known those people?

P – Like two years, three years.

When participants were asked how they would feel if they lost or broke their smartphone, they expressed feelings of anxiousness, especially during periods of time when they were alone. For example, when Sarah was asked how she would feel if she lost or broke her phone, she explained:

It makes me anxious, like when I'm waiting for my friends in the cafeteria, cuz like they can't come anymore for different reasons then when I am waiting after just a couple minutes I'm like "oh I don't have my phone, they probably got busy and can't tell me because I don't have my phone". Or they're probably not going to show up, and I just get really anxious then I feel like things are happening and I don't know about them.

Since smartphones linked the adolescents in this study with their friends, it also became a symbol of friendship when participants were alone. Participants expressed that simply having a smartphone helped ensure others perceived the smartphone user as having friends at times when they were alone. Victoria was asked how her smartphone makes her feel and she explained:

I think a lot of times it will make me feel safe. Like sometimes you are waiting at your locker for your friend to come find you so you can go out for lunch, and all these people are walking by and you are by yourself and you don't want to look…like I guess weird, stupid by yourself so you go on your phone and you like start texting people…or you at least pretend to so you hope that people will see you as 'She's on

her phone. She's texting someone. She has friends therefore, she is important'.

"I Don't Have Time": Smartphone Use as Low Commitment Leisure

While participants indicated spending a lot of time on their phone, participants also discussed their perceptions that they did not have time to take on other leisure activities such as being involved in clubs at school and community activities because they required a specific commitment or consumed large blocks on time. For example, Meghan explained that "There's some groups at school that I would join, but I don't have the time". Sarah and Victoria also explained that they are interested in participating in different leisure activities, but they simply do not have the time.

> A lot of times…well there is only 5 days in the school week and there is over 40 clubs and so a lot of times it will overlap and you can't be in more than one place at once. So I just like had to pick the top clubs that I wanted to be in. There are still more that I wish I could be part of but I don't have the time (Sarah).

> I'd like to join…there's like positive action committee at my school. I'd like to join that…I just …I don't know if I have time (Victoria).

Others explained that they had to stop participating in some of their leisure activities because they did not have enough time. For example, Meghan stopped taking singing lessons because she "just didn't have the time" while Charlie had to make a choice between his leisure activities because "time just wasn't working out."

Yeah. I was really good at fencing. I regret quitting it, but I played

for 6 years yeah. I had to choose between football and fencing and

I really wanted to try football. So…after cuz we originally did

football and fencing for my first two years of playing football, but

then on the third year, I got to the point where it's like I need to

choose because I can't do both anymore because like, time just

wasn't working out. So, I decided to actually leave fencing which

was probably a big mistake I made because I was training for

Canada games when I quit so…

It was interesting to hear participants explain that they used their smartphone a couple of

hours a day, and yet did not have time for other leisure activities. It became clear from

their discussion of their time, that smartphone use did not take that same commitment as

other leisure activities nor did it present the challenges associated with a commitment like

fitting it into their schedule or arranging transportation to the activities. Participants did

acknowledge that their smartphones can still take away from other low commitment

leisure activities. Sarah was asked, "Do you find that you use your smartphone during

leisure to better your experience?" She responded with, "Yeah, maybe like…social media

can be fun sometimes. So like, like if you use that, I don't know because it does take

away time spending with your friends, but I'm not sure. That's a really good question".

CHAPTER FIVE: DISCUSSION

The purpose of this study was to explore adolescents' experiences with having and using smartphones, and how those experiences influenced their leisure. More specifically, this investigation examined how nine adolescents were using their leisure time; how they used their smartphones during leisure time; and what influences smartphones had on their leisure experiences. The discussion of the findings is organized around the key findings from Chapter Four. A major finding was that smartphones played a central role in adolescents' leisure. They used their smartphone more often when they were participating in unstructured leisure activities; however, when participating in structured leisure activities, their smartphone use was decreased. These adolescents also expressed being bored during available leisure time when they were not engaged in structured leisure activities (i.e., sport, theatre and school clubs). Smartphones influenced the adolescents' lives by assisting in alleviating boredom through entertainment. Despite the entertainment value of smartphones, the participants experienced their leisure with their smartphones as relatively unsatisfying when they were bored. Smartphone use facilitated leisure during both unstructured leisure and obligatory tasks by offering intermittent leisure. Although their smartphone distracted them during their leisure and obligatory tasks, having access to intermittent leisure may have enhanced their overall leisure experience. The findings suggest that smartphone use may detract from positive youth development because it hindered adolescents from being able to fully engage in the activity. However, having access to their smartphone and sharing their experience with others may have enhanced their experience.

Leisure of Adolescents in the Smartphone Era

Adolescents in this study engaged in both structured and unstructured leisure – typical of what other research has found and typical of youth from non-smartphone eras (Caldwell, 2016). It was evident throughout participants' descriptions that structure played a role in how much they were using their smartphones. Structured activities (e.g., school, clubs, sport) seemed to limit smartphone use both in terms of the amount of time spent on smartphones and in what ways they were used. For example, even though adolescents were allowed to use their smartphones during certain classes at school to listen to music or look up information, there was a decrease in smartphone use during a structured school day when compared to smartphone use in the evenings and on weekends.

Smartphones use played a central role in the lives of adolescents in this study. The majority identified that they were spending *"a lot"* of leisure time on their smartphones, mainly to communicate with others, look up information or entertain themselves. Individual leisure was facilitated by smartphones as they could stream videos and shows (e.g., YouTube, Netflix) and play music (e.g., iTunes). Smartphones also facilitated social leisure through text messaging capacities and social media apps (e.g., Snapchat, Instagram, Facebook).

Adolescents in this study engaged in social leisure both in person through their involvement in clubs and sports, but also engaged in social leisure via their smartphone. Social leisure has been noted as the most desired leisure activities to help adolescents feel a sense of belonging (Kleiber, Caldwell, & Shaw, 1993). At the same time, a link has

been found between mobile device use for communication and information needs and the increased dependency on devices to facilitate a sense of belonging (Mihailidis, 2014). Therefore, given how much the adolescents in this study indicated using their smartphones, those devices likely served as an important instrument in facilitating their social leisure and, as a result, their sense of belonging.

