Young Adults’ Internet Use and their Relationships with their Parents

by

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ABSTRACT

YOUNG ADULTS’ INTERNET USE AND THEIR RELATIONSHIPS WITH THEIR PARENTS

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This study explored problematic Internet use (PIU) among Canadian female young adults (YAs) within a University setting (i.e., undergraduate) and its influence on their relationships with their mothers and fathers. More specifically, the focus of this study was on YAs’ perceptions of their parents’ level of monitoring, communication, and conflict and how these constructs were related to PIU. Data were obtained using an online questionnaire filled out by 98 female University students, who were between the ages of 18 and 25. Findings indicated that YAs who showed signs of PIU experienced both higher levels of perceived conflict and monitoring with both mother and fathers. Similar with previous research, it was found that regardless of YAs’ levels of PIU, YAs’ perceived that they were monitored more by their mothers than their fathers. More research needs to be conducted as PIU is a growing concern, not only with the YA cohort, but also among other age groups, as technology and social media increasingly becomes an important part of everyday lives.
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# Table of Contents

Abstract.................................................................................................................................................. ii
Acknowledgements................................................................................................................................. iii
Table of Contents...................................................................................................................................... iv
Introduction.............................................................................................................................................. 1
   Developmental Trajectory During Young Adulthood............................................................................. 2
   Problematic Internet Use ..................................................................................................................... 6
      Gender Differences......................................................................................................................... 8
   Attachment Theory.............................................................................................................................. 10
   Social Bond Theory............................................................................................................................. 11
   Self-Control Theory............................................................................................................................. 14
   Parental Roles and Relationships......................................................................................................... 16
      The Role of Parents........................................................................................................................... 16
         Parental Monitoring.................................................................................................................... 16
         Parental Communication.............................................................................................................. 21
         Conflict Between Parents and YAs............................................................................................. 24
   The Present Study................................................................................................................................. 27
      Research Questions and Hypotheses................................................................................................. 27
   Methods............................................................................................................................................... 29
   Participants.......................................................................................................................................... 29
   Procedures........................................................................................................................................... 29
   Measures............................................................................................................................................. 30
      Demographics.................................................................................................................................. 30
      Young’s Diagnostic Questionnaire (YDQ)........................................................................................ 30
      Parental Adolescent Communication Scale (PACS)........................................................................ 31
      Parental Monitoring Questionnaire (PMQ)...................................................................................... 32
      Issue Checklist................................................................................................................................. 33
   Analytic Plan....................................................................................................................................... 33
   Results.................................................................................................................................................. 34
      Research Question One: Problematic Internet Use................................................................. 34
      Research Question Two: Levels of Communication............................................................... 35
Research Question Three: Levels of Monitoring

Research Question Four: Levels of Conflict

Discussion

Problematic Internet Use

Parental Roles and Internet Use

  Monitoring

  Levels of Communication

  Parent-Young Adult Conflicts

Prevention Methods

Recognizing PIU

Education in the Household

Education through Schools

Long-Term Assessment Programs

Clinical Treatment Methods

Limitations and Strengths of Study

Sample

Scales

Length of Survey

Data Validity

Conclusions and Future Directions

References

List of Tables and Appendices

Table 1: Mean Scores and Standard Deviation for Female University Students’ Views about Parents’ Levels of Communication, Monitoring, and Conflict Intensity by Age Group and Internet Use

Appendix A: Research Ethics Board Certificate

Appendix B: Consent Form

Appendix C: Ethics Consent Form and Qualtrics Survey
Introduction

The Internet originated in the early 1960s, during the Cold War era when the Soviet Union attempted to enhance levels of communication on a global scale. The primary intention behind the development of the Internet was to create a communication network allowing various agencies to convey messages between different levels of government at a faster rate (Cohen, 2011). Since then, the Internet has provided many benefits for everyday individuals, such as communication, access to information, and generation of income through the offering of different types of business platforms (Turel et al., 2015). Young adults (YAs), which includes adolescents and emerging adults, primarily use the Internet for education, entertainment, and relationship formation (Cohen, 2011). For example, researchers have found that most often individuals use the internet for checking emails, downloading, chatting, surfing different webpages, and engaging in sexual online content (Strittmatter et al., 2015).

Although the Internet serves as a platform that can provide positive outcomes for societies, researchers have reported that the Internet can have negative outcomes for users (Spada, 2014; Treuer et al., 2001). These problems occur when individuals engage in excessive Internet use that may lead to the development of underlying health issues such as depression, anxiety, and social isolation (Holtz & Appel, 2011). This is especially meaningful for YAs between the ages of 18 and 25 years of age, as this cohort is most prone to misusing the Internet through excessive use of video games or social media interaction (see Calvert et al., 2005; Holtz & Appel, 2011).

To address these given challenges among YAs, it is useful to further explore the factors related to Internet overuse among this population, and more specifically, how these factors may be impacted with immediate family relationships. Thus, it is important to assess the interplay
between YAs’ Internet use and levels of monitoring, levels of both open and problematic communication, as well as conflict frequency and intensity that occur in the parent-YA dyad, particularly because parenting is an important aspect of youth development and encompasses various components. Most research assessing YA Internet use has been conducted in the United States, with limited attention on the severity of this problem in other countries such as Canada. Additionally, most Internet addiction researchers have not assessed these three parental constructs simultaneously in the same study, which is important as they are interrelated and may overlap with one another (Low et al., 2012).

To address these issues, I first discuss the developmental trajectories of adolescents and emerging adults, which may shed light as to why this cohort is at a highest risk for PIU. Second, I briefly discuss the shifting economy, which has impacted the education system, creating many YAs feeling unstable, followed by a more in-depth discussion of the growing issue of PIU and the reasons why YAs are most prone. Fourth, various theoretical perspectives (i.e., Attachment Theory, Social Bond Theory, and Self-Control Theory) that can help understand PIU, especially in relation to YAs are discussed. Lastly, three parenting constructs (i.e., monitoring, communication, and conflict) are discussed, along with the ways that these constructs may influence PIU in YAs later in their lives.

**Developmental Trajectory During Young Adulthood**

When discussing excessive Internet use, two distinct age groups are of interest. The first age group is adolescence, as this cohort is one of the most frequent users of the Internet. As adolescents enter emerging adulthood, the second cohort group, many of these individuals may be prone to continue frequent Internet use. Thus, overuse or abuse of the Internet as a method of
coping with other issues may be an indication of other underlying mental health issues, such as anxiety or depression (Anderson, 2001; Ko et al., 2009).

Adolescence is a crucial period of transition where biological, psychological, and social characteristics undergo significant change (Smetana, 2010; Smetana & Berent, 1993). The adolescent stage includes individuals between 13 and 18 or 19 years of age (Phinney, Kim-Jo, & Vilhjalmsdottir, 2005). This developmental stage may be a difficult time due to various pressures that adolescents face, such as developing and forming autonomy, fitting in and gaining acceptance from peer groups, and excelling in academia (Laible et al., 2000; Laursen & Collins, 2009). These difficulties heighten when adolescents undergo emotional and cognitive shifts in their thinking patterns (Holtz & Appel, 2011), while simultaneously being pressured to form and alter relationships with important individuals, such as parents, peers, and teachers (Rubin, Bukowski, & Parker, 1998). Adolescents are continuously developing a greater sense of themselves, as they begin to have views more similar to their peers, leading to increased engagement with individuals outside of their own family (Grotevant & Cooper, 1998).

During the transition from adolescence to emerging adulthood, individuals often experience a decrease in their level of self-esteem, which can negatively impact their lives (Robins & Trzesniewski, 2005). For example, older adolescents with low self-esteem are at greater risk of suffering from mental and physical health issues, and more likely to engage in higher levels of delinquency later in their lives in comparison to their counterparts with greater self-esteem (Puskar et al., 2010). Furthermore, emerging adults who reported lower levels of self-esteem were considered to be more vulnerable to Internet addiction than those with high levels of self-esteem (Yen et al., 2009). This association between low self-esteem and Internet addiction may exist as individuals lacking social skills may be more likely to use the Internet as a
way of creating a new identity (Naseri et al., 2015). Robins and Trzesniewski (2005) found that levels of self-esteem decreased during late adolescence, especially for females, and then gradually increased again during adulthood. Birndorf and colleagues (2005) similarly revealed that females reported having lower self-esteem than did males at all grade levels. Thus, reported female YAs were more inclined towards frequent Internet usage, as compared to their male counterparts (Younes et al., 2016). Perhaps this gender difference may reflect the lower levels of self-esteem among females, as previously reported (Birndorf et al., 2005).

Unfortunately, most studies that have assessed problematic Internet use (PIU) have focused on adolescents, while not fully examining Internet use among emerging adults. These individuals are between 18 or 19 and 25 years of age (Guillot et al., 2016), which is an important time in life where pressures form to attain the necessary skills and education to achieve a stable career (Arnett, 2000). Emerging adulthood is a relevant cohort to examine when studying Internet usage, as these individuals are at increased risk of developing PIU. This may be due to emerging adults experiencing increased change and instability when attempting to form love and career-oriented relationships (Asher & Weeks, 2014). This stage of life is quite volatile, which reflects the experimental and exploratory nature of emerging adulthood (Arnett, 2006). This can be demonstrated by viewing the multitude of events that may be experienced during this period, such as committing to a romantic relationship, having children, pursuing higher levels of education, living independently, or living at home with family (Arnett, 2000). This level of uncertainty may attract many emerging adults to the Internet, as it may provide temporary relief or distraction from life’s current challenges (Durak & Senol-Durak, 2014).

Although there are many new challenges for emerging adults, there has been a recent trend for individuals to spend more time pursuing higher levels of education in order to acquire a
more stable and supportive career. This is referred to as the massification of higher education. Historically, the education system was primarily designated for society’s elites; however, this trend changed in the 1980’s. During this time, a movement towards achieving higher levels of education arouse due to globalization of the education system across the world, becoming more accessible to the masses of society (Mok & Jiang, 2016; Trow, 1973). Canada’s education system is an example of this change as the total number of Canadians enrolled in post-secondary education increased from 0.7% in 1951 to 3.6% in 2016 (i.e., 91,100 enrolled in 1951, and 1,307,277 in 2016) (Statistics Canada, 2014).

The globalization of education has been influenced by economic change, which made it increasingly difficult for emerging adults to earn an income capable of supporting a family (Danziger & Ratner, 2010). Challenging economic conditions intensified educational inequality, leaving many college and University graduates unemployed or working for minimum wage (Mok & Wu, 2016; Mok & Jiang, 2017). This extension of the education system has also led to a delayed adulthood for many individuals. For example, in Canada, the average age for marriage in 1972 was approximately 23 years for women and 24 years for men, respectively (Eichler, 2012). According to Statistics Canada (2020), the average age for marriage was approximately 28 years for women and 30 years for men, respectively. This delay has led emerging adults to experience greater instability, as they are not able to meet the same goals that were achieved by their previous generations (i.e., attain a sustainable job, raise a family etc.).

To deal with this growing level of instability faced by many emerging adults, the Internet often poses as an attractive means to temporarily escape reality (Ozdemiret al., 2014). Canan et al. (2012) found that between 6 and 25% of college students in Turkey were dependent on the Internet. Similarly, many college students in North America suffered from mood disturbances,
sleep problems, loneliness, decreased social involvement, and the inability to form real-life relationships during their everyday activities, which may be a contributing factor to the high Internet dependence rates among this cohort (Anderson, 2001). There has also been a decrease in levels of face-to-face interaction time between emerging adults and their peers, which may be linked to the reason they are using the Internet at such high capacity (Smahelet et al., 2012). Due to the increasing problem of excessive Internet use, it is important to further explore this topic to determine the underlying causes of its abuse by YAs.

**Problematic Internet Use**

Many terms are used when discussing Internet dependence. Some of these terms include pathological Internet use, computer addiction, Internet dependence, compulsive Internet use, and problematic Internet use (PIU) (Cash et al., 2012). Young (1996) developed the term PIU and defined it as frequent Internet use creating psychological, social, school, or work difficulties in an individual’s life. PIU was not discussed in-depth in the most recent version of the DSM, which may attribute to the inconsistencies that arise when defining the term (Spada, 2014). However, Block (2008) claimed that four components were required for an individual to be considered a problematic Internet user. These four components included: (a) frequent use of the Internet accompanied by a loss of time; (b) feelings of depression, anger or tension when Internet restrictions apply; (c) a frequent desire for improved forms of technology; and (d) adverse consequences of using the Internet such as arguing, lying, poor school achievements, and/or social isolation.

PIU has often led individuals towards other problematic activities, such as online gambling or frequent alcohol consumption (Shaffer et al., 2000). This may be because of the many similarities that PIU shares with these other addictive behaviours, such as feelings of
craving, withdrawal, and a lack of tolerance (Block, 2008). Griffiths (2000) stated that PIU may be a medium for individuals to engage in other addictive behaviours such as cybersex, online gambling, or online gaming. PIU shares many qualities with pathological gambling, both of which are classified as impulse control disorders (ICD) (Beard & Wolf, 2001).

ICDs are characterized by the continuation of repetitive behaviours, as well as increased tension prior to acting out these behaviours, and pleasure or relief during or shortly after the act (Faregh & Derevensky, 2012). ICDs are often known to occur with other mental disorders, many of which are classified as substance abuse and mood disorders. The primary problem is that ICDs are commonly under-diagnosed (Dell’Osso et al., 2006). PIU is often characterized as a poorly controlled urge, as well as a maladaptive obsession with the Internet which interferes with one’s everyday standard of living (Aboujaoude, 2010).

Despite the lack of consensus on the definition of PIU, the number of YAs who suffered from PIU varies depending on the location. For example, 1.2% of German students met the criteria for having an Internet Gaming Disorder (IGD) (Rehbein et al., 2010), whereas a Dutch study indicated that approximately 5.4% of adolescents and YAs suffered from IGD (Lemmens et al., 2015). Furthermore, studies conducted in Spain prior to the release of the DSM-5 found prevalence rates ranging from as low as 0.5% to 9.9% (Tejeiro et al., 2002).

There are also concerns regarding the association between school connectedness and YA PIU (Li et al., 2013), as some of the adverse outcomes associated with PIU included neglecting social activities, work, and mental/physical health, as well as avoiding school responsibilities (Spada, 2014). PIU has also been positively associated with increased rates of depression and social anxiety among YAs (Guillot et al., 2016; Yen et al., 2009). Moreover, YAs who reported
higher symptoms of PIU expressed worse interpersonal relationships with individuals during their everyday lives (Guillot et al., 2016; Milani et al., 2009).

