Reading Between the Lines: How Childhood Home Reading Environment and Associated

Psychological Need Satisfaction Relate to Adult Leisure Reading.

by

Julia Rose Farmer

A thesis submitted in partial fulfillment of the requirements for the degree of

Master of Education

in

SCHOOL AND CLINICAL CHILD PSYCHOLOGY

Department of Educational Psychology

University of Alberta

Abstract

Despite the numerous lifelong benefits that are associated with continued leisure reading, there has been a steady decline in adult reading habits. Researchers have given limited attention to examining the factors that may influence whether an individual chooses to read recreationally beyond adolescence. Expanding on the previously studied positive impact of the various forms and quantities of reading exposure within the home environment on child and adolescent reading cognitions and practices, the purpose of this study was to understand how the recalled childhood home reading environment, and the associated psychological need satisfaction incurred during shared-reading experiences, was associated with adults' leisure reading beliefs and practices. We used recalled basic psychological need satisfaction during parent-child shared reading experiences as a reflection of the degree of intrinsic reading motivation support as conceptualized within Ryan and Deci's Self-Determination Theory. With a quantitative correlational survey design, we collected data from 214 Canadian adults (age 18-29). To answer our research questions, we used descriptive and correlational analyses and linear regressions. Contrary to previous findings, almost all participants reported some degree of leisure reading. Like previous findings, results of this study suggest that home reading environment may significantly contribute to the development and reinforcement of positive reading attitudes, identities and habits. However, basic psychological need satisfaction during childhood shared reading experiences did not appear to mediate this relationship. These results are discussed in terms of implications for both researchers and parents.

Preface

This thesis is an original work by Julia Farmer. The research project, of which this thesis is a part, received research ethics approval from the University of Alberta Research Ethics Board, No. Pro00081407, May 28th, 2018.

Acknowledgements

Thank you to my committee members, Dr. Jacqueline Pei and Dr. Karen Cook. I sincerely appreciate your feedback and your taking the time to review my work.

Thank you to my supervisor, Dr. Lia Daniels, for your invaluable support and guidance over these past two years. Working with you has been ceaselessly inspiring, and an absolute privilege. You have played such a critical role in my development as a researcher and have taught me so much. I look forward to continuing to work with you in the years to come.

Thank you to the Social Sciences and Humanities Research Council of Canada for supporting this project, and for allowing me to dedicate my time to my research.

To my cohort members, I am so thankful to have had the privilege to complete this journey with you all. I could not imagine knowing more incredible, compassionate and supportive women than all of you. To my fellow ACME lab mates, I cannot express the depth of my gratitude for all the guidance, encouragement, support that I received from you all.

To my family and friends, I cannot thank you enough for your unwavering support, encouragement and patience throughout this journey. Thank you for always being there to listen and for always being so understanding when I felt completely overwhelmed. I would especially like to thank my Mom and Dad. I cannot express how much your constant encouragement, support, and guidance has meant to me. You are the most incredible people and I would not be where I am today without you both.

Finally, to Matt, thank you for your love, support, and immeasurable patience. You have taken every moment of this journey in stride and I cannot thank you enough for all that you have done for me. You have been my oasis, my rock, and my motivator. I would not be here without you.intr

Table of Contents

List of Tables

Reading Between the Lines: How Childhood Home Reading Environment and Associated

Psychological Need Satisfaction Relate to Adult Leisure Reading.

In the fast-paced, information laden, immediate satisfaction world of the 21st century,

leisure reading may be a quickly fading pastime. It is well established that adequate literacy

skills maintain cognitive function (Lopes, Ferrioli, Nakano, Litvoc & Bottino, 2012), are

important for academic success (Whitten, Labby, & Sullivan, 2016), and facilitate daily life

through activities like voting, seeking employment, complying with medical prescription

instructions, etc. Although few would dispute the notion that literacy is a necessity, fewer may

view reading as a desirable leisure activity. In fact, Canadian adults spend an average of 126

minutes per day watching television but spend only 24 minutes per day on leisure reading or

listening to music (Statistics Canada, 2019a). In the United States, this discrepancy is even

larger, with adults spending, on average, approximately 170.4 minutes watching television and

15.6 minutes on daily leisure reading (Bureau of Labor Statistics, 2019).