This growing reliance on technology has been referred to as "tethering" by Turkle (2006). Tethering is explained as being dependent on technology to facilitate communication, self-worth, and community (Turkle, 2003; 2005; 2006). "This tethering has extended self-centered social communication into all aspects of daily life" (Mihailidis, 2014, p. 59). Smartphones were a key instrument of leisure for adolescents in my study. Adolescents' dependence on their phones for social connection at school, at home, and when planning activities with others was evident. This dependency and portable access *throughout* one's childhood is a recent phenomenon and one that may affect their development. For example, research found that university students who were tethered to their devices through the use of social media indicated a need to constantly be present on social networks in order to feel included, accepted, and a sense of belonging (Mihailidis, 2014). Similarly, other research found that smartphones played a significant role in producing and maintaining interpersonal and intrapersonal benefits such as increasing social connectedness, feelings of belonging and social identity (Walsh et al., 2011). This tethering results in adolescents being very dependent on them for meeting needs (e.g., close relationships, feelings of acceptance) that are critical to their development.

Adolescents in this study were all involved in structured leisure activities and had access to the benefits of participating in structured leisure activities (e.g., experiences of intrinsic motivation, challenge and concentration; Larson 2000). Therefore, using their smartphone during their unstructured time may not have a significant effect on their development because they were still accessing the benefits of structured leisure. However, adolescents who are not participating in structured leisure and only participating in unstructured leisure may be more vulnerable and become more tethered to their smartphone in a negative way. The constant access or tethering to their smartphone may have increased adolescents' need to be validated (Turkle, 2006). For example, smartphones change how adolescents' thoughts and feelings can be validated. When individuals are fragile, they support themselves by transforming others into "self-objects" (Ornstein, 1978). "Self-objects are objects which we experience as part of our self…" (Ornstein, 1978, p. 361). Once this happens, the individual experiences the other or others as aligning with their inner state (i.e., inner peace or peace of mind). Tethering to their smartphones, therefore, may have provided participants in this study access to validation through "self-objects" (e.g., social media "likes" which are accessible on their smartphone) and may have increased their options for validation.

Frequency

Through their descriptions, participants indicated spending between two and four hours on their smartphone each day. Research has found that adolescents age 13-18 spent nine hours per day on entertainment media (i.e., watching television, movies and online videos; playing video, computer and mobile games; reading; listening to music; using

social media sites and surfing the internet; Common Sense Media, 2015). The current

study extends existing research on adolescent time use by offering information

specifically on adolescents' smartphone use as opposed to combined use of various

entertainment media sources.

Previous studies that focused on the frequency of smartphone use and leisure

involved university students and used the number of text messages they sent and not the

amount of hours spent on their smartphones as a measure (Lepp, 2014a; Lepp, 2014b).

While the measures are different, the results of Lepp's studies are insightful when

considered alongside the current study. The results of Lepp's (2014a) study suggested

that high frequency users (i.e., high frequency texters) were more dependent on their

smartphone for leisure and are less likely to turn it off in order to experience leisure.

Adolescents in the current study noted that they were constantly thinking about their

smartphone and the notification(s) they could be receiving during their structured leisure

time. Similar to what Lepp (2014a) found, the adolescents in this study would check their

smartphone (i.e., texts, calls or social networking sites) immediately after their activities

were finished. Lepp (2014a) also found that among high frequency users, having

smartphone access during activities and sharing their experiences directly after the

activity could enhance leisure experiences. Therefore, adolescents in the current study

may not have been fully engaged in their leisure activity because they were constantly

thinking about their smartphone. However, having access to their smartphone

immediately after their activity may have enhanced their leisure experience by being able

to share their experience with others (i.e., friends). Since this study did not focus on

measuring the specific outcomes of adolescents having access to their smartphones during their leisure activities, a definitive conclusion cannot be made about the impact. However, this study identifies that some adolescents may struggle to be fully engaged in structured leisure because of what might be happening away from them. The findings may also suggest that requiring adolescents to leave their smartphones at home or to set them aside during leisure activities may not necessarily eliminate these devices as a distraction. However, it may cause feelings of depression, anxiety and distress (Beranuy, Oberst, Carbonell, & Chamarro, 2009; Harwood, Dooley, Schoot, & Joiner, 2014; Rosen et al., 2014). Research suggests that smartphone users who use their phones at a high frequency have lower rates of happiness and higher rates of anxiety when compared to those who use their smartphones at a lower frequency (Lepp et al., 2014). The increase of smartphone use during leisure and the increase of distress from smartphone use may have resulted in an alteration of the leisure experience for the participants by diminishing the stress coping benefits for which leisure is known. In addition, having access at some point during structured leisure and immediately afterward could enhance adolescents' experiences with their structured leisure.

Lepp's (2014a) results show that low frequency users were more likely to turn off their smartphones to enhance a leisure experience, whereas high frequency users were more likely to be interrupted because they had their phone on them at all times. While most of the participants from the current study were separated from their smartphones during their structured leisure activities, they had them with them during unstructured

leisure. Therefore, they could be considered high frequency users who were supported by rules of structured leisure (i.e., coaches not allowing smartphones during practices and games). As for unstructured leisure, they used their smartphone more often when they were less "busy" and had more time to relax. Adolescents in my study did not relinquish their physically active leisure in order to be sedentary and use their smartphone (Lepp et al., 2013). Furthermore, smartphone use during their unstructured leisure may have enhanced their overall leisure experience whereas participation in structured leisure activities decreased smartphone use and offered opportunities for positive development.

Smartphone Use as Casual Leisure

Smartphone use was a leisure activity that adolescents in this study engaged in with relative ease. They also described using their smartphone as being pleasurable or enjoyable while temporarily alleviating boredom. These descriptions of smartphone use are consistent with casual leisure (Stebbins, 1997). Casual leisure has been defined as "immediately, intrinsically rewarding; and it is a relatively short-lived, pleasurable activity requiring little or no special training to enjoy it. It is fundamentally hedonic; it is engaged in for the significant level of pure enjoyment, or pleasure, found there" (Stebbins, 1997, p. 18). Casual leisure differs from serious leisure in that serious leisure requires commitment, persistence and continuity of participation over time; offers challenges to overcome; builds skills and increase one's level of competence; requires discipline and focused attention; and is goal orientated and/or creative and expressive in nature (Carnegie Council on Adolescent Development, 1992). The current study did not focus on serious leisure and assessing specifically whether adolescents met the criteria for

their pursuits to be considered as serious leisure. However, a number of participants were engaged in leisure activities several times a week (i.e., commitment). These were activities (e.g., sport, dance) the adolescents had engaged in over several years (continuity of participation) developing their skills and persisting.