Collectively, YAs are the cohort most prone to developing PIU for two reasons. First, many YAs have yet to completely develop their levels of self-control, and researchers have reported a negative association between self-control and PIU (Li et al., 2013; Li et al., 2013; Lin et al., 2009; Park et al., 2014). For example, lower levels of self-control were associated with increased levels of anti-social behaviours (Kuhn & Laird, 2013), increased levels of loneliness (Ozdemir et al., 2014), and lower levels of parental support (i.e., parental monitoring and parent-YA communication) (Dang et al., 2014), all of which are predecessors to PIU. Second, YAs are the most frequent users of the Internet, making them more prone to develop PIU than any other demographic group (Cao et al., 2011; Ko, Yen et al., 2012). Researchers reported that YAs initially occupy the Internet as a means of acquiring information; however, they then engage in the use of various social media platforms (e.g., Facebook or Instagram) for the purpose of social comparison with others (Israelashvili et al., 2012). Additionally, YAs frequently used the Internet due to its heightened sense of community, which may be lacking in the individual’s lives (Hollingdale & Greitemeyer, 2014; O’Connor et al., 2015). Koff and Moreno (2013) provided further support for the claim that adolescents were more likely than adults to engage in frequent Internet usage, as it was found that older adolescents in the United States used the Internet (i.e., counted using both computer and smartphone time) for approximately seven hours per day.

Gender Differences

Gender differences have been reported in studies on PIU. According to Self-Control Theory, parents are more likely to monitor the actions of their daughters as opposed to their sons, which may be the reason why males exhibited lower levels of self-control than did females.
(Gottfredson & Hirschi, 1990). These different levels of self-control may explain why males have been found to be three times more likely than females to develop PIU (Cao & Su, 2007; Tsai et al., 2009). Supporting this argument, Liang et al. (2016) reported that males in China between the ages of 11 and 13 years were twice as likely than their female counterparts to become addicted to the Internet. Along similar lines, Gentile (2004) found in North America that males between the ages of 5 and 17 years spent an average of 13 hours each week engaging in online gaming, in comparison to their female counterparts who only spent five hours.

However, Park, Kim, and Cho (2008) found that males were more likely to be addicted to the Internet than females, but the difference was not significant. In contrast, Borca et al. (2015) found no gender differences when assessing time spent online. It was determined that males and females differed in the specific ways that they used the Internet. For example, males engaged in Internet usage primarily to play video games and follow sports, whereas females used the Internet to keep up with fashion, modify photos, and communicate with their friends using online chat and other forms of social media (Laconi et al., 2017). Given that females are more likely to be engaged in interactive ‘real-time’ Internet services (e.g., Internet relay chat, and multi-user domains) while using the Internet (Borca et al., 2015), they may be more likely to become addicted to the Internet than their male counterparts (Young, 1998). This is largely because of the growing presence of social media in societies. For example, in 2004, the most popular form of social media was MySpace, which had just under one million users. In comparison, in 2018, the most popular form of social media was Facebook, which had over two billion users (Ortiz-Ospina, 2019). This shows how social media has rapidly progressed in our society.

Thus, it is important to understand that males and females occupy the Internet differently, as this understanding will allow a more comprehensive solution to dealing with problematic
Internet use among this age cohort. More attention should be devoted to assessing female internet use, as females engage in higher rates of social media use than do males, and evidence has shown how social media has become increasingly more relevant in societies around the world.

Many YAs faced difficulties forming relationships in their regular daily lives, which may partly be due to insecure attachments that have been developed during infancy. Thus, it is important to focus on the contributions of Attachment Theory as well as the roles of parents to provide YAs with greater insight about Internet use.

**Attachment Theory**

In the field of human development, attachment is an important concept often used to describe the shared bond between an infant and a parent. Bowlby (1969) believed that the attachment children developed with their mothers (or primary caregivers) became internalized during infancy, which influenced the ways they engaged with others throughout their lives. For example, children with a secure attachment experienced warm, intimate, and continuous relationships with their caregivers, in which both the infant and the caregiver experienced satisfaction and enjoyment (Bowlby, 1969; Bretherton, 1992).

The mental representation of an infant’s attachment is known as an internal working model, which subconsciously aids in the formation of future relationships. The internal working model is developed by the age of three and impacts the way children understand their surrounding world (Schore, 2000). The internal working model guides everyday interactions based on previous memories and expectations of relationships with significant others (Bretherton & Munholland, 1999).
There are four internal working model outcomes that children can experience based on the relationship that they experience with their primary caregiver. The first internal working model is a secure attachment, which forms when the caregiver is sensitive and responsive to the needs of the child. The next model is insecure avoidant, which occurs when the child feels unloved and rejected by the caregiver. The third model is referred to as an insecure-resistant attachment, which occurs when the child expresses feelings of anger and confusion, and their caregiver does little to amend the situation (McLeod, 2007). Lastly, the fourth model, disorganized attachment, most often occurs when the child experiences maltreatment or neglect from their parent or guardian. When this attachment style is internalized by a child, they will no longer view their parent as a safe haven during stressful times, and thus they will naturally adapt to their own insufficient methods of coping which are often intolerable (Zilberstein & Messier, 2010). Attachment Theory can be useful when trying to better understand PIU among YAs, as many YAs use the Internet to replacing positive face-to-face relationships that should be formed during adolescence and emerging adulthood. If YAs were able to establish more secure attachment styles with their parents, then they may be less likely to suffer from PIU, as they may have more positive relations in their daily lives.

Along with the child’s attachment to their parents, it is also important to assess the strength of a child’s bond with individuals and activities within society, as these bonds either help to inspire or reduce deviant or risky behaviours in individuals’ lives (Peterson et al., 2016). Thus, Social Bond Theory (Hirschi, 1969) will be used to better understanding how certain ties to individuals or activities in a society can reduce rates of PIU among YAs.

**Social Bond Theory**
Hirschi’s (1969) Social Bond Theory was greatly influenced by the contributions of Durkheim (1893). Durkheim (1893) conceptualized society similar to a living organism, in which human beings represented the moving counterparts that made up the whole organism. Hirschi also adopted Durkheim’s idea that when individuals grow apart from their group (i.e., society), they become influenced to engage in abnormal or deviant behaviours (Durkheim, 1893). Social Bond Theory can be useful when attempting to explain a wide variety of deviant acts in society.

Unlike most other theoretical perspectives in sociology (i.e., Strain Theory, Social Disorganization Theory, Social Learning Theory etc.), Social Bond Theory is a ‘pull theory’. The idea of a pull theory is that humans are inherently born evil, but certain factors exist in a person’s life that pulls him or her away from crime. This is contrary to a push theory, which contends that individuals are inherently good, but certain factors inspire crime or deviancy (Helfgott, 2008).

Social Bond Theory recognizes that conformity is learned at a young age as individuals have positive social bonds and by values (Wiatrowski et al., 1981). According to Hirschi (1969), an individual’s social bonds become relatively stable between the ages of eight and 10 years, at which point these bonds are considered to be more difficult to change. If an individual develops strong positive bonds to society, there are greater chances that they will conform to the respective rules (Hart & Mueller, 2013).

There are four essential elements that comprise an individual’s bond to society, including: (a) attachment; (b) commitment; (c) involvement; and (d) beliefs. Bowlby had initially defined attachment as the shared emotional bond between a mother and her infant, which influenced social, emotional, and cognitive development (Bowlby, 1969; Wrape et al., 2017). It
is unclear as to whether or not Hirschi (1969) was influenced by Bowlby’s (1969) concept of attachment. Regardless, Hirschi’s main premise was that a secure relationship attachment could form with many individuals in society, such as peers, teachers, or other role models, and that these relationships occurred when each individual acted in a way that garnered approval from the next individual. For example, students who displayed secure attachments to their teachers were more likely to arrive to class on time and complete their assigned homework. In contrast, students who had insecure attachments behaved how they choose, as there was little to no risk of damaging the relationship (Gault-Sherman, 2012).

Commitment refers to the drive that individuals have towards having positive accomplishments in their lives that are deemed socially acceptable. Examples of this include pursuing higher levels of education or attaining a high-status occupation within the community. Similar to commitment, the next type of bond is involvement, which refers to the amount of time individuals dedicate to positive acts in society (Hirschi, 1969). Many adolescents who commit crimes may claim that they have high levels of involvement within society, but it is important that adolescents are involved in activities that are conventional and not deviant. For example, adolescents who are occupied with positive activities, such as attending school or playing sports during their free time, have less time to engage in delinquent activities.

Lastly, the individuals’ belief system refers to a common set of values that become developed based on the beliefs of those who raised them. If the values are positive and consistent with those of the surrounding community, then the likelihood of the individuals’ engaging in delinquent activities are reduced (Durkin et al., 2007).

Both attachment and commitment are considered the two most important of the four bonds when predicting future adolescent behaviour (Han et al., 2016; Intrivia et al., 2012; Miller,
Jennings et al., 2009; Yun et al., 2016). For example, the individuals’ attachment influences their level of commitment to conventional activities (Han et al., 2016), which subsequently impacts the number of deviant behaviours that they may engage in. Also, YAs with high levels of commitment to academia and other proactive activities (e.g., sports and clubs etc.) are more likely to form positive relationships with fellow peers in the community, which aids in deterring deviant or risky behaviours (Van Gundy-Yoder, 2007).

Assessing how these bonds may influence levels of PIU among YAs helps to illustrate how this theory can be used when trying to better understand this problem. Years later, Hirschi (1990) further constructed his theory of social bonds by developing Self-Control Theory (SCT), which further extended his views about self-control.

**Self-Control Theory**

Self-Control Theory (SCT) (Hirschi, 1990) is a widely used theoretical perspective closely aligned with many of the concepts ingrained in his earlier Social Bond Theory. SCT, along with the Social Bonds Theory, contends that one’s level of self-control is developed and stabilized by a young age. The primary concept of SCT is that individuals with low self-control have the desire for immediate gratification, and they are usually considered impulsive, insensitive, physical, shortsighted, and non-verbal (Intrivia et al., 2012). It was suggested that in order for parents to help instill positive levels of self-control in their children, they should monitor their actions, recognize deviant behaviour when it occurs, and punish them in accordance to the severity of the given behaviour (Gottfredson & Hirschi, 1990). If these methods of parenting are continuously repeated, then there is an increased likelihood of children developing higher levels of self-control.
In 2004, Hirschi modified his theory of self-control integrating elements of his Social Bond Theory. The key component of the new theory was that the initial characteristics of individuals’ with low self-control (i.e., impulsiveness, short-sightedness, non-verbal etc.) were not given the same level of importance as they were in the initial SCT. For example, in his revised version of SCT, certain inhibitors, which are factors that one takes into account when committing any sort of deviant activity, could be a more accurate indicator of whether or not he or she would be deterred from crime or delinquency. These inhibitors were closely aligned with values discussed in Hirschi’s Social Bond Theory, namely maternal attachment and school commitment (Intrivia et al., 2012). Hirschi found a positive association between the strength of a child’s bond and their level of self-control. More specifically, he claimed that children with more inhibitors showed decreased levels of delinquency. Attachment is an important concept as it is indispensably linked to the other remaining bond elements. This is shown as individuals with secure attachments to conventional figures within society are influenced to follow conventional lives (Han et al., 2016).

The importance of these theories is to better understand that positive parenting practices are not only fundamental during the child’s infancy stage, but also as one enters adolescence and young adulthood. Although a child’s levels of self-is almost fully developed by the age of eight (Turner & Piquero, 2002), there is still evidence that parenting roles are important to individual development. Although parenting at a young age is shown to be a vital component for positive child development, as shown by attachment theory, it is important to also understand how these parenting practices influence development later in life.

These collective theories highlight the importance of positive early parenting techniques, as the relationship shared between the primary caregiver and the child is an essential element for
the child’s future. This is important when assessing the growing problem of PIU, to take an interdisciplinary approach to explore the complexities of PIU and the impact on social relationships. The guiding principles (attachment, commitment, involvement, and commitment) are based on the roles of parents and their parenting practices, creating a framework for future relationship development. Thus, it is imperative to understand that there are different methods that can be used when attempting to prevent or reduce levels of PIU among YAs, which differ depending on the severity of the problem.

**Parental Roles and Relationships**

**The Role of Parents**

Although many important figures exist in the lives of YAs, parents are often the most influential role model for their development (Evans, 2016). The parent-YA relationship is influenced by the parents’ level of awareness, monitoring, supportiveness, strictness, and routines within the family setting, which are usually established during childhood, and often endures until emerging adulthood. Moreover, parenting practices are relevant and meaningful to children throughout their lives and act as protective factors against anti-social behaviours and depression later in life (Paschall et al., 2003; Smetana et al., 2002).

Focusing on Internet issues, a negative association was found between parent-YA relationship quality and YAs’ online gaming dependence (Kim & Kim, 2015). More specifically, high-quality relationships with parents were positively associated with higher levels of mental well-being, which led to lower levels of PIU (Hair et al., 2008). Thus, certain parenting practices have been shown to be important for positive development, especially parental monitoring.

**Parental Monitoring**
Given the importance of parents in YAs’ lives, it can be understood that parenting practices are essential at a young age when promoting healthy development. One of the most important parenting practices is monitoring, which is considered a dual-person process (Lippold, 2011). For example, it is the parents’ role to gain information on their children’s behaviours, and it is children’s role to decide what information to disclose to their parents (Kerr et al., 2010). Parental monitoring can also be defined as the parents’ knowledge of their children’s whereabouts at all times (Lamb, 2010). Stattin and Kerr (2000) discussed how parental monitoring can be defined as a parent’s knowledge of their adolescents’ whereabouts, peer group, and events. Parental monitoring continues from infancy and extends beyond adolescence and young adulthood, however, the methods that parents use to monitor their children adapt with age. Regardless of how parental monitoring may be defined, it is agreed that the amount of parental monitoring perceived by the YA will act as a protective factor for risky behaviours in their lives (Borawski et al., 2003).

Parental monitoring is one of the most successful methods of instilling high levels of control in children (Baumrind, 1973), and has also been associated with positive adjustment and academic achievement later on in young adulthood (Lamborn et al., 1997; Patterson & Stouthamer-Loeber, 1984). Additionally, children who received higher levels of parental monitoring were less likely to be engaged in delinquent activities later in their lives (Hair et al., 2008; Intrivia et al., 2012), and were also less likely to be engaged in substance abuse or risky behaviour (e.g., smoking, drinking alcohol, unprotected sex etc.) (Borawski et al., 2003). Also, high-risk children often turned out more resilient during young adulthood when they grew up in environments with positive family functioning, which consisted of higher levels of parental
monitoring, greater numbers of adults in the household, and greater educational expectations (Sprott et al., 2005).