Although there are numerous individual and cultural factors that may influence how

people choose to allocate their leisure time, a central underlying component to the low levels of

leisure reading is aliteracy (Annable, 2017). Aliteracy occurs when a literate individual avoids

reading due to a lack of interest or intrinsic motivation (i.e. seeing value in reading because the

activity is personally satisfying/rewarding to the person; Nathanson, Pruslow, & Levitt, 2008).

Aliteracy appears to increase in prevalence during adolescence and into adulthood (Merga 2014).

In spite of this, and the numerous lifelong benefits that are associated with continued leisure

reading, very few researchers have sought to examine the factors that may influence whether an

individual chooses to read recreationally beyond adolescence (Cassidy, Valadez, Garrett, &

Barrera, 2010; Merga, 2017). While there is extensive research into the factors that influence the

development of intrinsic reading motivation and leisure reading habits in childhood and adolescence (e.g. Malanchini et al., 2017; McGeown, Duncan, Griffiths, & Stothard, 2014), and emerging research into why avid book readers choose to read regularly in adulthood (Merga, 2017), no research has explored the associations between intrinsic motivation-supportive reading experiences in childhood and reading cognitions and practices in adulthood. In this study we used Self-Determination Theory (Ryan & Deci, 2000), to examine how retrospective parent-child reading experiences in terms of both home reading environment and basic psychological need satisfaction relate to adults' current (1) attitudes toward recreational reading, (2) reading identity, and (3) self-reported reading habits.

Literature Review

It is well supported within the empirical literature that recreational reading habits and experiences benefit people across a variety of life domains. For example, leisure reading has been directly associated with enhanced academic and cognitive skill development and achievement throughout childhood and adolescence (Department of Education, 2012; Sullivan & Brown, 2013; Whitten, Labby, & Sullivan, 2016). Reading for pleasure has a strong positive impact on the adolescent development of self-identification, self-construction, and self-awareness (Howard, 2011), and has also been linked to higher levels of educational attainment and employment prospects in adulthood (Taylor, 2011). Lifelong reading habits enhance several social and communicative skills throughout the lifespan (Wilhelm & Smith, 2016; Wilson et al., 2013). In fact, some of the benefits gained via regular reading become more pronounced with age. For example, Mol and Bus (2011) identified that the influence of print exposure on oral language skills development increased with age from accounting for 12% of the variance in children's oral language skills in kindergarten to 34% of the variance in adults at the graduate

level. Finally, regular leisure reading habits in later adulthood have been found to potentially help guard against the development of dementia in seniors (e.g. Lopes, Ferrioli, Nakano, Litvoc & Bottino, 2012; Vemuri & Mormino, 2013).

Despite these numerous potential benefits, leisure reading habits appear to be declining. In North America, the percentage of the American population who read daily for personal interest dropped from 24.9% to 18.7% between 2007-2017 (Bureau of Labor Statistics, 2019). Of this percentage of the 2017 population, Americans between ages 15 to 34 spent the least amount of time leisure reading. In Canada, the number of hours spent on daily leisure reading has remained consistent at 0.4 between 2005-2015 (Statistics Canada, 2019a). However, only 21% of Canadians report reading during their leisure time (BookNet Canada, 2018a). Within Western countries, women consistently read for enjoyment significantly more frequently than men (e.g. Bureau of Labor Statistics, 2019; Moyser & Burlock, 2018; OECD, 2010). Although these statistics are informative, there is almost no theory-guided research into the current reading habits of Canadian adults and the variations in these habits by age. Whereas several researchers have examined the proportion of time spent on leisure reading in relation to other recreational activities in adulthood, along with adult's current reported reasons for leisure reading (e.g. Merga, 2017), few have sought to explore the childhood factors that encourage adult leisure reading habits.

Reading Motivation

Childhood factors that contribute to a positive view of reading may be linked to leisure reading habits and enjoyment in adulthood. Motivation has been identified as a vital component to the development and maintenance of reading habits among children and adults (e.g. Burak, 2004; Wang & Guthrie, 2004). Reading motivation is defined to be "the set of goals and beliefs

that guide behaviour in regard to reading" (Parault & Williams, 2009, p. 120) and has been

identified as both an important consequence of reading experiences and a critical predictor of

later reading abilities (e.g. Oldfather & Wigfield, 1996; Scarborough & Dobrich, 1994).

Motivation to read is frequently divided into two forms within empirical research: intrinsic

motivation and extrinsic motivation (e.g. Ryan & Deci, 2000; Wang & Guthrie, 2004).