Literature on serious leisure suggests that children may begin to compete at a young age (i.e., 5 or 6); however, at that age they may not foresee their participation as 'career' (Siegenthaler & Gonsalez 1997). Those who want to succeed need to have a long-term commitment (Stebbins, 1982; 1992). Therefore, the committed activities that the adolescents in this study engaged in could have been considered serious leisure. Individuals who consider their leisure activity important are more likely to commit the time and effort that is necessary to be successful in it (Stebbins, 1993). Some participants in my study even identified themselves as "volleyball players or dancers"; therefore, their leisure activities seemed to make up their identity (Siegenthaler & Gonsalez 1997) which is another characteristic of serious leisure. However, this identification and level of commitment may be at the expense of other interests (i.e., casual leisure). Therefore, the study participants may have used their smartphone less because they also participated in serious leisure activities.

Research suggests that participants experience less satisfaction and happiness when they engage in casual or passive leisure activities when compared to committed or serious leisure (Lui & Yu, 2015). They may also experience dissatisfaction and leisure boredom as a result. However, there are also benefits of casual leisure which adolescents in the current study described experiencing that are similar to results from other research.

For example, participants used their smartphone for re-generation (i.e., relaxing) – one of the benefits of casual leisure identified by Stebbins (2001) – before or after their serious leisure activities. Therefore, using their smartphone between serious leisure activities could be considered casual leisure. Arguably, by participating in both serious and casual leisure, adolescents in this study experienced balance. Using their smartphone during leisure time required less of a commitment and it allowed them to fill bits and pieces of time throughout their day by communicating with others, playing games, watching videos or looking up information (i.e., things to build, things to do).

While Stebbins (1992) advocates for serious leisure, casual leisure also contributes to one's well-being. Casual leisure activities provide a break from stressors which results in decreased distress and an increase in mood (Hutchinson & Kleiber, 2005). They also provide opportunities for individuals to disengage, to step back and think about their personal beliefs and their goals. Finally, they encourage individuals to redefine themselves and their lives as meaningful through expressing themselves and their values. Therefore, casual leisure through smartphone use may have brought balance to the lives of adolescents in the current study who were also engaged in activities that required significant commitment and may have been serious leisure.

Serious leisure is considered meaningful leisure which requires involvement that is both sustained and committed (Siegenthaler & Gonsalez 1997). In turn, serious leisure decreases problems that may arise from participation in meaningless leisure. Therefore, serious leisure allowed for meaningful leisure for adolescents in the current study which contrasts with the meaningless and unsatisfying leisure that came with some of the

participant's smartphone use. Involvement in serious leisure also allows for social benefits (Siegenthaler & Gonsalez 1997), such as friendships, that continue outside of practices and games. Therefore, serious leisure can help to maintain interpersonal relationship. Even though I did not ask questions regarding adolescents' serious leisure it was very likely that their involvement in their leisure activities could be considered serious leisure. Smartphones are an instrument that facilitates and supports these relationships by providing an avenue for communicating before or after practices and games.

Boredom

Participants often mentioned boredom during their interviews and that smartphones were used to alleviate their boredom. For these adolescents, boredom occurred primarily during their unstructured leisure time. Therefore, it appears to be the unstructured leisure time when the adolescents in this study were most vulnerable to feelings of boredom. Reviewing the work of Regheb and Merydith (2001) on sources of boredom in everyday life, it may be that these adolescents experience boredom when there is a lack of meaningful involvement and/or lack of physical involvement. Without these types of involvement during their unstructured leisure, the adolescents appeared to go to their default – their smartphone. Participants accessed apps on their smartphone as a way to entertain themselves while they killed, passed, or filled time while they were waiting for another, perhaps more engaging, leisure activity to happen. This behaviour is consistent with research by Wegmann, Ostendorf, and Brand (2018) who found that

smartphone use is a common habit for individuals who are waiting for another person or waiting for something else to happen (i.e., waiting for the train).

The finding that participants were bored primarily during unstructured leisure was similar to what was found by Biolcati, Mancini, and Trombini (2018) related to "relaxed leisure". In their study, adolescents who experienced boredom were more likely to be engaged in "relaxed leisure" activities (e.g., iPhone or smartphone and listening to music) and adolescents who did not experience boredom were more likely to be engaged in "transitional leisure" activities (e.g., sports and hobbies). Unlike "relaxed leisure", "transitional leisure" has structure, a set of rules related to personal engagement, and requires concentration and effort focused toward achieving goals. Results indicated that adolescents were more likely to participate in unstructured activities such as PC use or doing nothing in particular rather than playing an instrument. Similar to the current study, the adolescents participated in "relaxed leisure" (i.e., smartphone use, hanging out with friends, relaxing at home) during their unstructured time. Therefore, they chose an activity that did not require skill or focus but provided pleasure (Kleiber, Larson, & Csikszentmihalyi, 1986). Relaxed leisure activities do not require the exertion of effort that transitional leisure (i.e., sports, theatre, school clubs) does; however, they provide a type of experience that restores both one's energy and spirit. Therefore, smartphone use during "relaxed leisure" time may not be negative for adolescents' development because their relaxed leisure is balanced with their participation in "transitional leisure".

Smartphone use was also used as a default by adolescents to alleviate boredom during car rides to and from their leisure activities or on trips. Adolescents often get

transported to activities in cars (Murray, 2009). The time spent travelling in the car has been considered "time well-spent" by bringing family members together (Cycil, 2015) or catching up on daily activities (i.e., school, leisure activities). The car is a context that facilitates serious conversation similar to ones in traditional spaces such as meal time around the dining table (Laurier et al., 2008). It is a unique context for parents to stimulate conversations and discussion while not being interrupted (Barker, 2009; Laurier et al., 2008; Marvin, 1994). Therefore, the car is considered a context that facilitates bonding during leisure time. The portable technology of the smartphone and its use by the participants during car travel means that this time and space, which has traditionally been an opportunity for family bonding, may now be a time and space for individual leisure. Participants' use of smartphones in the car was an unexpected finding, yet is an important one to note as it might affect family leisure including sibling and parent-child interaction.