Researchers found that YAs’ reports of parental monitoring were a greater predictor of risky behaviour than parents’ reports of their own monitoring skills (Cottrel et al., 2003). Others have demonstrated that higher levels of parental monitoring were a discriminating factor for Internet addiction among adolescents (Stattin & Kerr, 2000; Vaala & Bleakley, 2015; Yen et al., 2009). This is demonstrated as parental monitoring has been linked to lower rates of adolescent exposure to risky online content (Cho & Cheon, 2005) and adolescent internet addiction (Lin, Lin & Wu, 2009). Approximately 58% of adolescents in the United States claimed that their parents were the largest influence regarding the websites and activities they accessed when they went online. This can be positive, as many parents claimed that while they monitored their adolescents’ Internet activities, they were using it for schoolwork or news consumption (Lenhart et al., 2011). This is why the Internet is considered a double-edged sword, as it is capable of providing opportunities for individuals, while also easily able to cause harm to individuals (Finkelhor et al., 2000).

Given the many benefits that exist when discussing parental monitoring, there has been limited research conducted regarding the amount of monitoring that fathers provide in relation to mothers, and how this potential difference may directly influence the amount of time that YAs spend on the Internet (Stattin & Kerr, 2000; Vaala & Bleakley, 2015; Yen et al., 2009). Previous research has found that 70% of adolescents perceived their mothers to be the primary monitoring figure, whereas approximately 1% of adolescents perceived their fathers to be the primary monitoring figure. Wong (2010) found that when examining at Internet use, mothers were more likely to fill the monitoring role in comparison to fathers. Similarly, Lim and Soon
(2010) found that due to cultural and social expectations, mothers in China most often occupied the monitoring role for activities such as Internet use. This has also been supported as Arab mothers were found to be the primary monitoring agent for adolescent’s as they have a closer relationship in comparison to fathers who have a more distant relationship with their adolescents (Ahmad et al., 2015). This apparent gender role pattern may suggest that mothers, in comparison to fathers, act as the primary influential agent when monitoring technological use for youth (Le Poire, 2006). However, focusing only on who the primary parent is in monitoring their adolescents overlooks the potential contributions that a second parent, the father, may have on their adolescents.

This idea that fathers monitor their children less than mothers may stem from the problem that most studies that have assessed parental monitoring have viewed parents as one conjoined unit, or they have only taken the perspective of the mother (Coley et al., 2009). Studies which have collapsed maternal and paternal monitoring into one construct are problematic, as they ignore any potential monitoring differences that may be found when the constructs are treated separately. Furthermore, studies of this nature help contribute to the conception that fathers are making poor efforts to monitor their adolescents’ Internet usage, which may influence delinquency among YAs (DiClemente et al., 2001). Thus, it is important to explore parental monitoring of both mothers and fathers and their individual contributions to children’s development.

Despite the benefits that may arise from positive parental monitoring, there are often various challenges that parents encounter when attempting to monitor their YAs’ Internet use. First, many parents have trouble exercising good monitoring practices when their children become YAs due to the majority of YAs having access to social media and the Internet from the
privacy of their own bedrooms. This makes it difficult for parents to monitor the types of content that their YAs are accessing, or whom they are associating with while online (Roberts et al., 1999). Thus, parents must adapt their monitoring practices when children enter adolescence and young adulthood, as during this time, youth often become engaged in more unsupervised activities with peers within the community (Racz, & McMahon, 2011).

Second, it may also be an issue for parents to practice good monitoring practices due to changes in our societies’ workforce, which often leaves both mothers and fathers having to work full-time jobs, while their children may be unattended at home for undetermined amounts of time (DiClemente et al., 2001). According to Staksrud and Livingstone (2009), parents may find monitoring their YAs Internet usage more effective if they are able to implement Internet usage rules, or if parents are able to share with adolescents their own personal experiences involving the Internet. Additionally, parents can monitor their YAs’ Internet usage by checking recent browsing history or by using certain types of software to track what is being accessed (Lenhart & Madden, 2007). According to Lenhart and Rainie (2005), 62% of parents claimed that they regularly checked their YAs browsing history, whereas only 33% of YAs believed that someone was monitoring their browsing history. This demonstrated that if parents conducted regular history checks on their children’s Internet usage, they may have better knowledge surrounding the websites that their YAs are exploring. This is why it is important for parents to continue to monitor their YAs even when they are transitioning from high school into University, because at this time in their life youth are likely experiencing a great deal of change and uncertainty.

Nonetheless, much of the difficulty that parents face in relation to monitoring YAs’ behaviour is due to increasing levels of conflict that may exist in the relationship. These high levels of conflict between parents and their youth often occur due to a lack of active
communication (Vangelisti, 1992). If parents are able to improve levels of communication with YAs, then there are greater chances that levels of conflict between the dyad will decrease, allowing for healthy parental monitoring, along with other necessary parental practices.

**Parental Communication**

Another important parenting practice used to positively influence development is parent-adolescent communication. Interestingly, effective parental monitoring has been positively linked with open parent-adolescent communication. For example, positive parental monitoring occurs by providing affection, support, and by assisting with problem-solving, which ultimately influences youth to willingly disclose information (Low et al., 2012). Parent-adolescent communication is often defined as the amount of time parents spend discussing with their adolescents’ ongoing activities and occurrences in their lives (Lippold et al., 2013). However, Haraken et al. (2005) found that when attempting to reduce levels of risky behaviour among adolescents, the quality of communication between parents and adolescents was more important than the frequency of conversation. Communication with parents has been found to be especially important during adolescence due to their increasing need to seek out advice, as many individuals in this age cohort often become involved in a wider range of risky behaviours (e.g., substance abuse, delinquency, and unprotected sex) (McMorris et al., 2007).

A lack of communication with parents during adolescence may lead to poor decision making (Coley et al., 2009; DiClemente et al., 2001). Thus, parents should attempt to actively communicate with their YAs in meaningful ways to remain informed about the various events ongoing in their lives (Keijsers & Poulin, 2013). Healthy parent-YA communication is much more achievable if the dyad (i.e., mother-YA, or father-YA) spends meaningful time together on a consistent basis (Lee & Chae, 2007). Despite the importance of healthy communication, many
families do not actively communicate with each other. This can be shown as 40% of adolescents included in the study felt that they were not able to talk to their parents openly when they faced a problem (Shek et al., 1998). Similarly, Smetana et al. (1991) found that 47% of adolescents who had an argument with their parents walked away from the situation as a means of resolution.

It has been found that high levels of parent-YA communication were associated with decreased levels of problematic behaviours. It may be that YAs who did not perceive positive communication with their parents sought advice about sensitive topics from their peers, or other individuals, which may have influenced them to become engaged in risky behaviours (Lippold et al., 2013). Moreover, poor YA-parent communication was related to frequent Internet usage. For example, YAs who experienced lower levels of parental communication engaged in increased levels of online video game interaction (Lee & Chae, 2007). Similarly, adolescents with higher perceived parental communication were less likely to become addicted to the Internet (Alt & Boneil-Nissim, 2018; Kim, Jeong, & Zhang, 2010). In addition, family communication patterns had an impact on youths’ mass media use and effects (Cho, & Cheon, 2005). Also, research demonstrated that parents who had high-quality conversations about healthy Internet use with their adolescents were more likely to prevent them from engaging in PIU, which was likely due to the parents’ role of being influential agents (van Den Eijnden et al., 2010). According to Vaala and Bleakley (2015), parents are key gatekeepers in relation to youths’ online activities and are important socializing agents for youth when learning safe and healthy ways of using the Internet.

Some studies have also reported parental differences when discussing parent-YA communication. Specifically, mothers and fathers often occupied different roles when communicating with YAs. For example, the fathers’ role in communication was usually less effective than the mothers, as mothers communicated more openly with their YAs in comparison
to fathers (Rosnati et al., 2007; Williams & Kelly, 2005). In their study, Tucker et al. (2003) found that fathers spent more time with their first and second born sons, whereas mothers spent more time with their first and second born daughters. Similarly, fathers focused more of their support on sons, whereas mothers focused their affection equally to both sons and daughters (Starrels, 1994). This is demonstrated as daughters in comparison to sons, felt uncomfortable communicating with their fathers about their problems, whereas both daughters and sons were equally comfortable communicating their problems with their mothers (Ackard et al., 2006). Also, positive communication with mothers was reported to be negatively associated with alcohol use for adolescents, which was not the case for the quality of communication with fathers (van Den Eijnden et al., 2010). It is difficult to determine many of the differences that exist between mothers and fathers with regards to adolescent communication, which may be due to the lack of research viewing parents as two separate units (Lippold et al., 2013; Waizenhofer et al., 2004).

There were also differences found in the ways that parents communicated with their daughters and sons. For example, Liu, Fang, and Zhang (2012) found that daughters perceived to have higher levels of communication with their parents than did sons. Similarly, Keijsers and Poulin (1992) reported that during adolescence, daughters had a better relationship quality with their parents, which may contribute to the reason why they had better-perceived communication with their parents. In addition, daughters received greater levels of parental control, which led to them disclosing more information to their parents than did sons (Racz & McMahon, 2011). These differences in levels of communication shown to sons and daughters may have some influence on PIU levels among YAs, which is why it is important to further include parent-YA communication when reviewing Internet addiction. Although many studies have assessed parent-
adolescent communication, there have not been many distinctions in the ways that parents communicate with males in comparison to females, which may be because researchers did not explicitly explore gender by child. Despite the importance of parent-adolescent communication regarding Internet use, PIU is also important as it may impact levels of parent-YA communication.

**Conflicts Between Parents and YAs**

During adolescence, there are usually heightened levels of conflict with parents. Unless severe levels of conflict occur, these situations are considered a regular and fundamental component of adolescent development (Laursen, 1995; Moed et al., 2015). Conflict is an inevitable occurrence between parents and adolescents’ due to the close nature of the relationship, as both individuals are balancing out costs and benefits, as well as figuring out how to work with each other’s needs (Laursen, 1995). There are various reasons for these disagreements and conflicts. First, adolescents are constantly experiencing physical and mental change, which usually impacts the nature of the relationship with their parents (Smetana, 2010). Second, conflicts can occur when adolescents seek greater autonomy than parents are willing to permit (Van Lissa et al., 2017).

These disagreements may be beneficial and become learning schemas, which could help teach adolescents how to better form and maintain social relationships over time (Laursen, 1995). For example, adolescents’ early relational experiences with their parents were found to be an accurate reflection of the relationships that they formed and developed throughout their lives (Hair et al., 2008). Parent-adolescent conflicts were often regarding responsibility roles, academic performance, and the adolescents’ desire for increased autonomy. These conflicts indicate the need for both parents and adolescents to integrate the goals and desires of one
another into their lives so that each of their individual desires can be met (Assadi et al., 2011; Kriesberg, 2007; Laursen, 1995). This is important, as although mild conflicts are considered normal, and even healthy, if these conflicts become too frequent or intense, the outcomes may be problematic (Laursen, & Collins, 2009).

Despite these heightened levels of conflict during adolescence, most individuals experienced better relationships with their parents during young adulthood (Arnett, 2004). Although benefits may arise from normal amounts of conflict, many adverse outcomes may occur if these conflicts become too frequent or too intense, which may be a sign of maladaptive family functioning (Steinberg & Silk, 2002). High levels of conflict between parents and YAs have been found to predict problems later in life, such as depression, and substance abuse (Burt et al., 2003; Gonzales et al., 2006). Yen et al. (2007) found a positive association between levels of parent-adolescent conflict and Internet addiction. More specifically, higher levels of parent-adolescent conflict often led to less parental monitoring, which provided adolescents greater opportunity to misuse the Internet (Ary et al., 1999). Similarly, Yen et al. (2009) found that high levels of family conflict and lower levels of parental monitoring were associated with higher rates of Internet addiction among adolescents. High rates of parent-adolescent conflict may stem from insecure attachments, which may inhibit the individuals’ ability to communicate their concerns with their parents and others in their lives. This may lead to the youths experiencing potential feelings of loneliness or isolation (Hautamaki et al., 2010). Furthermore, higher rates of parent-adolescent conflict often led to higher levels of emotional distress among adolescents. Emotional distress has been shown to influence poor emotional and physical well-being and lower-quality close relationships (Chung et al., 2009), which may lead one to misuse the Internet.
There were also gender differences found regarding levels of parent-adolescent conflict, as daughters engaged in greater amounts of conflict with their parents than sons. More specifically, daughters engaged in higher levels of conflict with their fathers, whereas sons engaged in higher levels of conflict with their mothers (Ashraf, 2011). In contrast, it was found that daughters were more likely to have higher levels of conflict with their mothers than with their fathers (Birditt et al., 2009; Fuligni, 1998). Furthermore, daughters may become engaged in higher levels of conflict due to their increased need to explore interpersonal differences when facing a social dilemma. In contrast, sons often denied or avoided conflict when it occurred in close relationships, such as with their parents or peers. Also, parents often used more intensive surveillance techniques on their daughters, as opposed to sons (Ashraf, 2011), which may be an additional reason why daughters exhibited higher levels of conflict (Berk, 1991; Fuligni, 1998). When resolving conflicts, it was found that daughters were more likely than sons to use compromising techniques when resolving conflict rather than submissive techniques (Eder, 1990; Gesinde & Akujobi, 2011).

The different levels of conflict between the dyads may exist due to the different roles that each parent occupies. For example, the mother’s role is usually directed towards caretaking, whereas the father’s role is more centered around leisurely activities, which may explain why most studies have found greater levels of conflict between adolescents and their mothers (Allison, & Schultz, 2004; Laursen, & Collins, 1994; Renk et al., 2005). Given that father-adolescent conflicts are not as frequent, they may be more salient and may have greater implications for adolescents’ development (Weymouth et al., 2016). Due to the nature that parent-YA conflict requires a healthy balance, it is important to assess levels of conflict when viewing PIU among YAs. This is because too much or too little conflict within the parent-YA
Given the importance of parental communication, monitoring, and parent-YA conflict in relation to YA Internet use increased attention is needed. Studies of this nature may help reduce PIU among YAs. Thus, collectively exploring these parenting constructs may provide a more comprehensive understanding on the complexity of PIU.

**The Present Study**

The present study examined the behaviours and attitudes of young female adults (YAs), specifically concerning their use of the Internet, and their relationships with their parents. There has been contradictory evidence on Internet use and gender differences (Borca et al., 2015; Gentile, 2004). Despite these inconsistent findings, there has been a tendency for previous research to focus on males (Park et al., 2008; Yu et al., 2013), which why it is important to explicitly focus on rates of Internet use among female users. This study explored Internet use patterns and reported problems in relation to specific parenting practices (i.e., levels of communication, monitoring, and conflict). More specifically, this study assessed Internet problems among female YAs, as the literature on female Internet addiction has been understudied (Borca et al., 2015).

**Research Questions and Hypotheses**

For these areas of interest to be assessed, the following four research questions were explored:

(1) To what extent did YAs face problems controlling their Internet use, and did this
Internet use interfere with their daily lives?