Intrinsic reading motivation occurs when the individual is internally driven to read

because they find the activity personally satisfying or rewarding on its own and the individual

associates reading with positive experiences (Schunk, Pintrich, & Meece, 2008). Intrinsic

motivation has been shown to be a strong predictor of reading habits (e.g. McGeown, Osborne,

Warhurst, Norgate & Duncan, 2015). External reading motivation is when the individual is

driven to read through the incentive of receiving an external reward or to avoid negative

consequences for not reading. Extrinsic motivation has been shown to have a minimal, and

sometimes negative, impact on reading (Schiefel et al., 2012). For example, Ortlieb, Grandstaff-

Beckers, and Cheek (2012) found that students who felt 'forced' to read tended to develop

negative beliefs about reading, while students who had been offered choices in their reading of

relevant and interesting auxiliary reading material tended to show a desire to read.

Motivation and reading success. Numerous studies have found a reciprocal relationship

between children's intrinsic reading motivation (enjoyment and perceived competence) and their

reading success and achievement. (e.g. Malanchini et al., 2017; Morgan & Fuchs, 2007).

Reading motivation has been found to be a key factor in successful reading (De Naeghel et al.,

2014). One reason for this may be that children who are more intrinsically motivated tend to read

more and therefore they continue practicing and improving their reading skills. Researchers have

also found that persistent positive or negative encounters with reading, and how individuals

interpret these experiences, can have lasting impacts on how they develop and reinforce their sense of identity as readers (Alsup, 2006). Early reading successes have been found to predict later reading achievement (e.g. Sparks, Patton & Murdoch, 2014). In contrast, Morgan, Fuchs, Compton, Cordray, and Fuchs (2008) found that first-graders who experienced consistent reading failure early in life demonstrated lower intrinsic reading motivation, viewed themselves as less competent readers and tended to have more negative attitudes toward reading in general than those who had experienced early reading success.

Several researchers have also identified substantial gender discrepancies in reading motivation and success. Girls consistently demonstrate better attitudes toward reading, perceptions of competence in their reading abilities, and literacy skills (e.g. Logan & Johnson, 2009; Smith & Wilhelm, 2004). In 2009, the Pan-Canadian Assessment Program (PCAP-13) found that both 13- and 16-year-old girls significantly outperformed boys in reading (Canadian Council on Learning, 2009). In their literature review, Meece, Bower Glienke, and Burg (2006) found that girls tended to report significantly stronger reading ability, and reading interest beliefs than boys. Moreover, these gender differences in motivation continually increased as children progressed through school. These differences in reading success, motivation, and attitudes toward reading are correlated with the perpetuation of gender identity stereotypes within the home and school environment, rather than biological sex (McGeown, Goodwin, Henderson, & Wright, 2011). Boys tend to spend less time reading than girls, are less intrinsically motivated to read, are less confident in themselves as readers and more often viewed reading as a predominately feminine past-time (Canadian Council on Learning, 2009).

Home Reading Environment

In order to understand how intrinsic motivation for leisure reading may be established and nurtured, it is important to explore the characteristics of the home environment on childhood reading development. Broadly stated, the home reading environment is encapsulated by cultural perspectives on reading as well as parents' own reading habits. Additionally, the home reading environment has many components, including, but not limited to, the amount of print exposure and the types of interactions between parents and children. Each of these is considered below.

Cultural considerations. The home reading environment is shaped by factors such as socioeconomic status (SES), cultural parenting practices, and parental education (e.g. Gottfried, Schlackman, Gottfried, & Boutin-Martinez, 2015; Yarosz, & Barnett, 2001). In his examination of the effects of the home reading environment in 25 countries, Park (2008) found that early home literacy activities, parental attitudes toward reading and the number of books in the house all positively affected children's reading development. However, the level of each of these contributing components, and their effects on reading development, varied significantly across countries (Park, 2008). Parental attitudes toward reading and the number of books in the house tended to be significantly higher in countries with higher levels of economic development (Park, 2008). Chen (2007) also identified significant cultural contrasts while comparing the recreational reading habits of Taiwanese and American college students. They found that the gender discrepancy in extracurricular reading habits was reversed from North American studies, with men reading more frequently than women - which they attributed to reading having been traditionally promoted as more "masculine" within Chinese culture. They also found that, again contrary to North American studies, academic achievement was somewhat inversely related to

extracurricular reading, and hypothesized that this may be a result of parental concerns that leisure reading would distract from academic pursuits.