Smartphone use was identified as a way to stimulate participants when they were not stimulated enough. Even when the adolescents were engaged in leisure (e.g., watching a movie) or when leisure opportunities were available (e.g. being on vacation), they were turning to their smartphones and described the reason as "being bored". This suggested that they were understimulated. Therefore, the leisure activities they were engaged in did not hold their full attention. However, it could also be suggest that adolescents in this study could have been experiencing addiction symptoms. For example, Leung (2008) explains that when adolescents experience long periods of leisure

boredom, they are more likely to become addicted to their smartphone and experience addiction symptoms such as the inability to control craving and productivity loss.

There are a few theories that might explain this challenge of adolescents being bored during leisure. The social control and resistance theories suggest that boredom is a response to parental and/or other adult (i.e., coaches) control (Larson & Richards, 1991). For example, ". . . the frequent occurrence of boredom in adolescence is a product of subcultural (or personal) resistance to adult and school authority. . . " (Larson & Richards, 1991, p. 422). In relation to social control and resistance theories, forced-effort theory of boredom (Larson & Richards, 1991; O'Hanlon, 1981) suggests that individuals experience boredom when they are forced to use cognitive energy on repetitive tasks. For example, when routine is obligated by adults (i.e., parents, teachers, coaches), adolescents' boredom response may result. This occurs because "participation is extrinsically motivated either by social pressure or by their instrumental role in the attainment of intrinsically motivated goals" (Caldwell, Darling, Payne, & Dowdy, 1999, p. 105).

Cognitive psychology further suggests adolescents' perceptions of boredom are influenced by their level of maturity. When adolescents are in the lower maturation levels they may not have the ability to (a) change the situation and/or (b) identify ways in which they could change the situation (Elliot & Feldman, 1990). Furthermore, as basic cognitive processes change (i.e., speed, efficiency, and capacity; Keating, 1990) throughout adolescence it may result in under stimulation and consequently boredom.

The insights from the theories related to boredom may therefore suggest that adolescents may experience feelings of boredom as some tasks may seem repetitive as their cognitive abilities mature. One of the participants in the current study spoke about how the leisure activities he participated in can become repetitive whereas smartphones, more specifically social media which can be accessed on his smartphone, always provided something new. Therefore, adolescents may need to seek out new and more challenging leisure activities once they master ones they are engaged in so that their leisure does not become too repetitive or mundane. The challenge is that smartphones seem to, at their fingertips and without much effort, offer this novelty for youth.

Boredom can also be explained by psychological theories within leisure literature. Within these explanations, boredom stems from two different ideas. First, boredom may stem from a lack of intrinsic motivation, more specifically self-determination, to take action to want to alleviate boredom (Iso-Ahola & Weissinger, 1987; Weissinger, Caldwell, & Bandalos, 1992). This was evident in the participants' descriptions. When participants in the current study were bored, they seemed to lack the intrinsic motivation to identify and engage in more stimulating activities. As smartphones were accessible to adolescents, they seemed to be the default in the absence of intrinsic motivation for alleviating boredom. Participants turned to their smartphone to communicate (i.e., texting, social media) and entertain themselves (i.e., YouTube, Netflix) even though it was not particularly satisfying. Second, boredom can occur when one's skill level and the challenge being faced are mismatched (Csikszentmihalyi, 1990). This is also referred to as the understimulation model of boredom (Larson & Richards, 1991). There seems to be

a challenge for adolescents in amusing themselves as they seem to have a low threshold for boredom. Adolescents in this study seemed to be bored as soon as they were not participating in structured leisure suggesting that they did have a low threshold for boredom.

Individuals who are in the latter part of their adolescence are more likely to use and plan their leisure time meaningfully (Baxter, 2011). For example, they use their time efficiently by setting goals and priorities. This is referred to as free-time management (Wang, Wu, Wu, & Huan, 2012) which also relates to their capabilities and opportunities. Perhaps the participants in the current study were unable to change or prevent the occurrence of boredom because they simply did not possess the skills to do so.

Distraction

Participants in this study described how their smartphone was a distraction from them being fully engaged in their structured leisure activities (e.g., dance, club activities, sport, youth group, practicing scripts for an upcoming play, or being on vacation). Even though adolescents in this study seemed to have the right amount of adult guidance and supervision (e.g., coaches, teachers, parents), as well as the opportunities for sustained engagement in their structured or high-yield activities (Caldwell & Smith, 2006), they still were distracted by the fear of missing out (Przybylski, Murayama, Dehaan, & Galdwell, 2013). Also referred to as FoMO, adolescents in my study may have experienced "a pervasive apprehension that others might be having rewarding experiences" (Przybylski et al., 2013, p.1841) of which they are not part. Therefore, they had a desire, even during their structured leisure activities, to continually stay connected

with what their peers were doing. The accessibility of social media on smartphones has made it even easier to be continually aware of what is going on. Those who gravitate towards social media are said to have a greater fear of missing out (Przybylski et al., 2013). Since my study did not focus on assessing the quality of adolescents' leisure, the findings hint at, but do not offer a clear understanding of how the fear of missing out could potentially be affecting the quality of leisure.

Adolescents also spoke about how their smartphone distracted them during obligatory tasks (e.g., homework, in class) which resulted in the task taking longer (Bowman, Levine, Waite, & Gendron, 2010). Therefore, the challenge of having access to smartphones during leisure activities (structured or unstructured) is that high frequency users were more likely to be interrupted during their leisure activities because they have their phone on them at all times (Lepp, 2014a). Adolescents in the current study identified this as an issue. However, they also identified using their smartphone throughout the time they were doing their homework – an obligatory task. Their smartphone interrupted or distracted them from their task. Being interrupted or distracted by smartphones during their homework may mean more intermittent leisure and less opportunity to be fully engaged in a leisure experience afterward. However, the intermittent leisure (i.e., smartphone use) may enhance the experience with the obligatory task, which was similar to what high frequency users reported during planned exercise in Barkley and Lepp's study (2016). Intermittent smartphone use may also mean that adolescents may have a difficult time estimating the amount of time they spend on their smartphones.