It was expected that YAs would experience Internet addiction problems. It was also expected that with greater prevalence of reported PIU, YAs would be more likely to report greater negative impacts on their daily lives. No age differences were expected.

(2) How did YAs’ perceived levels of communication with their mothers and fathers differ by their Internet use?

It was expected that YAs with less Internet addiction problems would perceive to have higher levels of perceived open communication and lower levels of perceived problematic communication with their parents than those who had problems controlling their Internet use. It was also expected that YAs would perceive to have higher levels of communication with their mothers than with their fathers. No age differences were expected.

(3) How did YAs’ perceptions of parental monitoring differ by YAs’ Internet use?

It was expected that YAs who with less Internet addiction problems would perceive to have higher levels of parental monitoring than YAs who had problems controlling their Internet use. It was also expected that YAs would perceive to have greater monitoring from their mothers than from their fathers. No age differences were predicted.

(4) How did YAs’ perceptions of conflicts with their parents differ by their own Internet use?

It was expected that YAs with less Internet addiction problems would have less conflict with mothers and fathers than those who faced Internet addiction problems.
More specifically, it was expected that YAs would have more intense conflicts with fathers than with their mothers. Also, it was expected that younger YAs would have higher levels of conflict with their parents than older YAs.

**Methods**

**Participants**

This study included 98 female participants, with 35 first/second-year university students (Group 1) and 63 third/fourth-year university students (Group 2). Participants in the study met the following criteria: (a) were enrolled in university either full-time or part-time; (b) lived at home with at least one parent either full-time or part-time; and (c) had access to the Internet on a daily basis from their residential, occupational, and/or educational institution. Participants initially filled out a screening background questionnaire located at the beginning of the survey which assessed for two criteria, year of birth and living arrangement. Those who did not meet the screening requirements were automatically directed to the end of the survey, and their data was removed.

Most of the participants were born in Canada (n = 92, 94.00%). The other participants were born in Colombia, England, Indica, Jamaica, Malaysia, and Norway. Most of the participants either volunteered (n = 62, 63.30%) and/or were employed on a full-time or part-time basis (n = 64, 65.30%). For maternal levels of education, participants reported that 3.10% of mothers had below a high school education, 27.60% had a high school education, and 69.30% had a post-secondary education or higher. For paternal levels of education, participants reported that 7.10% of fathers had below high school education, 30.60% had a high school, and 62.20% had a post-secondary education or higher.

**Procedures**
Upon receiving approval from the University of Guelph’s Research Ethics Board (see Appendix A), listservs for undergraduate classes at the University of Guelph were used to recruit students for the University cohort. In addition, word of mouth was used to gather subjects, as participants were encouraged to promote the study to their fellow peers who met the studies requirements. To reduce bias, no personal contacts were used during the recruitment process.

Qualtrics (hosted by the University of Guelph) was also used to distribute the online survey to YAs via the Internet (See Appendix B). For compensation, participants who completed the online questionnaire were eligible to win one of two $50 cash prizes (two prizes per each age cohort). The prizes were distributed using a random number generator in correspondence to the participants’ email address. Participants email addresses were collected using an anonymous link located at the end of the Qualtrics survey.

**Measures**

**Demographics**

As a pre-screening tool, participants were asked to report information about their age and their living arrangements (i.e., did they live with their parent(s), or did they live elsewhere). When the participants met both of these criteria, they were asked about their gender, level of education (e.g., high-school education, college, university), aspired level of education, occupational status (e.g., jobs held and hours worked per week), volunteer status, living arrangements (e.g., who they currently live with), and parents’ educational and occupational statuses. Next, participants completed a series of questions drawn from previously designed scales.

*Young’s Diagnostic Questionnaire*
The YDQ was developed to assess Internet addiction among individuals (Young, 1998). This scale was adapted from the DSM-IV, based on its criteria for pathological gambling. This was due to the many similarities shared between Internet addiction and gambling. The YDQ was composed of 8-items designed to assess participants’ feelings towards their own usage of the Internet. Example items included, “Do you feel preoccupied with the Internet (think about a previous online activity or anticipate the next online session)?” or “Do you stay online longer than intended?” Responses were recorded with either a yes or no. Participants’ scores were summed to create a diagnostic scale. Scores of five or greater indicated an addiction to the Internet. According to previous research, the reliability coefficients for YDQ translations range from .71 (i.e., Chinese and Norwegian versions) (see Johansson & Gotestam, 2004) to .79 (i.e., Greek version) (see Fisoun et al., 2012). For this current study, the Cronbach α’s for Young’s Diagnostic Questionnaire was .70 and .61 for Groups 1 and 2, respectively.

**Parental Adolescent Communication Scale**

Barnes and Olson (1985) developed the PACS for the purpose of assessing two types of communication in the family, including open and problematic. The scale was composed of 20 items, 10 items measuring open communication, and 10 items measuring problematic communication. Participants answered the questions individually based on their own perspectives of their communication with their mother and father. Items 1 through 10 measured levels of open communication. Example items included, “I can discuss my beliefs with my mother without feeling restrained or embarrassed” or “When I ask questions, I get honest answers from my father.” Items 11 through 20 measured problematic communication. Example items included, “When talking to my mother, I tend to say things that would be better left unsaid” or “Sometimes I have trouble believing everything my father tells me.” Responses were
recorded using a 5-point Likert scale (1 = strongly disagree, 5 = strongly agree) (questions 11 through 20 were reverse coded to ensure consistency during scoring). In previous research, this scale had a high level of internal consistency (Cronbach $\alpha$ for open communication = .87; Cronbach $\alpha$ for problem communication = .78). Also, the test-retest reliability has been found to be .78 and .77 for open communication and problematic communication, respectively (see Barnes & Olson, 1985). For this present study, the Cronbach $\alpha$’s for maternal communication was .93 for both Group 1 and Group 2. The Cronbach $\alpha$’s for fathers communication was .91 and .92 for Group 1 and Group 2, respectively.

The total scores were then averaged to produce a separate communication score called parental communication for each parent. The “Parental Communication” construct was created by averaging the scores for mothers and fathers separately. Higher scores indicated that the YA perceived to have more effective communication with their parent.

**Parental Monitoring Questionnaire**

Stattin and Kerr (2000) developed this 9-item scale to determine how youths perceive their parents’ levels of monitoring. More specifically, the scale probes on information about youths’ school performance along with their peer associations. Example items included, “Does your mother normally know where you go and what you do after school?” or “In the last month, has your father ever had no idea where you were at night?” Participants were required to complete the survey twice to examine both maternal and paternal monitoring. Responses were recorded using a 5-point Likert scale (1 = never, 5 = always). This scale had a high level of internal consistency in previous studies (Cronbach $\alpha = .87$) (see Everri, Mancini, & Fruggeri, 2015). For this present study, the Cronbach $\alpha$’s for maternal monitoring was .88 and .84 for Groups 1 and 2, respectively. The Cronbach $\alpha$’s for paternal monitoring was .93 for both Groups.
1 and 2, respectively. YAs’ scores on monitoring were then averaged separately for mothers and fathers and termed as “Parental Monitoring.” Higher scores indicated perceptions of greater parental monitoring.

**Issues Checklist**

The Issues Checklist (IC) is a 44-item self-report instrument designed to determine both the frequency of discussions that occur between YAs and their parents and the intensity of these discussions (Robin et al., 1975). Participants completed the IC twice, reporting on their relationship with both their mother and father. The discussion topics ranged across a wide spectrum. Example items included, “Have you discussed telephone calls with your mother?” or “Have you discussed how your money is spent with your father?” Participants were initially asked if they had discussed certain topics with their mother or father, which they answered using a yes or no response system (1 = yes, 2 = no). This information was then used to determine the frequency of interactions between the parent-YA dyad. Next, when YAs noted that they discussed a certain topic with their parent or guardian, they were then asked to rate how the conversation made them feel using a 5-point likert scale (1 = calm, 5 = angry). The score, “Parental Conflict,” was averaged to produce an intensity score for mothers and fathers, individually. Thus, two Parental Conflict scores were created. Higher scores referred to more intense discussions between the dyad.

**Analytic Plan**

For research question one (RQ), a frequency of responses was conducted to determine the number of YAs who showed evidence of Internet addiction according to the YDQ.

For RQ two to four, YAs’ relationships with their mothers and fathers on communication, monitoring, conflicts, and Internet use were analyzed (repeated-measures ANOVAs, ANOVAs).
Scores on the YDQ were used as the independent variable, scores were dichotomized, such that scores 5 or greater were problematic Internet use. For each analysis, the parental constructs (i.e., communication, monitoring, and conflict) were treated as the repeated measure. Post hoc ANOVAs were conducted to further examine the significant main and interaction effects.

To test for levels of normality, skewness and kurtosis were assessed using the Shapiro-Wilk test, which was more appropriate than the Kolmogorov-Smirnov due to the small sample size in the current study. Results from the initial Shapiro-Wilk test revealed that three of the twelve variables were normally distributed, including: maternal communication, and maternal and paternal monitoring for Group 1. To resolve this issue, a Log-10 transformation was conducted to normalize the data before further running analyses. After the Log-10 transformation, four of the twelve variables were skewed, including: paternal monitoring and maternal conflict for Group 1, and communication for both mothers and fathers for Group 2.

Results

To create the two age cohorts, the groups were determined by their levels in University. Group 1 were first and second year students, and Group 2 were third and fourth (or higher) students. To examine whether the groups differed by Age, a 2 (Group) x 2 (Age) ANOVA was conducted. The analysis revealed an Age effect, \( F (1, 97) = 103.96, p = <.001 \). Group 1 were significantly younger than Group 2. Thus, these groups are referred to as “Age Group.”

Research Question 1: Problematic Internet Use

The extent that YAs faced problems controlling their Internet use (IU) was assessed by scoring their responses from the YDQ. Those who scored 5 or higher were considered as experiencing problematic Internet use. The results indicated that 14 (40.00%) first and second-
year students (Group 1), and 18 (28.57%) third and fourth-year students (Group 2) abused the Internet. These groups are referred to as Internet Use (IU).

**Research Question 2: Levels of Communication**

To explore the relationship between YAs’ IU and their perceived communication with their mothers and fathers, a 2 (Age Group) x 2 (IU: addicted, non-addicted) x 2 (Parental Communication: mother, father) repeated measures ANOVA, with Parental Communication treated as the repeated measure, was conducted. The analysis revealed a significant main effect for Parental Communication, $F (1, 94) = 7.32, p = .01$, but not for IU or Group, $F$'s (1, 94) = .20, .40, $p$'s = .65, .54, respectively. There were no interaction effects for Parental Communication x Group, Parental Communication x IU, Group x IU or Parental Communication x Group x IU ($F$'s (1, 94) = .10, .03, .11, .31, $p$'s = .75, .91, .74, .58, respectively). More specifically, regardless of age or Internet use, YAs perceived to have better levels of communication with their mothers than they did with fathers ($M$s = 3.38, 3.22, $SD$’s = .36, .60, respectively).

**Research Question 3: Levels of Monitoring**

To explore YAs’ perceptions of parental monitoring in relation to their IU, a 2 (Group) x 2 (IU) x 2 (Parental Monitoring: mother, father) repeated measures ANOVA, with Parental Monitoring as the repeated measures, was conducted. The analysis revealed a significant main effect for Parental Monitoring and IU ($F$’s (1, 94) = 85.60, 10.25, $p = .001, .01$, respectively), but not for Group, $F$ (1, 94) = 0.25, $p = .62$. Also, there were no significant interaction effects for Parental Monitoring x Group, Parental Monitoring x IU, Group x IU, or Parental Monitoring x Group x IU ($F$’s (1, 94) = 1.40, 3.12, .79, 1.73, $p$’s = .24, .08, .38, and .19, respectively).
To explore differences in parental monitoring, mean scores revealed that YAs perceived to be monitored more by their mothers than their fathers ($M$s = 3.21, 2.40, $SD$s = 1.11, .88, respectively). Furthermore, YAs who were addicted to the internet had higher perceptions of parental monitoring than those who were not addicted ($M$'s = 3.18, 2.62, $SD$'s = .74, .92, respectively).

**Research Question 4: Levels of Conflict**

When viewing how many participants in each group had conflicts with their mothers and fathers a frequency revealed that 31 and 25 participants in Group 1 had conflicts with their mother and fathers, respectively. Whereas 55 and 56 participants in Group 2 had conflicts with their mothers and fathers, respectively. When assessing conflict intensity, both groups had more intense discussions with mothers than they did with fathers (Group 1: $M$'s = 3.49, 1.61, $SD$'s = 3.02, 2.72, respectively; Group 2: $M$’s = 2.98, .1.00, $SD$’s = 2.18, 1.22, respectively).

To explore parent-YA conflict intensity, a 2 (Group) x 2 (IU) x 2 (Parental conflict: mother, father) x Conflict repeated measures ANOVA, with intensity of conflict treated as the repeated measures, was conducted. The analyses revealed a significant main effect for Parental Conflict, $F$(1, 61) = 61.72, $p$ = <.001, and an interaction effect for Group x IU, $F$(1, 61) = 4.12, $p$ < .05, but not for IU or Group, $F$’s (1, 61) = .56, 3.81, $p$’s = .46, .06, respectively. There were no significant interaction effects for Parental Conflict x IU, Parental Conflict x Group, or Parental Conflict x IU x Group ($F$’s (1, 61) = 3.50, 0, .02, $p$’s = .07, .99, and .89, respectively). Specifically, regardless of age or Internet use, YAs perceived that they experienced more intense discussions with their mothers than with their fathers. Also, younger YA’s who were addicted to the Internet perceived higher levels of conflict with their parents than those who were not addicted in Group 1 ($M$ =3.98, 1.59, $SD$ = 3.41, 1.50, respectively). When viewing levels of
conflict among addicted participants, it was revealed that those in Group 1 had higher levels of perceived conflict with parents than those who were addicted to the Internet from Group 2 ($M = 3.91, 1.83$, $SD = 3.41, 1.46$, respectively).

**Discussion**

The present study extends the current understanding of problematic Internet use (PIU) rates among female young adults (YAs) (i.e., late adolescents and young adults) in a Canadian University setting. YAs’ levels of PIU were explored to determine how Internet use may impact their perceived relationships with their mothers and fathers. Specifically, the YAs’ perceptions of how they communicate with their parents, their parental monitoring, and the intensity of their discussions/conflicts provided greater insights into the complexities of their Internet use and social interactions with their parents.

I first discuss the association between PIU and parental monitoring, parental communication, and parent-YA conflict. Next, I examine the different prevention methods that can be used in both household and educational institutions to help reduce levels of PIU. Third, clinical methods of treatment is discussed, including Cognitive Behavioral Therapy (CBT) and Family-Based Interventions (FBI), as well as how these treatment options can be used by both individuals and families to help reduce Internet overuse/abuse. Finally, both the limitations and strengths of the present study are highlighted to inform future researchers in this field.