In addition, international and generational differences in home reading advocacy and reading programs may also lead to variations in reading-related parenting practices, reading advocation, and the quantity of reading materials in the home. For example, Home-School Partnership policies began in the United States in the 1980s (Collins, Moles, & Cross, 1982) to encourage and instruct parents on how to take a more active role in facilitating and supporting their child's academic development in the home. In the 1990s, Canadian educators began to incorporate the notion of parental involvement in children's literacy development into research projects for program and policy construction by advocating for increased parent-child reading-related discussions, modeling and co-reading practices (e.g. Boschung, et al., 1999). This shift in culturally-promoted parenting practices may have changed reading-related home experiences for subsequent generations of Canadian children as compared to that of their predecessors.

Parents' reading habits. Home-school partnerships aside, the independent reading habits of parents have been shown to influence a child's tendency to read. In 2017, Mancini, Monfardini, and Pasqua found substantial evidence that children were more likely to read after having observed their parent(s) modeling reading behaviour. Weigel, Martin and Bennet (2006) found that mothers who viewed reading as opportunities for learning and bonding with their children tended to be more positively engaged with their children during shared book reading and tended to report higher levels of recreational reading and reading attitudes than those who did not. As a result, children of these mothers showed significantly greater gains in print knowledge and interest in reading than those with less reading-positive mothers (Weigel, Martin, & Bennet, 2006). Using the 2011 Progress in International Reading Literacy survey data from 50

international education systems, Stephens, Erberber, Tsokodayi, Kroeger, & Ferguson (2015) also found that it was most common for children to have positive attitudes toward reading and to read frequently if their parents also demonstrated these habits and attitudes.

The influence of parental reading attitudes and practices has been found to continue into adolescence. In 2016, Merga and Moon found that there is a significant positive correlation between parents' leisure reading frequency and attitudes toward reading, and the leisure reading frequency and reading attitudes of their adolescent children. Several other studies have found that parenting styles, along with parental support and expectations, significantly impact goal orientation and academic motivation in adolescence and young adulthood (Aunola, Stattin, & Nurmi, 2000; Diaconu-Gherasim, & Măirean, 2016; Gordon, & Cui, 2012).

Although these benefits have been observed across genders, numerous researchers have identified marked differences in how parents interact with boys compared to girls (e.g. Aznar & Tenenbaum, 2015; Tenenbaum & Leaper, 2003). Specifically, from an early age, parents spend significantly more time reading, storytelling, and teaching letters and numbers with girls than boys (Baker & Milligan, 2016). In school-age children, girls reportedly receive more parental encouragement for book reading than boys, despite girls typically reading more frequently (Merga & Roni, 2018).

Print exposure. Traditionally, the relationship between the home environment and reading benefits has been studied within the context of childhood literacy skill development (e.g. Bracken & Fischel, 2008; Hamilton, Hayiou-Thomas, Hulme, & Snowling, 2016). In other words, researchers have conceptualized the home "literacy" environment as the degree of child and/or parental print exposure (i.e. the number of book titles/authors they know), the quantity of books in the house, and the frequency of parent-child shared book reading (e.g. Boerma, Mol &

Jolles, 2017; Hamilton, Haylou-Thomas, Hulme, & Snowling, 2016). There is substantial empirical evidence that when operationalized this way the home literacy environment plays a pivotal role in the development of children's language and literacy skills (e.g. Frijters, Barron, & Brunello, 2000; Levy, Gong, Hessels, Evans, & Jared, 2006; Sénéchal & Lefevre, 2002). In their meta-analysis, Mol and Bus (2011) found that children who had more print exposure tended to have better reading comprehension and technical reading and spelling skills in school. The reviewed studies illustrated that more proficient readers also tended to read more frequently, thus continually increasing their levels of print exposure. Shared-book reading has been found to predict oral language development, and to indirectly predict children's reading comprehension (e.g. Sénéchal, Pagan, Lever, & Ouellette, 2008). Furthermore, the quantity of reported shared book reading experiences in kindergarten directly predicted kindergarten vocabulary levels and the frequency of children's leisure reading in grade 4 (Sénéchal, 2006). Home literacy environment was also found to mediate the relationship between family SES and children's literacy development (e.g. Chazan-Cohen et al., 2009). Although important, this information tells researchers and parents little about the nature of the relationships between parents and children in relation to reading.