The use of the Internet or technology for non-class related purposes during class time has been referred to as "cyber-slacking" (Gerow, Galluch, & Thatcher, 2010). Oulasvirta, Rattenbury, Ma, and Raita (2011) suggest that individuals impulsively attend to their phones in inappropriate times and that digital distractions negatively affect both their performance (End, Worthman, Mathews, & Wetterau, 2009) and enjoyment (Isikman, MacInnis, Ülkümen, & Cavanaugh, 2016). Research also suggests that using a smartphone and social media while attempting to learn something new can decrease comprehension and impair academic performance (Froese et al., 2012). Adolescents in my study may have experienced pleasure from interacting with their smartphone during time when they were doing their homework (Lewis, 2015). This pleasure or feel-good chemical, also known as dopamine, makes it difficult for individuals to resist the sounds from their notifications (i.e., buzz, ring, vibrate). Every time individuals break their concentration by checking their smartphone (i.e., notification), their task performance is negatively influenced (Stothart, Mitchum, & Yehnert, 2015). For example, receiving notifications provokes the mind to wander or thoughts that are irrelevant to the tasks. Even if there are no direct interactions with the device, performance of tasks that are deemed attention demanding are suggested to be disrupted by notifications. When adolescents in the current study experienced digital distractions, it could have taken them 50 percent longer to complete the task and make more mistakes (Lewis, 2015). Therefore, while intermittent leisure offered by smartphones may have provided pleasure during adolescents' homework time, there is a chance that academic performance may have been affected.

In explaining that homework took longer because of intermittent smartphone use, it appeared that adolescents in this study did not seem to value larger blocks of leisure aside from their structured leisure activities. They did not work toward completing homework without distraction so they could have a longer period of uninterrupted time to engage in a leisure pursuit (e.g., read a book, exercise, hang out with friends or family). If adolescents perceive intermittent leisure to make homework more enjoyable, they may not be motivated to complete their homework without distraction. More research is needed to better understand if the enjoyment experienced by smartphone use during homework counters the negative affects related to concentration.

While smartphones were a distraction for participants, that distraction also facilitated leisure. Facilitators are factors that are perceived or experienced by an individual as fostering the creation of preferences and enhancing participation in leisure (Raymore, 2002). For adolescents in my study, their smartphone facilitated leisure during obligatory tasks. Research also suggests that performance on self-paced tasks are not affected by smartphone use because self-paced tasks allow individuals to pick up where they left off after experiencing device-related distractions (e.g., Fox, Rosen, & Crawford, 2009; Bowman et al., 2010). Adolescents in the current study also did not seem to engage in hobbies during their unstructured leisure, just their serious leisure activities; therefore, they seem to be in no rush to finish their homework when they have nothing else to do. It could be interpreted that adolescents' leisure no longer takes place during big chunks of time and that smartphones allow for bits and pieces of leisure during other tasks.

Limitations

This study has multiple limitations. All of the participants were from an urban community which gave them a wide range of opportunities to participate in structured leisure activities (e.g., school sports, out-of-school sports, club activities). Typically in rural communities, there are fewer opportunities to participate in structured leisure activities (Oncescu, 2015). Therefore, the communities in which adolescents live could play a role in smartphone use. If opportunities are available that interest adolescents, it could increase their engagement in structured leisure activities and therefore influence the amount of time spent using a smartphone. It is also important to note that all of the adolescents in the present study participated in structured leisure activities – many in sports. Given the cost of participating in sports can be high (Lamb, Asturias, Roberts, & Brodie, 1992; Solutions Research Group, 2013), it is likely that the adolescents in this study were middle class. It is also possible that adolescents of lower socio-economic status could have had different experiences than the ones represented in the present study.

Given that all participants in this study were Caucasian, there was a lack of ethnic diversity. There may be different cultural values around smartphone use that could have an impact for adolescents from other ethnic backgrounds. Therefore, it was not possible to gain a perspective of adolescents who were from different ethnic backgrounds.

Finally, none of the participants spoke about having a negative experience with their smartphone. Therefore, their positive experience may have contributed to their desire to participate in this study. Perhaps those with negative experience did not want to be involved in the study because they did not want to recount those experiences. It would

be important, in future research, to seek out adolescents with varied experiences with smartphone use.

Recommendations

First and foremost, this study demonstrated that smartphone use may not be detrimental to youth's development if it serves as a casual leisure activity alongside a serious leisure or committed, structured activity. One recommendation for parents and recreation service providers is to encourage youth to develop an interest in and commitment to some activity – a hobby, a sport, or a cause in which to serve as a volunteer. While youth in the study were in high resource serious leisure activities, youth-serving organizations (e.g., Boys and Girls Club) could support youth in developing interests in low-cost leisure pursuits (e.g., drawing, juggling, skateboarding, volunteering).

As the findings suggested, smartphones can be a distraction during structured leisure and participants' fear of missing out can take away from them being fully engaged. Therefore, it is recommended that sport and recreation organizations review their policies around smartphones and smartphone use as it relates to adolescents and consider the important role that these devices play in their lives. Leaders and coaches may benefit from being educated on smartphone use, how it can influence both adolescents' structured and unstructured leisure, and how to manage smartphone use. Furthermore, coaches and leaders may want to discuss smartphone use with adolescents, explain, and then enforce policies with their groups or teams.

Recreation and leisure providers may also want to educate adolescents about smartphone use. It may be beneficial to discuss smartphone use and work to provide leisure and recreation programs for adolescents that either incorporate or exclude smartphone use.

There are a number of opportunities for future research. Given that all the adolescents in the current study were engaged in structured leisure which appeared to lessen their smartphone use, further research is needed that explores the experiences of adolescents who may not have the opportunity to be involved in structured leisure, or may not choose to participate in structured activities. Research with those adolescents would support a better understanding of how the lack of structured activities in adolescents' life may influence smartphone use. Since adolescents indicated using their smartphone during car rides to and from their structured leisure activities and on trips, this likely decreased family communication during this time and space. Further research is needed related to how smartphone use by adolescents in family leisure spaces may affect family communication.

Findings from the current study found that some adolescents were not sufficiently stimulated during their leisure; therefore, their smartphone became a default activity to elevate their level of stimulation. Future research could explore whether the need for stimulation during leisure has increased for adolescents. Understanding the stimulation needs of youth and adolescents could support the development of programs and services for youth that better hold their interest and attention.