**Problematic Internet Use**

Results from the current study revealed that approximately one in four participants engaged in PIU, but no age differences were found. The findings from this study are similar with many others that have used the same scale (Young’s Diagnostic Questionnaire). For example, Cha and Seo (2018) found that approximately 30% of participants in their study were included in
the ‘at risk’ group for smartphone addiction. Similarly, up to 37% of adolescents in a European study had Internet addiction problems (Durkee et al., 2012), as well as approximately 18% of adolescents in Spain were considered as intensive Internet users (Gomez et al., 2017). These consistent findings indicate that overuse or addiction to the Internet is a great concern and needs further attention from researchers to help guide clinicians to identify and treat individuals.

In contrast, there are other studies that have found contrary findings. For example, Tejeiro et al. (2002) found that PIU rates in Spain ranged anywhere from .5% - 9.9%. One of the discrepancies among findings may be the time of when the data was collected (e.g., Tejeiro et al., 2002). Especially in recent years, technology and social media have significantly become much more pervasive and integrated in everyday personal and academic lives (e.g., Facebook, twitter, online academic group projects), although other studies in Europe have found rates of PIU to be between 1%-9% (for review Spada, 2014). Unfortunately, the research is limited and thus, the prevalence of PUI needs further attention.

Given these diverse findings, it can be understood that this is not a clearly defined problem, which may be due to a lack of a universal definition or due to the way that PIU is being measured by researchers. Despite these inconsistencies when discussing PIU, it is important to recognize that this problem is largely impacting the younger individuals in society. Thus, there is a need to implement culturally and developmentally relevant prevention and reduction strategies to combat this problem.

**Parental Roles and Internet Use**

**Monitoring**

When assessing parental monitoring, results indicated that mothers and fathers monitored their youths differently. In the current study, YAs perceived to be monitored more by their
mothers than they did by their fathers. This is consistent with previous research revealing that in various sociocultural contexts such as China, the United States and Europe, as mothers were shown to be the primary monitoring figure in the household (Ahmad et al., 2015; Lim & Soon, 2010; Wertz et al., 2016). While mothers were perceived to engage in more monitoring behaviours, fathers also were seen to participate in this parental role. However, no studies have explored the individual contributions of mother’s and father’s monitoring to children’s and youths’ Internet use. Despite these findings, it is important to continue to distinguish between the roles of mothers and fathers, as each parent does occupy different roles, and both parents impact the child in different ways (Lamb, 2010).

The current study also revealed that YAs who were problematic Internet users had higher perceptions of parental monitoring than those without Internet problems. This is unexpected given that researchers have discussed the importance of parental monitoring when instilling high levels of self-control, which has been shown to help decrease levels of engagement in risky behaviours and interactions with negative peer groups (Hair et al., 2008, Sieverding et al., 2005). More specifically, researchers reported that higher levels of parental monitoring have been associated with less risky Internet exposure as well as lower levels of Internet addiction (Cho & Cheon, 2005; Lin et al., 2009). Although the effectiveness of parental monitoring is developmentally dependent and better for younger children, which is aligned with Hirschi’s Self-Control Theory (Gottfredson & Hirschi, 1990), stating that self-control is established by the age of eight through effective parental monitoring, the current findings may partially support this notion. Higher perceived levels of monitoring were among YAs with PIU which may reflect the parents’ ineffective methods of “curbing” Internet use. However, the higher levels of monitoring among PUI YAs may be in reaction to their sensitivity and perception that they are being highly
monitored when, there may not be as compared to YAs who are non-PIU. Further studies on monitoring with parents’ perceptions as well may lead to greater understanding on the dynamics of monitoring and its bidirectionality of this parenting practice.

This may also signify the importance of attachment theory and having a healthy parent-child relationship at a young age, as the attachment style becomes internalized by children and influences the relationship quality experiences later in life. Thus, it may be that parental monitoring is more effective during childhood or early adolescence, whereas parental-YA communication may be more effective during late adolescence and emerging adulthood. However, this finding may stem from the notion that YAs who are problematic Internet users feel that they are being monitored more by their parents because there is evidence that a problem may exist. Given the inconsistency in findings, it could be that monitoring may not have as significant of an impact on PIU as previous research may have suggested, and perhaps more attention should focus on other constructs, such as parent-YA communication and levels of parent-YA conflict. Nonetheless, future researchers must continue to assess how parental monitoring (i.e., from both mothers and fathers) may impact levels of PIU among YAs, as previous research has found monitoring to be an important construct for healthy youth development.

**Levels of Communication**

When assessing YAs’ perception on parent-YA communication, the current study revealed YAs had higher levels of perceived communication with mothers than did fathers. This aligns with previous research which revealed that adolescents had a higher level of communication with their mothers than they did with their fathers (Bakir et al., 2006). It is important for parent along with those in the family setting to understand that healthy parent-YA
communication is not only important during childhood, as YAs may be going through difficult times, and the support of parents may help deter them from risky behaviours.

Given the importance of healthy parent-YA communication, it was unanticipated that there were no significant findings when assessing the relationship between PIU and parent-YA communication. Previous research has found that parental communication has a large impact on reducing levels of risky behaviour and has been shown to be particularly important during the period of adolescence (Haraken et al., 2005). It may be the case that parent-YA communication may not have had an impact on levels of PIU due to the shifting nature of the relationship, which occurs when youth transition from high school to post-secondary school. It could be that parents are giving their youth increased autonomy because they are trusting that they will make good decisions or come to them for advice if they need during their next stages in life.

Given the non-significant findings between parent-YA communication and levels of PIU among YAs, it may be that communication is a more important component of development as children enter late adolescence and emerging adulthood. This can be shown as those in the addicted category had higher perceptions of parental monitoring, meaning that at this developmental stage, parental communication me be more effective than parental monitoring. Although these two parenting constructs are linked, it may be that monitoring is more effective during early adolescence and communication is more effective in later adolescence. Regardless, parent-YA communication is an important construct for future researchers to pay attention to, as monitoring and communication have been found to be related to one another (Low et al., 2012).

**Parent-Young Adult Conflicts**

When viewing parent-YA conflict, the current study revealed that YAs in Group 1 (first and second-year students), had higher levels of perceived conflict with their parents than those in
Group 2 (third year and higher). Furthermore, those who were addicted to the Internet had more intense conflicts with their parents than those who did not abuse the Internet. Given that majority of participants included in this study were traditional students (i.e., they went directly from high school to University), it was assumed that most individuals in Group 1 were younger than those in Group 2. Thus, this finding aligns with previous research indicating that during late adolescence, there are usually heightened levels of conflict with parents. This is because adolescents are experiencing both physical and mental change, greater need for autonomy, and both parents and adolescents need to learn how to adapt to each other’s needs (Laursen, 1995; Moed et al., 2015). This is also consistent with previous findings showing that adolescents who perceived to have more intense conflicts with their parents were more likely to engage in risky behaviours such as substance abuse and other behavior problems including PIU (Yen et al., 2009). Moreover, poor family function was correlated with Internet addiction among adolescents (Ko et al., 2005). Thus, this finding is consistent with previous research, as late adolescents are more likely than emerging adults to have conflicts with both mothers and fathers.

Despite existing literature that has assessed the dynamics of parent-adolescent conflict, there is limited research on father-adolescent conflicts, and how these relations may impact adolescents’ mental health. However, some scholars have found that high levels of father-adolescent conflict led to poorer mental health conditions for adolescents (Littleat al., 2019). In another study, Cole and McPherson (1993) found that when controlling for both mothers and fathers, conflict between the father-adolescent dyad was found to be a greater indicator of depressive symptoms among adolescents than conflicts with mothers. This shows the importance of assessing both mothers and fathers when exploring parent-YA relationships, as both parents utilize different roles, which impacts the overall development of a child.
When reviewing how conflict is measured, it is important to discuss the language used throughout the Issue Checklist scale (Robin et al., 1975). This scale was designed to measure conflict rates among adolescents and mothers/fathers as well as the intensity of these conflicts. When assessing the terminology used in the scale, it appears that the scale may be measuring rates of discussions rather than rates of conflict. For example, questions in the scale were phrased, “Have you discussed telephone calls with your mother?” Thus, the word “conflict” had never been mentioned in the measure but rather, “discussions.” Researchers need to be mindful of the assumptions of the meaning of “intense discussions” as this may not culturally reflect all YAs’ interactions with their parents. For some YAs, having intense or loud discussions may not be interpreted as “having conflicts” but rather, being highly engaged and passionate about the topic at hand. Thus, future studies which assess parent-YA conflict should ensure that they are using a scale which is explicitly measuring conflict between the dyad, or researchers using this scale could consider changing the wording in the questions to better capture for conflict rather than discussions.

Prevention Methods

Recognizing PIU

When assessing Young’s (1996) definition of PIU, which consisted of “psychological, social, school, or work difficulties in individuals’ lives,” it was clear that PIU can have a negative impact on individuals’ quality of life. One issue regarding PIU among YAs is the initial identification of a problem, as this is the most important step before treatment can begin. There may be YAs who are not willing to admit that they have an addiction problem. However, and perhaps more likely, YAs may not even recognize the issue, not being fully educated on the signs of addiction. This overuse/abuse of the Internet may likely hinder their daily lives. To help
reduce the levels of PIU among YAs, education programs must be implemented to make this growing problem more aware. Entering households to try and identify families that may be prone to PIU and to further educate them about prevention methods may be one of the most effective ways of doing this.

**Education in the Household**

One useful way of identifying PIU among YAs would be to explore the home environment. When parents monitor their children’s Internet activities in the home, they often ensure that they are engaging in constructive activities, such as assessing information for school or communicating with peers (Mei et al., 2016). However, when assessing older adolescents, it is important for parents to use effective monitoring techniques or negative consequences may arise. The current study found that levels of YA Internet use increased when there were higher levels of parental monitoring. Many parents view effective monitoring to be in the form of restricting media and having direct control of their youths’ Internet use (Wohlman, 2012), which may not always be the case. Perhaps parents may need to shift their monitoring practices from controlling to having more open levels of communication when they are dealing with older adolescents.

An additional prevention method involving family therapy would be to focus on families that may experience high levels of conflicts in their immediate family-setting (Tukawskiet al., 2019). When adverse family conditions exist (e.g., disrupted marriages, substance abuse, psychical or verbal abuse etc.) within a family, there are more likely lower levels of both parental monitoring and communication as well as higher levels of parent-youth conflict (Yen et al., 2009). This often results in youth engaging in higher amounts of risky behaviours, which may include PIU. This relates to one of the fundamental components of Social Bond Theory, which is attachment. One of the main premises of this theory is that by developing strong bonds to
positive individuals and conventional activities in society, individuals will be more inclined to engage in proactive behaviours throughout their lives. Thus, if parents can better understand the importance of building both strong positive relationships with their young at a young age and ensuring their children are engaged in positive components of society then there are reduced chances they will engage in risky behaviours such as PIU.

Another prevention method that could be used to prevent PIU among YAs could be to implement parenting workshops to better inform parents about the ways to improve their levels of monitoring and communication in the household. This extends on previous findings that parent-YA communication is fundamental, as it relates to reducing levels of PIU among YAs. Research conducted in Turkey revealed that mothers with lower income and less education had lower perceptions about the risks of addiction in comparison to mothers with higher income and more education (Atabek et al., 2020). This indicates that it may be beneficial to implement education programs in lower Socioeconomic status neighbourhoods, as these individuals may have more to learn than those in more fortunate locations. Thus, it is necessary to target problems that stem from inside the family-setting to help prevent YA from engaging in certain behaviours such as PIU (Spada, 2014). In addition to household prevention methods, it would also be useful for individuals to target educational institutions to assess for PIU information.

**Education Through Schools**

When attempting to reduce levels of PIU among YAs, it may be beneficial to implement self-report questionnaires in educational institutions asking YAs about their ongoing Internet usage. Acquiring information about Internet use to help better identify individuals prone to PIU could be a very important first step in reducing the problem. It may also be beneficial to use educational awareness videos in high schools and University settings so that YAs are able to
better understand the severity of this problem at an age when the problem is most prone. In addition, PIU workbooks may also be provided during these sessions which may help some adolescents track their Internet use, better understand their emotional states when using and not using the Internet, and how Internet use may positively or negatively impact their everyday activities and social relationships. This would likely encourage individuals who recognize that there is an issue at hand to explore additional resources. For example, the National Institute on Alcohol Abuse and Alcoholism (2005) recommended that in order to help reduce levels of alcohol abuse in universities and colleges, students should participate in one-hour intervention programs involving lectures held by trained professionals.

Educating youth about the severity of PIU has been found to be one of the most efficient ways of preventing this problem (Turel et al., 2015). For example, psycho-educational intervention programs could be implemented in schools to assist youth suffering from or at-risk of PIU. At the very least, programs of this nature will help to more accurately identify individuals who may need assistance so that they can be further contacted for support. For example, The Psychological Intervention Program-Internet Use for Youth (i.e., PIP-IU-Y) was implemented in four secondary schools, making use of 45 Malaysian Participants. This program combined positive psychology theory and CBT, and was designed to improve participants’ face-to-face interactions, with the goal of reducing levels of harmful behaviour (Ke & Wong, 2018). Thus, implementing more programs with these structures in our schools will provide children and youth with greater understanding of their Internet use.

The increasing problem of PIU may be due to the Internet being capable of providing temporary relief from psychological problems in the real world (Mei et al., 2016). To combat PIU, intermediate prevention programs have been considered most effective when dealing with
different types of ICD, such as gambling and kleptomania (Binde, 2016). These prevention programs are aimed at individuals who are high-risk, but not yet showing indication of problematic behaviour. For example, Goldston and colleagues (2008) found when dealing with problematic gambling, it was best to solve the problem at a young age to reduce the likelihood of carryover into adulthood. Given the similarities between problematic gambling and PIU, these issues should be dealt with similarly at an early stage, as this addiction can escalate and become more difficult to deal with overtime.

**Long-Term Assessment Programs**

Unfortunately, many prevention strategies used to combat ICDs lack long-term systematic evaluation of their effectiveness, making it difficult to determine if they are successful (Faregh & Derevensky, 2012). Self-regulation is important when attempting to deal with PIU, but when this fails there are some programs that can be used (Breslau et al., 2015). For example, to deal with PIU, Air Force was making use of treatment options that have had success for dealing with depression, anxiety, and other substance abuse problems. Regardless, this is an important step as many of these issues have an early onset, making prevention a key factor in reducing these problems.