Parent-child interactions. Positive benefits of reading-related experiences within the home environment have been widely examined at numerous stages of childhood development. As a specific example, dialogic reading (Whitehurst et al., 1994) - when parents question and discuss with their child during shared book reading - was found to positively impact parent-child relationships (Ganotice, Downing, Mak, Chan, & Lee, 2017). Parental encouragement and involvement in literary activities also plays an important role in increasing childhood motivation for pleasure reading, regardless of the child's gender (e.g. Baker, Scher, & Mackler, 1997; Scher,

& Baker, 1994). There are extensive bodies of literature on the impact of reading-related home experiences (i.e. print-exposure and/or parental reading habits and beliefs) on emergent literacy skills in preschoolers (e.g. Frijters, Barron, & Brunello, 2000; Levy, Gong, Hessels, Evans, & Jared, 2006; Weigel, Martin, & Bennet, 2006), the academic achievement and cognitive development of school-age children (e.g. Boerma, Mol, & Jolles, 2017; Niklas, Tayler, & Schneider, 2015; Sénéchal, 2009), and the continued impact of these early experiences on adolescents' reading habits and attitudes (e.g. Merga & Moon, 2016; Notten & Becker, 2017).

A 28-year longitudinal study by Gottfried, Schlackman, Gottfried, and Boutin-Martinez, (2015) examined the impact of the amount of time that mothers spent reading to their young children and the quantity of various reading materials in the home environment on child reading achievement and intrinsic motivation across the school years and subsequent educational attainment in adulthood. The researchers found that the quantity of time spent reading to young children had a significant direct effect, over print environment, on reading achievement and motivation in childhood, and a significant indirect effect on adolescent reading achievement and motivation. The adolescent reading achievement and motivation levels, in turn, had significant positive effects on educational attainment in adulthood (Gottfried, Schlackman, Gottfried, & Boutin-Martinez, 2015). Although impressive in scope, this study focused almost exclusively on reading skills in academic settings and thus overlooked other outcomes, including leisure reading, more generally. In their literature review, Baker, Scheer, and Mackler (1997), found that children who had experienced enjoyable early reading encounters with their parents were more likely to read widely and frequently in later years. They also identified that children had more positive beliefs about reading when they had parents who viewed reading as a source of entertainment rather than parents who emphasized reading as an opportunity for skill

development. More recently, qualitative and mixed-methods research has shown that parents who report high levels of reading enjoyment frequently attribute their recalled enjoyment of childhood reading experiences with their parents as positive influences for their own desires to read with their child (Sawyer, Cycyk, Sandilos, & Hammer, 2018; Swain, Cara, & Mallows, 2016). These studies are the first to illustrate the importance of the potential lasting influences of the positive psychological experiences of shared book-reading during childhood.

Although these findings indicate that positive childhood reading experiences may help to motivate adults to continue these parenting practices with their own children, no research to date has illustrated the influence of these childhood reading experiences on adult's own recreational reading attitudes, identities and habits. Additionally, by restricting the conceptualization of the home environment to the incorporation of literacy-supportive factors like access to print materials and frequency of shared-reading, researchers may be overlooking important theoretical frameworks to understand the impact of associated parent-child interactions.

Theoretical Framework: Self-Determination Theory

Based on the reviewed empirical research above, it is clear that there are numerous factors which influence reading frequency, achievement, attitudes, and identity in childhood and adolescence. However, much of this previous research has failed to closely examine the psychological factors at play and their potential continued influences on the valuation and incorporation of leisure reading practices in adulthood. As described previously, intrinsic motivation occurs when an individual is self-driven to participate in an activity because they find the task personally satisfying or rewarding on its own and associate the activity with positive experiences. Intrinsic reading motivation has been linked to more frequent and broader reading habits and higher levels of reading enjoyment (e.g. Cox & Guthrie, 2001; Hidi, 2000; Wang &

Guthrie, 2004). However, few researchers have sought to explore the factors that may influence the development of this sense of personal satisfaction/reward, and positive association, in relation to leisure reading. If we seek to understand how individuals come to develop lasting and self-driven leisure reading habits, it is critical that we examine the factors that may lead to the development and reinforcement of intrinsic reading motivation.