Adolescents in the current study used their smartphone during structured leisure (i.e., school clubs), unstructured leisure (i.e., hanging out with friends, watching a movie), and obligatory tasks (i.e., homework) which resulted in multitasking. Multitasking could be viewed as a valuable skill as adolescents move into adulthood. While outside the scope of this study, future research could explore how adolescent smartphone use contributes to skill development (e.g., multitasking) and which of those skills that are transferred into adulthood.

Adolescents in the present study did not seem to value large blocks of unstructured leisure time. Instead, they appeared to engage in intermittent leisure while completing obligatory tasks. This study did not examine the level of enjoyment or pleasure adolescents received from their smartphone during intermittent use leaving room for researchers to explore this in the future.

Finally, this study did not attract a diverse set of adolescents (e.g., socio-economic status, urban versus rural, ethnicity). Therefore, further studies should consider a study that purposefully selects youth from a range of backgrounds and communities or targets a set of youth who were not represented in this study (e.g., rural youth). The study involved five females and four males, but the data did not offer significant gender differences. With an understanding now of how adolescents are using their smartphones, future research could also explore specific gender differences. For example, both males and females indicated watching Netflix and engaging with Instagram using their smartphones. However, future research could explore the differences in what male and female adolescents are streaming on Netflix or what they are sharing on social media apps.

Conclusion

Smartphone use was central to the lives of adolescents' in this study. They used their smartphone when they were participating in unstructured leisure; however, when participating in structured leisure activities their smartphone use was decreased. Therefore, structured activities played a role in how often their smartphone was being used during the day and during the school week.

Smartphones influenced adolescent leisure behaviour by alleviating boredom during their unstructured leisure time and during leisure experiences when they were not sufficiently stimulated. As a low commitment activity, smartphone use became their go-to as soon as boredom occurred. Smartphone use also influenced adolescents' leisure behaviour by distracting them during both their structured activities and obligatory tasks. During their structured leisure activities, adolescents were not fully engaged in their activities because they were constantly thinking about their smartphone. During obligatory tasks, they intermittently used their smartphone to access leisure which lessened the larger block of leisure time they could access when tasks were completed. However, it was unclear what value adolescents placed on larger blocks of leisure aside from their structured leisure activities.

This study makes two significant contributions to the existing research on adolescents' leisure. While there have been links identified between smartphone use and leisure, the majority of literature focuses on university students and adults. Therefore this study provided insight into how smartphone use influences leisure behaviour in adolescents. Second, this study also contributed to the growing body of literature on

youth development. Smartphones were central to adolescents' lives; however, the role of

structure or serious leisure activities seemed important in limiting smartphone use and

lessening potential negative effects on their development. The youth in this study did not

forgo structured activities that required commitment and persistence. Rather,

smartphones served as a casual leisure pursuit that balanced the types of leisure in which

they were engaged.

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APPENDIX A: E-mail Script to Youth Serving Recreation Organizations

My name is Michaela Allaby. I am a graduate student in the Faculty of Kinesiology at the University of New Brunswick working under the supervision of Dr. Charlene Shannon-McCallum. This project has been reviewed by the Research Ethics Board of the University of New Brunswick and is on file as REB #2017-107.

Adolescence is considered one of the most significant time periods of physical, intellectual, personality, and social development changes. The introduction and widespread use and integration of smartphones into daily life means that the period of adolescence is now influenced by smartphone use. However, very little is understood about the influence smartphones have on leisure behaviour and how leisure behaviours influence smartphone use. Therefore, the purpose of this study is to explore adolescents' experiences with having and using smartphones and how those experiences influence and are influenced by their leisure.

I am looking for organizations/clubs to forward the information letter to parents of youth who are involved in your programs and in between the ages of 14-17. I am also looking for permission to display recruitment posters in your facility.

Please understand that participation in this study is voluntary.

Attached to this email is an information letter outlining the specific methods involved in the study.

If you have any questions or interested parents/adolescents have questions, you (they) can contact me by email: michaela.allaby@unb.ca or phone: (506)440-6462

Thank you for your consideration.

Sincerely,

Michaela Allaby
University of New Brunswick
Master of Art in Sport and Recreation Studies Candidate

PARTICIPANTS NEEDED FOR RESEARCH ON ADOLESCENTS' LEISURE

I am conducting a study on adolescents' leisure and how smartphone influences their leisure experiences. Please understand that participating in this study is voluntary.

I am seeking to interview individuals who:
- are between 14 to 17 years of age,
- have owned a smartphone for one year
- use their smartphone for multiple purposes (i.e. social media apps and other apps such as email, camera, etc.)

You will be asked to participate in one hour, face-to-face interview to discuss leisure activities and experiences you participate in. The focus of the interview will be on smartphone use during leisure time.

For more information about this study or if you are interested in participating in the study please contact:

Michaela Allaby, Principal Investigator
Faculty of Kinesiology, University of New Brunswick
By email at michaela.allaby@unb.ca
By phone at (506) 440-6462

This study has been reviewed by, and received ethics approval through, the Research Ethics Board at the University of New Brunswick and is on file as REB #2017-107

APPENDIX C: Parent/Guardian Information Letter

University of New Brunswick
Faculty of Kinesiology
PO BOX 4400
Fredericton, NB E3B 5A3

October 16, 2017

Dear Parents/Guardians,

This letter is an invitation for your son or daughter to voluntarily participate in a study that focuses on smartphone use and how it influences leisure behaviour in adolescents. This research is being conducted by Michaela Allaby, graduate student of the Faculty of Kinesiology at the University of New Brunswick under the supervision of Dr. Charlene Shannon-McCallum. I would like to provide you with more information about this project and what your son's/daughter's participation would involve.

Adolescence is considered one of the most significant time periods of physical, intellectual, personality, and social development changes. The introduction and widespread use and integration of smartphones into daily life means that the period of adolescence is now influenced by smartphone use. However, very little is understood about the influence smartphones have on leisure behaviour and how leisure behaviours influence smartphone use. Therefore, the purpose of this study is to explore adolescents' experiences with having and using smartphones and how those experiences influence and are influenced by their leisure.