**Clinical Treatment Methods**

One of the most recognizable treatments currently used for PIU is CBT, which is when the belief system of an individual is systematically changed and/or transformed using instructive videos or similar tools (i.e., workbooks or online exercises) (King et al., 2012; Tukawskiet al., 2019). These different tools can be used help to inform individuals about the various symptoms and risks often associated with the given habit or addiction. This can help influence the individual to then actively decrease the given problematic behaviour(s) (Matsumoto et al., 2006).
Young (2007) conducted a study with adults who received CBT, and by the eighth session of the study, most of the adults exhibited vast improvement in controlling their given symptoms. This improvement continued according to the six-month check-up period.

Family-based interventions are another method of treatment often used to help reduce PIU. This type of therapy may be more beneficial than regular group therapy, as both the adolescent and the parent(s) or other individuals in the household are offered the advantages of working in a group. This is beneficial as it helps to show everyone involved the full extent of the problem and permits each person to view the perspectives of others within the family (Zhong et al., 2011). These programs often inspire the individual who is prone to or suffering from the ICD to seek further forms of treatment (i.e., different forms of self-help or medication) (Wagener & Thomas, 2019). These programs are also designed to increase levels of parent-YA communication, and to educate parents on better monitoring techniques so that they are better able to fulfill their roles (Intrivia et al., 2012). These programs are also aimed at helping YAs become more aware of the time they are designating towards unproductive or harmful activities on the Internet.

Limitations and Strengths of the Study

Although the present study contributes to the existing literature on PIU among YAs, there are certain limitations that must be recognized. The limitations of this study include: (a) the small sample size, which does not permit generalizable results; (b) length of survey; and (c) data validity issues as questionnaires were completed using self-report surveys from YAs.

Sample

The participants in the study were recruited primarily from the University of Guelph, along with some other parts of the GTA, including Scarborough, Vaughn, Mississauga, and
Brampton. Given that participants were located within the GTA, the findings are limited, and cannot be generalized to other YAs who reside in different parts of Canada. Also, participant recruitment was conducted via email by accessing students’ University of Guelph email address, which was attained from various Professors from the University. The classes used to recruit participants were all a part of the Family Relations and Applied Nutrition department, which may have skewed the findings as many of the students in the program may have shared similar interests to one another (e.g., academic aspirations, peer groups, career goals etc.). Thus, the results from this study were not generalizable to all female YAs in Canada, as the sample was primarily gathered from Guelph. For future studies, a larger, and more varied sample size should be gathered (e.g., females from various provinces, educational backgrounds, careers, ethnic status etc.) to help better represent females in Canada.

**Scales**

Another limitation in the current study was that the YDQ only had an alpha value of .56 and .57 for the two different age groups. This is problematic, as a scale with a good level of reliability should have a minimum alpha value of .60. Thus, according to statistical guidelines the YDQ may not be a good measure of Internet addiction (Tavakol & Dennick, 2011). Moreover, the YDQ was structured so that participants were either categorized as addicted or regular Internet users, reducing the potential nuances of those how may be over-using the Internet, verging on being addicted. Thus, a more varied scaling system could be developed to better capture Internet use.

Additionally, there was an issue with the issue checklist (IC) scale used to measure both the frequency and intensity of conflicts that may have occurred between the parent-YA dyads. Specifically, the wording used in the IC indicated that both the frequency and intensity of
conflicts within the dyad will be measured, however the items are phrased to measure frequency and intense of discussions between the dyad. For example, one question asked, “Have you discussed telephone calls with your mother/father?”. If participants answer “yes”, this does not indicate that there is a conflict between the dyad, whereas there may just be a discussion regarding that specific topic. Therefore, the choice of wording used to measure conflict in future scales must be assessed to ensure that levels of conflict are being measured.

Length of Survey

A further limitation of this study was the length of the study. The survey was long as it aimed to assess multiple constructs (i.e., communication, monitoring, and conflict) for both mother and fathers, which meant that participants had to answer questions for each of the parenting construct twice. Furthermore, upon examining the data, it was noticed that certain scores for fathers were lower than mothers, which may have been due to some participants not filling out the correct information once they were required to answer the questions a second time for fathers.

Data Validity

The last issue was that the study used self-report data. When using self-reporting data, there is always the concern of social desirability, especially when asking difficult questions. Also, since the survey took place online, any individual could have completed the survey multiple times. Attempting to prevent issues of the nature, the data was screened to remove any outliers, ensuring that participants provided meaningful data.

Conclusions and Future Directions

A growing number of studies have examined the relationship between Internet addiction among adolescents and parent-YA relations (Borca et al., 2015; Chittaro & Valnello, 2013;
These studies have provided great insight about the seriousness of Internet addiction among youth. However, there were various limitations of past research which the current study attempted to address.

The current study exhibited uniqueness due to its use of theory from various academic domains, including perspectives from sociology and developmental psychology. This was beneficial as it integrated the use of multiple perspectives while examining the problem, whereas many studies often make use of a single theory, using a single perspective. For example, the developmental perspective is primarily concerned with the individual and the changes that a person endures as they progress through adolescence and into a YA (DePoy & Gilson, 2011). This is in contrast with the sociological perspective, which is more concerned with how the individuals’ surroundings (i.e., their educational institution, peer groups, and family structure) influence their everyday decision making (Turner, 2012). These different theoretical perspectives appeared to complement one another, as much of the IA literature relating to these two theories supported one another.

Furthermore, this study was distinct from other IA research as it provided specific insight about the relationship between various parenting practices and IA among YAs. More specifically, this study used three different well-known scales that were able to measure important parenting practices associated with IA among youth (including parental monitoring, parent-YA communication, and parent-YA conflict). This allowed for a more meaningful understanding of how PIU impacted certain parenting practices. Second, this study included both mothers and fathers, whereas most previous IA studies have either focused on one parent, or they have collapsed maternal and paternal data into a single category (Deatherage et al., 2014; Griffiths et al., 2000; Tejeiro, 2002; Borca et al., 2015). Questioning participants about both
mothers and fathers provided a better indication of how each parent fulfilled their different roles, as well as how these parenting roles were interpreted from the perspective of the YA. Despite the growing amount of research surrounding PIU, it is evident that there is still much to be done to help reduce this growing addiction to the Internet.
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Table 1

*Mean Scores and Standard Deviation for Female University Students’ Perceived Views about their Parents’ Levels of Communication, Monitoring and Conflict Intensity by Age Group and Internet Use*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Age Group 1</th>
<th>Age Group 2</th>
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<tbody>
<tr>
<td></td>
<td>Addicted Non-Addicted</td>
<td>Addicted Non-Addicted</td>
</tr>
<tr>
<td></td>
<td>Mean (SD)</td>
<td>Mean (SD)</td>
</tr>
<tr>
<td>Mother communication</td>
<td>3.35 (.32)</td>
<td>3.33 (.37)</td>
</tr>
<tr>
<td>Father communication</td>
<td>3.16 (.30)</td>
<td>3.26 (.86)</td>
</tr>
<tr>
<td>Mother monitoring</td>
<td>2.19 (1.01)</td>
<td>2.55 (.81)</td>
</tr>
<tr>
<td>Father monitoring</td>
<td>2.80 (1.20)</td>
<td>3.90 (.75)</td>
</tr>
<tr>
<td>Mother conflict</td>
<td>4.93 (3.61)</td>
<td>2.52 (2.16)</td>
</tr>
<tr>
<td>Father conflict</td>
<td>3.03 (3.70)</td>
<td>.66 (1.16)</td>
</tr>
</tbody>
</table>

*Note.* Means and standard deviations are untransformed scores.
Appendix A

Research Ethics Board Certificate

<table>
<thead>
<tr>
<th>UNIVERSITY OF GUELPH</th>
<th>RESEARCH ETHICS BOARDS</th>
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<tr>
<td>Certification of Ethical Acceptability of Research Involving Human Participants</td>
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| APPROVAL PERIOD: | November 6, 2017 |
| EXPIRY DATE: | November 5, 2018 |
| REB: | G |
| REB NUMBER: | 17-09-006 |
| TYPE OF REVIEW: | Delegated |
| PRINCIPAL INVESTIGATOR: | Chuang, Susan (schuang@uoguelph.ca) |
| DEPARTMENT: | Family Relations & Applied Nutrition |
| SPONSOR(S): | N/A |
| TITLE OF PROJECT: | The Lives of Emerging Adults and Family Relationships |

The members of the University of Guelph Research Ethics Board have examined the protocol which describes the participation of the human participants in the above-named research project and considers the procedures, as described by the applicant, to conform to the University’s ethical standards and the Tri-Council Policy Statement, 2nd Edition.

The REB requires that researchers:
- Adhere to the protocol as last reviewed and approved by the REB.
- Receive approval from the REB for any modifications before they can be implemented.
- Report any change in the source of funding.
- Report unexpected events or incidental findings to the REB as soon as possible with an indication of how these events affect, in the view of the Principal Investigator, the safety of the participants, and the continuation of the protocol.
- Are responsible for ascertaining and complying with all applicable legal and regulatory requirements with respect to consent and the protection of privacy of participants in the jurisdiction of the research project.

The Principal Investigator must:
- Ensure that the ethical guidelines and approvals of facilities or institutions involved in the research are obtained and filed with the REB prior to the initiation of any research protocols.
- Submit an Annual Renewal to the REB upon completion of the project. If the research is a multi-year project, a status report must be submitted annually prior to the expiry date. Failure to submit an annual status report will lead to your study being suspended and potentially terminated.

The approval for this protocol terminates on the EXPIRY DATE, or the term of your appointment or employment at the University of Guelph whichever comes first.

Signature: [Signature]
Date: November 6, 2017

Stephen P. Lewis
Chair, Research Ethics Board-General
Appendix B

Consent Form

CONSENT TO PARTICIPATE IN RESEARCH

My Life, My Environment, and the Internet

You are being invited to take part in a research study conducted by Dr. Susan Chuang and Thomas Esufali from the Department of Family Relations and Applied Nutrition at the University of Guelph. This research will contribute to a final thesis project.

If you have any question or concerns about the research, please feel free to contact Thomas Esufali at 1 (519) 829 0695 or tesufali@uoguelph.ca or Susan Chuang at (519) 824 4129 ext. 58389 or schuang@uoguelph.ca.

PURPOSE OF THE STUDY

This study is designed to assess how Internet use among young adults (i.e., both adolescents and emerging adults) may be influenced by parenting practices (e.g., communication, monitoring etc.) as well as young adults’ perceptions of their own social isolation.

PROCEDURES

If you volunteer to participate in this study, we would ask you to do the following:

Read over this consent form. By beginning the survey, you are providing assumed consent. This survey can be completed anywhere with Internet access, as it is conducted through Qualtrics. The survey will take approximately 30 to 45 minutes to complete.

POTENTIAL RISKS AND DISCOMFORT

A potential psychological risk to participants in the study would be gaining a greater understanding of their own Internet usage problems. This may be discomforting, due to the realization of a problem. This risk or discomfort will be managed by providing participants with a list of various resources at the end of the survey (i.e., both locally and online).

Also, participants should never be required to divulge information. They always have a choice as to whether or not they will answer the questions.
POTENTIAL BENEFITS TO PARTICIPANTS AND/OR SOCIETY

There will be no direct benefits for participants.

PAYMENT FOR PARTICIPATION

Participants in the study will be randomly selected to win one of four $50 cash awards. In order to be entered in the draw, participants must click the link at the end of the survey, which will direct them to a separate Qualtrics survey. If interested, they can enter their first name and email address. This separate link will ensure anonymity. Winners will be required to send an email to Thomas Esufali once you have received the $50 compensation for participation.

CONFIDENTIALITY

Please note that confidentiality cannot be guaranteed while data are in transit over the internet.

PARTICIPATION AND WITHDRAWAL

There will be no way of removing or withdrawing your information from the study once the survey has been completed as the survey due to anonymity. You may refuse to answer any questions you do not want to answer and still remain in the study by skipping over the question(s). This can be done by leaving the response list blank.

RIGHTS OF RESEARCH PARTICIPANTS

You may withdraw your consent at any time during the survey by discontinuing your participation and not submitting your responses. There will be no penalty in doing so. You do not waive any legal rights by agreeing to take part in this study. This project has been reviewed by the Research Ethics Board for compliance with federal guidelines for research involving human participants. If you have questions regarding your rights and welfare as a research participant in this study (REB# 17-11-011), please contact: Director, Research Ethics; University of Guelph; reb@uoguelph.ca; (519) 824 4120 (ext. 56606).

SIGNATURE OF RESEARCH PARTICIPANT/LEGAL REPRESENTATIVE

I have read the information provided for the study “My Life, My Environment, and the Internet” as described herein. My questions have been answered to my satisfaction, and I agree to participate in this study.
Q1
CONSENT TO PARTICIPATE IN RESEARCH

My Life, My Environment, and the Internet

You are being invited to take part in a research study conducted by Dr. Susan Chuang and Thomas Esufali from the Department of Family Relations and Applied Nutrition at the University of Guelph. This research will contribute to a final thesis project. If you have any question or concerns about the research, please feel free to contact Thomas Esufali at 1 (519) 829 0695 or tesufali@uoguelph.ca or Susan Chuang at (519) 824 4129 ext. 58389 or schuang@uoguelph.ca.

PURPOSE OF THE STUDY

This study is designed to assess how Internet use among young adults (i.e., both adolescents and emerging adults) may be influenced by parenting practices (e.g., communication, monitoring etc.) as well as young adults’ perceptions of their own social isolation.

PROCEDURES

If you volunteer to participate in this study, we would ask you to do the following: Read over this consent form. By beginning the survey, you are providing assumed consent. This survey can be completed anywhere with Internet access, as it is conducted through Qualtrics. The survey will take approximately 30 to 45 minutes to complete.

POTENTIAL RISKS AND DISCOMFORT

A potential psychological risk to participants in the study would be gaining a greater understanding of their own Internet usage problems. This may be discomforting, due to the realization of a problem. This risk or discomfort will be managed by providing participants with a list of various resources at the end of the survey (i.e., both locally and online). Also,
participants should never be required to divulge information. They always have a choice as to whether or not they will answer the questions.

POTENTIAL BENEFITS TO PARTICIPANTS AND/OR SOCIETY

There will be no direct benefits for participants.

PAYMENT FOR PARTICIPATION

Participants in the study will be randomly selected to win one of four $50 cash awards. In order to be entered in the draw, participants must click the link at the end of the survey, which will direct them to a separate Qualtrics survey. If interested, they can enter their first name and email address. This separate link will ensure anonymity. Winners will be required to send an email to Thomas Esufali once you have received the $50 compensation for participation.

CONFIDENTIALITY

Please note that confidentiality cannot be guaranteed while data are in transit over the internet.

PARTICIPATION AND WITHDRAWL

There will be no way of removing or withdrawing your information from the study once the survey has been completed as the survey due to anonymity. You may refuse to answer any questions you do not want to answer and still remain in the study by skipping over the question(s). This can be done by leaving the response list blank.