For the purpose of this study, Self-Determination Theory (SDT; Ryan & Deci, 2000) provides an excellent framework to bring theoretical precision to the research reviewed above. This theory provides conceptualizations of both extrinsic and intrinsic motivation, along with an outline of the factors which act to give rise to, and sustain, intrinsic motivation. According to SDT, there are three psychological needs that act as precursors for intrinsic motivation. The theory states that when the psychological needs of competence, autonomy, and relatedness are met, there is enhanced self-motivation and well-being. Competence can be conceptualized as the individual feeling as though they have the ability to accomplish a task (Ryan & Deci, 2000) - such as reading material that is suitably challenging but is not beyond their capabilities. Autonomy can be understood as the individual having an independent and active role in the activity - such as the freedom to choose reading material. Finally, relatedness represents the positive affect experienced during the activity, for example, the closeness and positive emotions experienced by a parent and child during shared book reading. However, when these needs are not met, the individual experiences diminished motivation and well-being (Ryan & Deci, 2000). The home reading environment could act to support the basic psychological needs of SDT. A more reading-oriented home environment characterized by opportunities for self-directed reading selection and high quantity and quality of reading material exposure and accessibility, should act to support the child's sense of autonomy and competence.

Because there is currently no empirical research on the impact of basic psychological need support on reading motivation and perseverance, we borrow from evidence on the motivational influence of need-supportive practices in other domains. For example, numerous studies have shown that autonomy supportive parenting practices (i.e. providing children with opportunities for choice and initiative, with less attempts to pressure or control children) lead to better academic achievement (e.g. Bindman, Pomerantz, & Roisman, 2015; Pomerantz, Grolnick, & Price, 2005). Intrinsic goal-framing (focusing on developing interest and enjoyment in the task) and autonomy supportive classroom settings have also been found to enhance depth of learning, test performance and task persistence in college and high school students (Vansteenkiste, Simons, Lens, Sheldon, & Deci, 2004). Maternal basic psychological need support has been shown to predict the development of children's intrinsic interests in mathematics, with autonomy support being particularly important to the development of children's mastery orientation in math (Aunola, Viljaranta, Lehtinen, & Nurmi, 2013).

Competence need support during reading-related activities has been found to be particularly important for boys, as boys tend to feel less competent in their reading abilities and will often reject or avoid reading activities as a result (Smith & Wilhelm, 2004). Research has also shown that parents' views of reading as a source of pleasure and enjoyment predicts children's intrinsic motivation for reading, perceived value and enjoyment in the task, and their perceived sense of competence while reading (Baker & Scher, 2002). As previously mentioned, parents who read frequently with their children often related their motivations for this activity to the positive, relatedness-supportive shared reading experiences that they recalled having with their own parents (Sawyer, Cycyk, Sandilos, & Hammer, 2018; Swain, Cara, & Mallows, 2016). Higher levels of relatedness and autonomy need satisfaction have also been shown to increase

adolescent athletes' desires and motivations to persist in their chosen sport (e.g. Calvo, Cervelló, Jiménez, Iglesias, & Murcia, 2010).

Within the environment, parental interactions with the child (e.g. support, encouragement, reading positivity, and co-reading) should also foster psychological need satisfaction, which would then act to sustain the child's motivation to read. Increased levels of continued print exposure, supportive feedback, opportunities for reading skill development, and positive memories associated with family reading-related experiences will likely help to establish more positive attitudes toward recreational reading and how they identify as readers. Those who experienced more reading-oriented home environments and more psychological need support during reading-related activities may demonstrate stronger adult leisure reading habits, due to an association of the activity with feelings of comfort and familiarity.

The Current Study and Research Questions

In summary, there is an extensive body of empirical literature on the importance of the home literacy environment and its various forms and quantities of reading exposure on fostering childhood reading achievement and reading habits. However, we identified two significant gaps in the reviewed literature, which we sought to address in the current study. First, we sought to move beyond childhood reading and focus on recreational reading in adulthood, which, despite its steady decline, does not seem to have captured the attention of researchers. Specifically, we focused on 18-29-year olds for two reasons. First, this age group shows low levels of leisure reading. Second, because of the retrospective nature of this study, 18-29-year-olds are well equipped to reflect on their past reading experiences in their home but also old enough to have formed their own leisure reading beliefs and habits. In addition, researchers examining the influence of the home environment on reading have predominantly focused on more directly

observable aspects of the environment, such as the quantity of, or access to, reading materials, frequency of shared book reading experiences, degree of print exposure, etc. By shifting to focus on the psychological impact of developing in a home environment that highly values leisure reading, and the positive affect incurred during shared-reading experiences, we bring a new perspective to bear on the influence of these early reading experiences.