This study is seeking to recruit male and female adolescents within the Fredericton area between the ages of 14 and 17 who have owned a smartphone (i.e., iPhone, Android) for at least one year. In addition, because this study seeks to explore how smartphone use can influence and be influenced by adolescents' leisure experience, I am recruiting adolescents who use their smartphones in multiple ways. More specifically, they must: be active in using their smartphone to text message and call, be using at least one social media application (i.e., Facebook, Instagram, Twitter, YouTube, etc.), and be using at least one other type of application almost every day (i.e., email, maps, weather, camera, etc.).

If your son or daughter is interested in this study and you give your permission, he/she will participate in a discussion about your leisure experiences with a particular focus on the role that smartphones play in those activities and experiences. The discussion will be in the form of an individual interview. Examples of the questions you will be asked to discuss include: Tell me about yourself. Describe your free/spare time. Describe how you feel when you participate in your leisure activities. Describe your smartphone use.

Describe what would happen if you lost or broke your phone. Describe the benefits you seek or experiences from using a smartphone.

The interview is expected to last approximately an hour. The length, however, will depend on what information your son/daughter has to share. The interview will be arranged to take place at his/her own convenience and he/she may choose the time and the setting of the location. Please understand that you may decline answering any question at any time by simply telling me that you would like to "pass" on that questions. With your son's/daughter's permission, the interview will be audio taped to assist me in later analyzing the information.

Please understand that your son/daughter may withdraw from the study without consequence at any time or any phase during the study. Your son/daughter may also withdraw any of the information collected prior to the data being submitted for publication, without penalty. The information he/she shares through the interviews will be kept confidential. Laws do exist, however, that limit this promise of confidentiality. For example, if your son/daughter indicated that he/she was abused during a leisure activity at school, I would notify you and be obligated to alert the appropriate Child and Family Services agency.

Your son/daughter will not be identified by name in any presentation, report or publication resulting from this study. Any information that might identify his/her (e.g., unique personal characteristics) will be removed when the text transcripts are created and will not be included in any report or publication. Once the interviews have been transcribed and reviewed for accuracy, audio recordings will be destroyed. All hard copy materials and memory sticks containing data will be retained in a locked filing cabinet for five years and then destroyed. Only I will have access to these materials.

Shortly after the interview has been completed, transcribed, coded and themes are generated, I will send a copy of the identified themes to your son/daughter and give them an opportunity to provide feedback on the accuracy and credibility of the interpretations. They will have two weeks to review the themes and provide feedback. Offering feedback is not mandatory, but completely voluntary.

There are no known or anticipated risks to your son/daughter as a participant in this study. It is hoped that his/her participation will provide insight into adolescents' leisure and how smartphones influence leisure activities, experiences and behaviours. This study may also be important in helping researchers and leisure service providers understand how smartphones both positively and negatively influences adolescents' leisure. This could, in turn, influence recreation program design, facility policies, or lead to the development of tips for enhancing adolescents' leisure experiences.

This project has been reviewed by the Research Ethics Board of the University of New Brunswick and is on file as REB #2017-107. If you have any questions regarding this

study or would like additional information to assist you in reaching a decision about participation, please contact myself, Michaela Allaby by phone at (506) 440-6462 or by email at michaela.allaby@unb.ca. If you wish to direct questions or concerns resulting from your participation in this study to my supervisor, Dr. Usha Kuruganti, Assistant Dean of Graduate Studies in the Faculty of Kinesiology, at (506) 447-3101 or by email at ukurugan@unb.ca.

Thank you in advance for considering participation in this study. It is my hope that you will personally benefit from this opportunity to discuss your leisure experiences.

Yours sincerely,

Michaela Allaby
Master of Arts in Sport and Recreation Studies Candidate
University of New Brunswick

APPENDIX D: Parent Consent Form

I understand that the main goal of this research is to learn more about adolescents' leisure and how smartphones influence leisure experiences. The research is being conducted by Michaela Allaby at the University of New Brunswick.

This project has been reviewed by the Research Ethics Board of the University of New Brunswick and is on file as REB #2017-107.

I understand that this study will take approximately 60 minutes during which time my son/daughter will participate in a face-to-face interview.

I understand that my son/daughter will receive a report of the study's findings after data collection has been completed.

I understand my son's/daughter's participation in this study is voluntary. At any point during the study he/she is under no obligation to answer any particular question, and that he/she can withdraw from the study at any time without explanation. I understand that this will be thoroughly explained to him/her.

I understand that the information provided during the interview will be kept strictly confidential.

I understand that my son's/daughter's name will not appear in any report or publication resulting from this study. Any information that might identify him/her (e.g., number of siblings; unique personal characteristics) will be removed when the text transcripts are created and will not be included in any report or publication. Once the interviews have been transcribed, audio recordings will be destroyed. All hard copy materials and USB memory sticks will be kept in a locked filing cabinet and only the researcher will have access to these materials.

I understand that this research will be used for publication purposes.

I understand my son's/daughter's name will not be attached to any hard copy materials (e.g., transcripts, reflective journal).

My son/daughter is willing to participate as a volunteer in the above mentioned study. I have read, understood, and agree to the above conditions.

Please print your son/daughter's name:
_____

Please print your own name:
_____

Your signature: _____ Date: _____

Contact Information:
APPENDIX C: Participant Consent Form
Michaela Allaby
Phone: (506) 440-6462
Email: michaela.allaby@unb.ca

APPENDIX E: Participant Consent Form (Youth)

Your parents have allowed me to talk to you about a project that I am working on. The project is about adolescents, leisure, and smartphones. I am going to spend a few minutes telling you about our project, and then I am going to ask you if you are interested in taking part in the project.

My name is Michaela Allaby and I am a Graduate Student in the Faculty of Kinesiology at the University of New Brunswick.

The study involves adolescents like yourself. I want to see if you would like to be in this study too.

I want to find out what youth your age do during their free time and how smartphones influence what they do during their free time. I am also interested in how what you do in your free times influences how you use your smartphone.

If you decide to take part in this study, I will ask you some questions about the activities you do during your free time alone or with friends. I will also ask questions about how smartphones are used during your free time. It will take you approximately 60 minutes to answer the questions.

What I find in this study will be used to help me to understand more about youth and activities and how smartphones can influence free time and activities. As far as I know, being in this study will not hurt you and it will not make you feel bad.

If I ask you questions that you do not want to answer then tell me you do not want to answers those questions.