RIGHTS OF RESEARCH PARTICIPANTS

You may withdraw your consent at any time during the survey by discontinuing your participation and not submitting your responses. There will be no penalty in doing so. You do not waive any legal rights by agreeing to take part in this study. This project has been reviewed by the Research Ethics Board for compliance with federal guidelines for research involving human participants. If you have questions regarding your rights and welfare as a research participant in this study (REB# 17-11-011), please contact: Director, Research Ethics; University of Guelph; reb@uoguelph.ca; (519) 824 4120 (ext. 56606).

SIGNATURE OF RESEARCH PARTICIPANT/LEGAL REPRESENTATIVE

I have read the information provided for the study “My Life, My Environment, and the Internet” as described herein. My questions have been answered to my satisfaction, and I agree to participate in this study.

☐ I give my consent to participate (1)

☐ I do not give my consent to participate (2)
Q2 What year were you born?
- 1992 (1)
- 1993 (2)
- 1994 (3)
- 1995 (4)
- 1996 (5)
- 1997 (6)
- 1998 (7)
- 1999 (8)
- 2000 (9)
- 2001 (10)
- 2002 (11)
- Other (12)

Q3 What is your current living arrangement?
- I live with my parents (either full time or part time) (1)
- Other (2)

Q4 State your gender.
- Male (1)
- Female (2)
- Self-identify (3)

Q5 Please specify.
Q6 What is your current educational status?
- < Grade 9 (1)
- Grade 9 - 10 (2)
- Grade 11-12 (or extra year) (3)
- College (1st or 2nd year) (4)
- College (3rd year or more) (5)
- University (1st or 2nd year) (6)
- University (3rd or 4th year or more) (7)
- Currently not in school (8)

Q7 Are you currently employed?
- Yes (1)
- No (2)

Q8 Do you currently volunteer?
- Yes (1)
- No (2)

Q9 Do you currently live with your biological or social mother?
- Biological mother (1)
- Social mother (e.g., step-mother, female guardian) (2)

Q10 Do you currently live with your biological or social father?
- Biological father (1)
- Social father (e.g., step-father, male guardian) (2)
Start of Block: RQ #2 a: Young's Diagnostic Questionnaire (YDQ) (Young, 1998)

Q11 Do you feel preoccupied with the Internet (i.e., think about previous online activity or anticipate your next online session)?
   - Yes (1)
   - No (2)

Q12 Do you feel the need to use the Internet for increasing amounts of time in order to achieve satisfaction?
   - Yes (1)
   - No (2)

Q13 Have you repeatedly made unsuccessful efforts to control, cut back, or stop your Internet use?
   - Yes (1)
   - No (2)

Q14 Do you feel restless, moody, depressed, or irritable when attempting to cut down or stop using the Internet?
   - Yes (1)
   - No (2)

Q15 Do you stay online longer than initially intended?
   - Yes (1)
   - No (2)
Q16 Have you jeopardized or risked the loss of a significant relationship, job, an educational opportunity, or a career opportunity because of the Internet?
   ○ Yes (1)
   ○ No (2)

Q17 Have you lied to family members, therapists, or others to conceal the extent of your involvement with the Internet?
   ○ Yes (1)
   ○ No (2)

Q18 Do you use the Internet as a way of escaping from problems or to relieve a dysphoric mood (e.g., feelings of helplessness, guilt, anxiety, depression etc.)?
   ○ Yes (1)
   ○ No (2)

Start of Block: RQ # 4: Parent Adolescent Communication Scale (Mother) (Barnes & Olson, 1985)

Q19 I can discuss my beliefs with my mother without feeling restrained or embarrassed.
   ○ Strongly disagree (1)
   ○ Moderately disagree (2)
   ○ Neither agree nor disagree (3)
   ○ Moderately agree (4)
   ○ Strongly agree (5)
   ○ N/A (6)
Q20 Sometimes I have trouble believing everything my mother tells me.

- Strongly disagree (1)
- Moderately disagree (2)
- Neither agree nor disagree (3)
- Moderately agree (4)
- Strongly agree (5)
- N/A (6)

Q21 My mother is always a good listener.

- Strongly disagree (1)
- Moderately disagree (2)
- Neither agree nor disagree (3)
- Moderately agree (4)
- Strongly agree (5)
- N/A (6)

Q22 I am sometimes afraid to ask my mother for what I want.

- Strongly disagree (1)
- Moderately disagree (2)
- Neither agree nor disagree (3)
- Moderately agree (4)
- Strongly agree (5)
- N/A (6)
Q23 My mother has a tendency to say things to me which would be better left unsaid.
   ○ Strongly disagree (1)
   ○ Moderately disagree (2)
   ○ Neither agree nor disagree (3)
   ○ Moderately agree (4)
   ○ Strongly agree (5)
   ○ N/A (6)

Q24 My mother can tell how I am feeling without asking.
   ○ Strongly disagree (1)
   ○ Moderately disagree (2)
   ○ Neither agree nor disagree (3)
   ○ Moderately agree (4)
   ○ Strongly agree (5)
   ○ N/A (6)

Q25 I am very satisfied with how my mother and I talk together.
   ○ Strongly disagree (1)
   ○ Moderately disagree (2)
   ○ Neither agree nor disagree (3)
   ○ Moderately agree (4)
   ○ Strongly agree (5)
   ○ N/A (6)
Q26 If I were in trouble, I could tell my mother.
- Strongly disagree (1)
- Moderately disagree (2)
- Neither agree nor disagree (3)
- Moderately agree (4)
- Strongly agree (5)
- N/A (6)

Q27 I openly show affection to my mother.
- Strongly disagree (1)
- Moderately disagree (2)
- Neither agree nor disagree (3)
- Moderately agree (4)
- Strongly agree (5)
- N/A (6)

Q28 When we are having a problem, I often give my mother the silent treatment.
- Strongly disagree (1)
- Moderately disagree (2)
- Neither agree nor disagree (3)
- Moderately agree (4)
- Strongly agree (5)
- N/A (6)
Q29 I am careful about what I say to my mother.
- Strongly disagree (1)
- Moderately disagree (2)
- Neither agree nor disagree (3)
- Moderately agree (4)
- Strongly agree (5)
- N/A (6)

Q30 When talking to my mother, I have a tendency to say things that would be better left unsaid.
- Strongly disagree (1)
- Moderately disagree (2)
- Neither agree nor disagree (3)
- Moderately agree (4)
- Strongly agree (5)
- N/A (6)

Q31 When I ask questions, I get honest answers from my mother.
- Strongly disagree (1)
- Moderately disagree (2)
- Neither agree nor disagree (3)
- Moderately agree (4)
- Strongly agree (5)
- N/A (6)
Q32 My mother tries to understand my point of view.

- Strongly disagree (1)
- Moderately disagree (2)
- Neither agree nor disagree (3)
- Moderately agree (4)
- Strongly agree (5)
- N/A (6)

Q33 There are topics I avoid discussing with my mother.

- Strongly disagree (1)
- Moderately disagree (2)
- Neither agree nor disagree (3)
- Moderately agree (4)
- Strongly agree (5)
- N/A (6)

Q34 I find it easy to discuss problems with my mother.

- Strongly disagree (1)
- Moderately disagree (2)
- Neither agree nor disagree (3)
- Moderately agree (4)
- Strongly agree (5)
- N/A (6)
Q35 It is very easy for me to express all my true feelings to my mother.

- Strongly disagree (1)
- Moderately disagree (2)
- Neither agree nor disagree (3)
- Moderately agree (4)
- Strongly agree (5)
- N/A (6)

Q36 My mother nags/bothers me.

- Strongly disagree (1)
- Moderately disagree (2)
- Neither agree nor disagree (3)
- Moderately agree (4)
- Strongly agree (5)
- N/A (6)

Q37 My mother limits me when she is angry.

- Strongly disagree (1)
- Moderately disagree (2)
- Neither agree nor disagree (3)
- Moderately agree (4)
- Strongly agree (5)
- N/A (6)
Q38 I do not think I can tell my mother how I really feel.

- Strongly disagree (1)
- Moderately disagree (2)
- Neither agree nor disagree (3)
- Moderately agree (4)
- Strongly agree (5)
- N/A (6)

Start of Block: RQ # 4: Parent Adolescent Communication Scale (Father) (Barnes & Olson, 1985)

Q39 I can discuss my beliefs with my father without feeling restrained or embarrassed.

- Strongly disagree (1)
- Moderately disagree (2)
- Neither agree nor disagree (3)
- Moderately agree (4)
- Strongly agree (5)
- N/A (6)

Q40 Sometimes I have trouble believing everything my father tells me.

- Strongly disagree (1)
- Moderately disagree (2)
- Neither agree nor disagree (3)
- Moderately agree (4)
- Strongly agree (5)
- N/A (6)
Q41 My father is always a good listener.
   - Strongly disagree (1)
   - Moderately disagree (2)
   - Neither agree nor disagree (3)
   - Moderately agree (4)
   - Strongly agree (5)
   - N/A (6)

Q42 I am sometimes afraid to ask my father for what I want.
   - Strongly disagree (1)
   - Moderately disagree (2)
   - Neither agree nor disagree (3)
   - Moderately agree (4)
   - Strongly agree (5)
   - N/A (6)

Q43 My father has a tendency to say things to me which would be better left unsaid.
   - Strongly disagree (1)
   - Moderately disagree (2)
   - Neither agree nor disagree (3)
   - Moderately agree (4)
   - Strongly agree (5)
   - N/A (6)
Q44 My father can tell how I am feeling without asking.
   - Strongly disagree (1)
   - Moderately disagree (2)
   - Neither agree nor disagree (3)
   - Moderately agree (4)
   - Strongly agree (5)
   - N/A (6)

Q45 I am very satisfied with how my father and I talk together.
   - Strongly disagree (1)
   - Moderately disagree (2)
   - Neither agree nor disagree (3)
   - Moderately agree (4)
   - Strongly agree (5)
   - N/A (6)

Q46 If I were in trouble, I could tell my father.
   - Strongly disagree (1)
   - Moderately disagree (2)
   - Neither agree nor disagree (3)
   - Moderately agree (4)
   - Strongly agree (5)
   - N/A (6)
Q47 I openly show affection to my father.

- Strongly disagree (1)
- Moderately disagree (2)
- Neither agree nor disagree (3)
- Moderately agree (4)
- Strongly agree (5)
- N/A (6)

Q48 When we are having a problem, I often give my father the silent treatment.

- Strongly disagree (1)
- Moderately disagree (2)
- Neither agree nor disagree (3)
- Moderately agree (4)
- Strongly agree (5)
- N/A (6)

Q49 I am careful about what I say to my father.

- Strongly disagree (1)
- Moderately disagree (2)
- Neither agree nor disagree (3)
- Moderately agree (4)
- Strongly agree (5)
- N/A (6)
Q50 When talking to my father, I have a tendency to say things that would be better left unsaid.

- Strongly disagree (1)
- Moderately disagree (2)
- Neither agree nor disagree (3)
- Moderately agree (4)
- Strongly agree (5)
- N/A (6)

Q51 When I ask questions, I get honest answers from my father.

- Strongly disagree (1)
- Moderately disagree (2)
- Neither agree nor disagree (3)
- Moderately agree (4)
- Strongly agree (5)
- N/A (6)

Q52 My father tries to understand my point of view.

- Strongly disagree (1)
- Moderately disagree (2)
- Neither agree nor disagree (3)
- Moderately agree (4)
- Strongly agree (5)
- N/A (6)
Q53 There are topics I avoid discussing with my father.

- Strongly disagree (1)
- Moderately disagree (2)
- Neither agree nor disagree (3)
- Moderately agree (4)
- Strongly agree (5)
- N/A (6)

Q54 I find it easy to discuss problems with my father.

- Strongly disagree (1)
- Moderately disagree (2)
- Neither agree nor disagree (3)
- Moderately agree (4)
- Strongly agree (5)
- N/A (6)

Q55 It is very easy for me to express all my true feelings to my father.

- Strongly disagree (1)
- Moderately disagree (2)
- Neither agree nor disagree (3)
- Moderately agree (4)
- Strongly agree (5)
- N/A (6)
Q56 My father nags/bothers me.
- Strongly disagree (1)
- Moderately disagree (2)
- Neither agree nor disagree (3)
- Moderately agree (4)
- Strongly agree (5)
- N/A (6)

Q57 My father limits me when he is angry.
- Strongly disagree (1)
- Moderately disagree (2)
- Neither agree nor disagree (3)
- Moderately agree (4)
- Strongly agree (5)
- N/A (6)

Q58 I do not think I can tell my father how I really feel.
- Strongly disagree (1)
- Moderately disagree (2)
- Neither agree nor disagree (3)
- Moderately agree (4)
- Strongly agree (5)
- N/A (6)

Start of Block: RQ # 5: Parental Monitoring Questionnaire (Mothers) (PMQ) (Stattin & Kerr, 2000)
Q59 Does your mother know what you are doing during your free time?
   ○ Yes (1)
   ○ Most of the time (2)
   ○ Half of the time (3)
   ○ Some of the time (4)
   ○ No (5)
   ○ N/A (6)

Q60 Does your mother know whom you have as friends during your free time?
   ○ Yes (1)
   ○ Most of the time (2)
   ○ Half of the time (3)
   ○ Some of the time (4)
   ○ No (5)
   ○ N/A (6)

Q61 Does your mother usually know what type of homework you have?
   ○ Yes (1)
   ○ Most of the time (2)
   ○ Half of the time (3)
   ○ Some of the time (4)
   ○ No (5)
   ○ N/A (6)
Q62 Does your mother know what you spend your money on?

- Yes (1)
- Most of the time (2)
- Half of the time (3)
- Some of the time (4)
- No (5)
- N/A (6)

Q63 Does your mother usually know how you do in different subjects in school?

- Yes (1)
- Most of the time (2)
- Half of the time (3)
- Some of the time (4)
- No (5)
- N/A (6)

Q64 Does your mother usually know when you have a paper or exam due in school?