Taken together, our overarching purpose was to understand how the recalled childhood home reading environment and its associated psychological need satisfaction related to adults' leisure reading. To meet this purpose, we posed the following three research questions (1) What are the reading habits of a sample of Canadian adults between the ages of 18-29?; (2) How does the recalled childhood home reading environment relate to adults' current (i) attitudes toward recreational reading, (ii) reading identity, and (iii) reading habits?; and (3) Are these relationships mediated by having experienced higher levels of basic psychological need support during recalled parent-child shared-reading activities?

Method

We employed a quantitative correlational survey design because it was a good fit for our research questions and its efficacy has been well documented within empirical literature (Lavrakas, 2008).

Procedures

The University of Alberta Research Ethics Board granted ethical approval for conducting this study (Pro00081407). We utilized an online survey research design because it permitted us to reach a large Canadian sample more quickly than traditional in-person survey administration (Toepoel, 2017). The survey was hosted on SurveyMonkey©. We posted the online survey link to our accounts on multiple social media platforms including Facebook, Instagram, and Twitter in

June 2018, with an explicit request for participants to repost or "share" the link to their own

social media pages. This type of snowball sampling technique (Atkinson & Flint, 2001) enabled

us to indirectly acquire additional participants who were exposed to the survey link via current

participants. The survey link was active for one week. Due to the nature in which we recruited

our sample, the sampling method was a convenience sample of self-selected participants who

chose to participate in the study.

Individuals who clicked on the survey web-link were directed to an information page

containing details about the study, the potential minimal risks, and statements regarding the

voluntary and anonymous nature of their participation (Appendix A). Consent was implied when

adults who chose to participate in the survey after reading the information page clicked the

"Continue" button at the bottom of the screen. The entire survey took less than 10 minutes to

complete. As remuneration for their time, each participant who completed the survey was

provided with the opportunity to select a charity (from two provided options) to which the

researchers would donate $1.00 CAD. Upon completion of the data collection, we uploaded the

survey data into the statistical program, SPSS-24 (IBM Corp, 2016), for analysis.

Participants

In total, 549 people accessed the survey link. Of this total, approximately 64.5% were

Canadian whereas the other 35.5% came from a wide range of countries within and outside of

North America including the United States, Australia, the United Kingdom, and the Netherlands.

Adults aged 18-71 accessed the questionnaire. We excluded one participant because they did not

identify as either a man or woman and thus could not be included in binary gender analyses. By

imposing our desired 18-29 age range, the sample was reduced to 302. We then further restricted

the sample to include only participants who had reported that they were Canadian. The final

sample for the present study consisted of 214 Canadian adults aged 18-29 years of age (174 women and 40 males). We compared the 214 adult Canadians to the excluded participants on the study variables and found statistically significant differences on their reading attitudes, t (390.01) = 6.26, $p < 0.001$, their reading identities, t (400.09) = 4.68, $p < 0.001$, and their daily leisure reading habits, t (401) = 6.46, $p < 0.001$. These individuals did not differ significantly in their recalled home reading environment or recalled basic psychological need satisfaction.

Measures

    Descriptive variables. To describe the sample we collected participants' age, gender and ethnicity, and country of residence, although we did not include ethnicity in our analyses. To better comprehend participant's current reading habits, we used a variation of the 'Books' components of the *Gender, Empathy, and Reading* instrument (McCreary, 2017). We listed six types of reading materials (non-fiction book(s), fiction book(s)/novel(s), audiobook(s), magazine(s), blog(s), and newspaper(s)/ news app) and asked participants to report approximately how many of each that they had read for pleasure in the past month. We chose to include a variety of reading materials to incorporate several of the alternative formats (i.e. blogs, news apps) that individuals may use for leisure reading, rather than exclusively examining more traditional forms of reading materials (i.e. books, magazines, and paper newspapers). The purpose of these items was to illustrate the ways that participants chose to read for pleasure.

    Home reading environment. To measure the participants' recalled experience of the home environment during their childhood, we developed a Home Reading Environment Questionnaire. We chose to create this measure because we were unable to find any questionnaires that adequately captured the memories of experiencing a home reading environment during childhood. We asked participants to think back to when they were "growing

up" and to rate the extent to which they agree/disagree to six items, such as "There were a lot of books in my house" (see Appendix B for all survey items). The purpose of these items was to capture the degree to which reading experiences were facilitated and positively promoted in their childhood home environment. We calculated the internal consistency of this measure in SPSS and found that it had an internal reliability of $\alpha = 0.87$.