The things you say and any information we write about you will not have your name on it, so no one will know they are your answers or are things that you did. I will not let anyone other than myself and my supervisor, Dr. Charlene Shannon-McCallum, see your answers or any other information about you. Your parents will never see the answers you gave or the information I wrote about you.

You do not have to be in the study. No one will get angry or upset with you if you don't want to do this. Just tell me if you don't want to be in the study. And remember, if you decide to be in the study but later you change your mind, then you can tell me you do not want to be in the study anymore.

You can ask questions at any time. You can ask now or you can ask later. You can talk to me or you can talk to someone else at any time during the study. If you want to reach me, here is my phone number (506 440-6462) and my email (michaela.allaby@unb.ca).

IF YOU WANT TO BE IN THE STUDY, PLEASE SIGN YOUR NAME AND HAVE YOU PARENT OR GUARDIAN SIGN BELOW:

PARTICIPANT
Please print your name: _____

Please print your address: _____

_____

_____

Please print your email or another way to contact you:

_____

Date: _____

Contact Information:

Principal Investigator
Michaela Allaby
Phone number: (506) 440-6462
Email: michaela.allaby@unb.ca

APPENDIX F: Interview Guide

I would like to begin by asking you, for the record, if it is okay to audio record this interview.

This interview will last approximately 60 minutes. I am going to ask you a variety of questions about your leisure experiences. Please feel free, at any time, to tell me that you wish to "pass" on a question. If a question is not clear, do not hesitate to ask me to clarify or explain further.

Background Information

1. Tell me about yourself?
    Probes: How old are you? What grade are you in? Who makes up your family? Describe a typical day: Morning? Afternoon? Evening?

2. Describe your free/spare time?
    Probes: What do you do for fun? To relax? For physical activity? What structured activities do you participate in? Unstructured? How much free time do you have? How often do you engage in your hobbies/activities? Who do you spend your free time with: Family? Friends? Alone? Where do you spend your free time? Indoors? Outdoors?

Leisure Experiences and Behaviour

3. Describe how you became interested in (<u>leisure activities from question 2</u>)?
    Probes: What made you choose this activity? How did you start participating? Peers? Family? Role models? Why have you continued to participate? Why did you stop participating?

4. Describe how you feel when you participate in your leisure activities? Do different activities give you different experiences?
    Probes: Good? Bad? Healthy? Tired? Welcome? Stressed? Bored? Does it satisfy a need (i.e., learn, relax, zone out, etc.)? If so, what need and how does it satisfy it?

5. Describe what motivates you to participate in your leisure activities? Are you motivated differently depending on the activity?
    Probes: Parents? Friends? Siblings? To be active? To relax? To have fun? To alleviate boredom?

6. Describe what gets in the way of you participating in your leisure activities.
    Probes: Cost? Transportation? Support? What about constraints you face while participating in (leisure activity)?

7. Are there activities you would like to participate in that you are currently not participating in?
   Probes: What reasons are you not participating in (leisure activity from question above)?   What would you need in order to be able to participate? Financial support? Opportunities?

Smartphone Use and Leisure Behaviour

8. Describe your smartphone use?
    Probes: How often do you use it each day? Does your usage vary from weekdays to weekends? Do you have specific rules about your smartphone use? When you can use it? When you can't use it? Where do you use it the most?

9. I want to focus more now on specific uses of your smartphone. Can you talk about what you specifically use your smartphone for?
    Probes: Text messaging? Phone calls? Social media apps (i.e., Facebook, Instagram, Twitter, etc.)? Other apps (i.e. email, camera, games, physical activity, etc.)?

10. Describe how using a smartphone influences your leisure?
    Probes: Do you perceive it to have a positive effect on your leisure? If so, in what ways? Do you perceive it to have a negative effect on your leisure? If so, in what ways?

11. Can you describe how the leisure activities you participate in influences your smartphone use?
    Probes: Do certain structured activities have rules about smartphone use? Do you find that you use your smartphone while you are engaged in leisure activities to better the experience (e.g., look something up, grab a picture, or post to social media)?

12. Do you post about your leisure experiences on social networking sites?
    Probes: If so, which sites? What types of things do you post (e.g., status update, photos, check-ins)? What type of information are you looking to share (e.g., where you are; what you are doing; who is participating with you; how you are enjoying your leisure experience)?

Smartphone Use and Youth Development

13. Describe what would happen if you lost or broke your phone?
    Probes: What would you do? How would you handle the situation? What would you feel like? How would your life change if you did not have a smartphone even if only for a short period of time?

14. Describe how using your smartphone makes you feel?
    Probes: How does it feel when you get a notification? Do certain notifications make you feel better than others?

15. Describe the benefits that you seek or experience from using a smartphone?
    Probes: To interact with others? To communicate with others? To entertain yourself?

16. Are there ways in which your smartphone use negatively affects your leisure?
    Probes: Are there times when it distracts you during a leisure experience? Are there times its use has stopped you from participating in something else?

I've asked you a number of specific questions about your leisure experiences. Is there something significant to you about your leisure that I have not asked you about but that you want to tell me or feel would be important for me to know?

APPENDIX G: Feedback Letter

April 2018

Dear (Name of Participant)

Thank you very much for being a part of this study on adolescents' leisure and how smartphone use influences leisure activities and experiences. Your involvement and input were valuable in contributing to the overall findings and results of the study. I greatly appreciate your willingness to participate and willingness to share your experiences and thoughts on those experiences with me.

The goals of the study were:

- To determine how adolescents who use smartphones experience leisure
- To identify the role smartphone use plays – both positive and negative – in leisure experiences
- To discuss whether smartphone use supports or detract from positive youth development
- To conduct leisure research that includes the voices of children and youth

These goals were achieved and an executive summary of the results is attached.

I enjoyed the opportunity to work with you in achieving these goals and wish you all the best in the future. If you would like to contact me about the research, please do not hesitate. I can be reached by e-mail at michaela.allaby@unb.ca.

Thank you.

Michaela Allaby
University of New Brunswick

Candidate's full name: Michaela Dawn Allaby

Universities attended: Bachelor of Recreation and Sport Studies, University of New Brunswick, 2012

Conference Presentations:

Allaby, M. (2017, May). "Leisure and smartphone use among digital natives: Exploring lived experiences." *Presented at the Canadian Congress for Leisure Research 15, Waterloo, Ontario.*

Publications: None