- Yes (1)
- Most of the time (2)
- Half of the time (3)
- Some of the time (4)
- No (5)
- N/A (6)
Q65 Does your mother know where you go when you are out with friends at night?
- Yes (1)
- Most of the time (2)
- Half of the time (3)
- Some of the time (4)
- No (5)
- N/A (6)

Q66 Does your mother normally know where you go and what you do after school?
- Yes (1)
- Most of the time (2)
- Half of the time (3)
- Some of the time (4)
- No (5)
- N/A (6)

Q67 In the last month, has your mother ever had no idea where you were at night?
- Yes (1)
- No (2)
- N/A (3)

Start of Block: RQ # 5: Parental Monitoring Questionnaire (Fathers) (PMQ) (Stattin & Kerr, 2000)
Q68 Does your father know what you are doing during your free time?
   - Yes (1)
   - Most of the time (2)
   - Half of the time (3)
   - Some of the time (4)
   - No (5)
   - N/A (6)

Q69 Does your father know whom you have as friends during your free time?
   - Yes (1)
   - Most of the time (2)
   - Half of the time (3)
   - Some of the time (4)
   - No (5)
   - N/A (6)

Q70 Does your father usually know what type of homework you have?
   - Yes (1)
   - Most of the time (2)
   - Half of the time (3)
   - Some of the time (4)
   - No (5)
   - N/A (6)
Q71 Does your father know what you spend your money on?
   - Yes (1)
   - Most of the time (2)
   - Half of the time (3)
   - Some of the time (4)
   - No (5)
   - N/A (6)

Q72 Does your father usually know how you do in different subjects in school?
   - Yes (1)
   - Most of the time (2)
   - Half of the time (3)
   - Some of the time (4)
   - No (5)
   - N/A (6)

Q73 Does your father usually know when you have a paper or exam due in school?
   - Yes (1)
   - Most of the time (2)
   - Half of the time (3)
   - Some of the time (4)
   - No (5)
   - N/A (6)
Q74 Does your father know where you go when you are out with friends at night?
- Yes (1)
- Most of the time (2)
- Half of the time (3)
- Some of the time (4)
- No (5)
- N/A (6)

Q75 Does your father normally know where you go and what you do after school?
- Yes (1)
- Most of the time (2)
- Half of the time (3)
- Some of the time (4)
- No (5)
- N/A (6)

Q76 In the last month, has your father ever had no idea where you were at night?
- Yes (1)
- No (2)
- N/A (3)

Start of Block: RQ # 6: Issue Checklist Scale towards Mothers (ICSM) (Robin, 1974)

Q77 In the last four weeks, have you discussed with your mother about telephone calls?
- Yes (1)
- No (2)
- N/A (3)
Q78 In the last four weeks, have you discussed with your mother about bedtime rules?
   ○ Yes (1)
   ○ No (2)
   ○ N/A (3)

Q79 In the last four weeks, have you discussed with your mother about cleaning your bedroom?
   ○ Yes (1)
   ○ No (2)
   ○ N/A (3)

Q80 In the last four weeks, have you discussed with your mother about doing your homework?
   ○ Yes (1)
   ○ No (2)
   ○ N/A (3)

Q81 In the last four weeks, have you discussed with your mother about putting away your clothes?
   ○ Yes (1)
   ○ No (2)
   ○ N/A (3)
Q82 In the last four weeks, have you discussed with your mother about use of the television?
   - Yes (1)
   - No (2)
   - N/A (3)

Q83 In the last four weeks, have you discussed with your mother about cleanliness (i.e., washing, showers, brushing teeth etc.)?
   - Yes (1)
   - No (2)
   - N/A (3)

Q84 In the last four weeks, have you discussed with your mother about which clothes to wear?
   - Yes (1)
   - No (2)
   - N/A (3)

Q85 In the last four weeks, have you discussed with your mother about neat clothes?
   - Yes (1)
   - No (2)
   - N/A (3)

Q86 In the last four weeks, have you discussed with your mother about making too much noise?
   - Yes (1)
   - No (2)
   - N/A (3)
Q87 In the last four weeks, have you discussed with your mother about table manners?
   ○ Yes (1)
   ○ No (2)
   ○ N/A (3)

Q88 In the last four weeks, have you discussed with your mother about fighting with your brothers and sisters? (If applicable)
   ○ Yes (1)
   ○ No (2)
   ○ N/A (3)

Q89 In the last four weeks, have you discussed with your mother about cursing?
   ○ Yes (1)
   ○ No (2)
   ○ N/A (3)

Q90 In the last four weeks, have you discussed with your mother about how to spend your money?
   ○ Yes (1)
   ○ No (2)
   ○ N/A (3)
Q91 In the last four weeks, have you discussed with your mother about which movies or books to choose?
- Yes (1)
- No (2)
- N/A (3)

Q92 In the last four weeks, have you discussed with your mother about your allowance?
- Yes (1)
- No (2)
- N/A (3)

Q93 In the last four weeks, have you discussed with your mother about going places without parents (i.e., shopping, movies etc.)?
- Yes (1)
- No (2)
- N/A (3)

Q94 In the last four weeks, have you discussed with your mother about playing stereo or radio too loudly?
- Yes (1)
- No (2)
- N/A (3)
Q95 In the last four weeks, have you discussed with your mother about turning off lights in the house?

- Yes (1)
- No (2)
- N/A (3)

Q96 In the last four weeks, have you discussed with your mother about using drugs?

- Yes (1)
- No (2)
- N/A (3)

Q97 In the last four weeks, have you discussed with your mother about taking care of your belongings (i.e., movies, games, bikes, pets, etc.)?

- Yes (1)
- No (2)
- N/A (3)

Q98 In the last four weeks, have you discussed with your mother about drinking beer or other alcoholic beverages?

- Yes (1)
- No (2)
- N/A (3)
Q99 In the last four weeks, have you discussed with your mother about buying records, games, toys, and other things?
   - Yes (1)
   - No (2)
   - N/A (3)

Q100 In the last four weeks, have you discussed with your mother about going on dates?
   - Yes (1)
   - No (2)
   - N/A (3)

Q101 In the last four weeks, have you discussed with your mother about who your friends should be?
   - Yes (1)
   - No (2)
   - N/A (3)

Q102 In the last four weeks, have you discussed with your mother about selecting new clothes?
   - Yes (1)
   - No (2)
   - N/A (3)

Q103 In the last four weeks, have you discussed with your mother about sex?
   - Yes (1)
   - No (2)
   - N/A (3)
Q104 In the last four weeks, have you discussed with your mother about coming home on time?
- Yes (1)
- No (2)
- N/A (3)

Q105 In the last four weeks, have you discussed with your mother about getting to school on time?
- Yes (1)
- No (2)
- N/A (3)

Q106 In the last four weeks, have you discussed with your mother about getting low grades in school?
- Yes (1)
- No (2)
- N/A (3)

Q107 In the last four weeks, have you discussed with your mother about getting in trouble at school?
- Yes (1)
- No (2)
- N/A (3)
Q108 In the last four weeks, have you discussed with your mother about lying?
- Yes (1)
- No (2)
- N/A (3)

Q109 In the last four weeks, have you discussed with your mother about helping out around the house?
- Yes (1)
- No (2)
- N/A (3)

Q110 In the last four weeks, have you discussed with your mother about talking back to her and/or your father?
- Yes (1)
- No (2)
- N/A (3)

Q111 In the last four weeks, have you discussed with your mother about getting up in the morning?
- Yes (1)
- No (2)
- N/A (3)
Q112 In the last four weeks, have you discussed with your mother about bothering her when she wants to be left alone?

- Yes (1)
- No (2)
- N/A (3)

Q113 In the last four weeks, have you discussed with your mother about bothering you when you want to be left alone?

- Yes (1)
- No (2)
- N/A (3)

Q114 In the last four weeks, have you discussed with your mother about putting feet on the furniture?

- Yes (1)
- No (2)
- N/A (3)

Q115 In the last four weeks, have you discussed with your mother about messing up the house?

- Yes (1)
- No (2)
- N/A (3)
Q116 In the last four weeks, have you discussed with your mother about what time to have meals?

- Yes (1)
- No (2)
- N/A (3)

Q117 In the last four weeks, have you discussed with your mother about how to spend your free time?

- Yes (1)
- No (2)
- N/A (3)

Q118 In the last four weeks, have you discussed with your mother about smoking or spit tobacco?

- Yes (1)
- No (2)
- N/A (3)

Q119 In the last four weeks, have you discussed with your mother about earning money away from the house?

- Yes (1)
- No (2)
- N/A (3)
Q120 In the last four weeks, have you discussed with your mother about what to eat?
   - Yes (1)
   - No (2)
   - N/A (3)

Start of Block: RQ # 6: Issue Checklist Scale towards Fathers (ICSF) (Robin, 1974)

Q121 In the last four weeks, have you discussed with your father about telephone calls?
   - Yes (1)
   - No (2)
   - N/A (3)

Q122 In the last four weeks, have you discussed with your father about bedtime rules?
   - Yes (1)
   - No (2)
   - N/A (3)

Q123 In the last four weeks, have you discussed with your father about cleaning your bedroom?
   - Yes (1)
   - No (2)
   - N/A (3)

Q124 In the last four weeks, have you discussed with your father about doing your homework?
   - Yes (1)
   - No (2)
   - N/A (3)
Q125 In the last four weeks, have you discussed with your father about putting away clothes?
   - Yes (1)
   - No (2)
   - N/A (3)

Q126 In the last four weeks, have you discussed with your father about use of the television?
   - Yes (1)
   - No (2)
   - N/A (3)

Q127 In the last four weeks, have you discussed with your father about cleanliness (i.e., washing, showers, brushing teeth etc.)?
   - Yes (1)
   - No (2)
   - N/A (3)

Q128 In the last four weeks, have you discussed with your father about which clothes to wear?
   - Yes (1)
   - No (2)
   - N/A (3)

Q129 In the last four weeks, have you discussed with your father about neat clothes?
   - Yes (1)
   - No (2)
   - N/A (3)
Q130 In the last four weeks, have you discussed with your father about making too much noise?
   - Yes (1)
   - No (2)
   - N/A (3)

Q131 In the last four weeks, have you discussed with your father about table manners?
   - Yes (1)
   - No (2)
   - N/A (3)

Q132 In the last four weeks, have you discussed with your father about fighting with your brothers and sisters? (If applicable)
   - Yes (1)
   - No (2)
   - N/A (3)

Q133 In the last four weeks, have you discussed with your father about cursing?
   - Yes (1)
   - No (2)
   - N/A (3)
Q134 In the last four weeks, have you discussed with your father about how to spend your money?

- Yes (1)
- No (2)
- N/A (3)

Q135 In the last four weeks, have you discussed with your fathers about which movies or books to choose?

- Yes (1)
- No (2)
- N/A (3)

Q136 In the last four weeks, have you discussed with your father about your allowance?

- Yes (1)
- No (2)
- N/A (3)

Q137 In the last four weeks, have you discussed with your father about going places without your parents (i.e., shopping, movies etc.)?

- Yes (1)
- No (2)
- N/A (3)
Q138 In the last four weeks, have you discussed with your father about playing the stereo or radio too loudly?
   ○ Yes (1)
   ○ No (2)
   ○ N/A (3)

Q139 In the last four weeks, have you discussed with your father about turning off lights in the house?
   ○ Yes (1)
   ○ No (2)
   ○ N/A (3)

Q140 In the last four weeks, have you discussed with your father about using drugs?
   ○ Yes (1)
   ○ No (2)
   ○ N/A (3)

Q141 In the last four weeks, have you discussed with your father about taking care of belongings (i.e., records, games, bikes, pets, etc.)?
   ○ Yes (1)
   ○ No (2)
   ○ N/A (3)
Q142 In the last four weeks, have you discussed with your father about drinking beer or other alcoholic beverages?
   ○ Yes (1)
   ○ No (2)
   ○ N/A (3)

Q143 In the last four weeks, have you discussed with your father about buying records, games, toys, and other things?
   ○ Yes (1)
   ○ No (2)
   ○ N/A (3)

Q144 In the last four weeks, have you discussed with your father about going on dates?
   ○ Yes (1)
   ○ No (2)
   ○ N/A (3)

Q145 In the last four weeks, have you discussed with your father about who your friends should be?
   ○ Yes (1)
   ○ No (2)
   ○ N/A (3)
Q146 In the last four weeks, have you discussed with your father about selecting new clothes?
   - Yes (1)
   - No (2)
   - N/A (3)

Q147 In the last four weeks, have you discussed with your father about sex?
   - Yes (1)
   - No (2)
   - N/A (3)

Q148 In the last four weeks, have you discussed with your father about coming home on time?
   - Yes (1)
   - No (2)
   - N/A (3)

Q149 In the last four weeks, have you discussed with your father about getting to school on time?
   - Yes (1)
   - No (2)
   - N/A (3)

Q150 In the last four weeks, have you discussed with your father about getting low grades in school?
   - Yes (1)
   - No (2)
   - N/A (3)
Q151 In the last four weeks, have you discussed with your father about getting in trouble at school?
   ○ Yes (1)
   ○ No (2)
   ○ N/A (3)

Q152 In the last four weeks, have you discussed with your father about lying?
   ○ Yes (1)
   ○ No (2)
   ○ N/A (3)

Q153 In the last four weeks, have you discussed with your father about helping out around the house?
   ○ Yes (1)
   ○ No (2)
   ○ N/A (3)

Q154 In the last four weeks, have you discussed with your father about talking back to him and/or your mother?
   ○ Yes (1)
   ○ No (2)
   ○ N/A (3)
Q155 In the last four weeks, have you discussed with your father about getting up in the morning?

- Yes (1)
- No (2)
- N/A (3)

Q156 In the last four weeks, have you discussed with your father about bothering him when he want to be left alone?

- Yes (1)
- No (2)
- N/A (3)

Q157 In the last four weeks, have you discussed with your father about bothering you when you want to be left alone?

- Yes (1)
- No (2)
- N/A (3)

Q158 In the last four weeks, have you discussed with your father about putting feet on the furniture?

- Yes (1)
- No (2)
- N/A (3)
Q159 In the last four weeks, have you discussed with your father about messing up the house?

- Yes (1)
- No (2)
- N/A (3)

Q160 In the last four weeks, have you discussed with your father about what time to have meals?

- Yes (1)
- No (2)
- N/A (3)

Q161 In the last four weeks, have you discussed with your father about how to spend your free time?

- Yes (1)
- No (2)
- N/A (3)

Q162 In the last four weeks, have you discussed with your father about smoking or using spit tobacco?

- Yes (1)
- No (2)
- N/A (3)
Q163 In the last four weeks, have you discussed with your father about earning money away from the house?

- Yes (1)
- No (2)
- N/A (3)

Q164 In the last four weeks, have you discussed with your father about what to eat?

- Yes (1)
- No (2)
- N/A (3)

Start of Block: Resource Links

Q165 If you feel that you have been impacted by completing this survey, here is a list of accessible resources that may be beneficial in dealing with some potential issues.

- The Computer, Internet, and Video Game Addiction Workbook (Conrad, 2017)
- The Centre for Internet and Technology Addiction (CITA) (Online Resource)
- The Hamilton Centre of Cognitive Behavioural Therapy, (519) 527 2507
- B & C Health (Cognitive Behavioural Therapy), Mississauga, (905) 814 8200
- Helix Healthcare Group, Toronto, 1 (855) 971 0311
- University of Guelph counselling services, Guelph, (519) 824 4120 ext. 53244
- Good2Talk, confidential helpline, 1-(866) 925 5454
- Contact your family doctor