Basic psychological need satisfaction. We assessed the participants' recalled basic psychological need satisfaction during childhood shared reading experiences using the 9-item Basic Psychological Need Satisfaction Scale-Relationship Domain Questionnaire (La Guardia, Ryan, Couchman, & Deci, 2000). For the purpose of this study, we asked participants to remember a time when they were in elementary school and rate the degree to which they agreed with the provided reading-activity related statements, such as "When my parent/guardian and I read together, I felt loved and cared about". Each of the basic psychological needs were measured using three items - two need supportive and one inversely scored need-thwarting item. We summed all items and created a total basic psychological need satisfaction score that captured the overall level of need support that the participants recalled experiencing ($\alpha = .90$).

Current reading attitudes, identities and daily reading habits. For the criterion variables, we used the 'Books' and the 'About Reading' components of the *Gender, Empathy, and Reading* instrument (McCreary, 2017) to assess the participants' current reading attitudes, reading identities, and their daily reading habits. On this measure, participants responded to nine items regarding their attitudes toward reading and two items about their perceived reading identity. They also reported the amount of time they typically spent reading for enjoyment each day. We chose to use this measure because the items used within this instrument were the most applicable to the population that we intended to study. We calculated the internal consistency of

the items for each of the criterion variables and found that the reading attitude items had a reliability of $\alpha = .90$ and the reading identity items had a reliability of $\alpha = .89$. Reliability values of $\alpha >= .70$ are widely understood as indication of a reliable measure, therefore, our reliability score for this measure falls within the acceptable range (Field, 2018).

Rationale for Analyses

We conducted our analyses in three steps. First, to describe the current reading habits of the participants we calculated the range, M and SD of the quantities of reading materials that participants had read for enjoyment in the past month. Second, we ran descriptive analyses and correlations on all the main study variables of home literacy environment, basic psychological needs, and criterion variables. Third, for our main analyses, we ran three separate hierarchical regression analyses for each of our criterion variables. In the first block, we entered the age and gender variables to hold the effects of these variables constant. In the second block, we entered the home reading environment variable to calculate its effect on each of the criterion variables. We entered the basic psychological need variable in the third block, while we held the effects variables in the previous two blocks constant. The full regression analysis allowed us to examine whether the relationship between home reading environment and each of the criterion variables was mediated by basic psychological need satisfaction.

<div align="center">

Results

</div>

Description of Current Reading

Participants had a wide range of current leisure reading habits. In the past month, participants reported reading newspaper(s)/news app most, followed by blog(s) (see Table 1). On average, participants read audiobooks the least in the past month. The majority of participants (92.8%) reported reading at least one type of reading material, while 7.2% of participants

reported that they had not read anything for enjoyment. Participants who had reported some

degree of leisure reading in the past month varied in terms of what they read: 6.4% of

participants had exclusively chosen to read non-fiction books, fiction books, and/or audiobooks

and 21.8% of participants had solely chosen blogs, magazines, and/or newspapers for their

leisure reading activities. Many participants (85.2%) had read more than one type of reading

material; with 62.7% reporting that they had read both book and non-book formats in the past

month.

Table 1. Amount of Leisure Reading in the Past Month

Variable	Range of Responses	n	M	SD
Non-fiction book(s)	0-15	195	.85	1.44
Fiction book(s) (novel)	0-10	195	1.04	1.55
Audiobook(s)	0-5	176	.38	.97
Magazine(s)	0-10	183	1.09	1.65
Blog(s)	0-100	181	5.62	12.13
Newspaper(s)/news app	0-1000	198	15.70	72.81

Preliminary Analyses

We examined the descriptive statistics of all study variables including skewness and

kurtosis for each (see Table 2). All study variables fell within the recommended range between

-3 and 3 for skew, and -8 and 8 for kurtosis (Finney & DiStefano, 2013), which indicated

adequate normality for regression analyses. We also examined the correlations between the study

variables and found that there were no substantial correlations between the variables ($r > .9$),

which indicated that it was very unlikely that there was multicollinearity in the data (see Table 3), again meeting an assumption of regression analysis.

Based on the correlations, several of the study constructs were significantly positively correlated with one another. Home reading environment and basic psychological need satisfaction were positively correlated with each other. This might suggest that those individuals who reported growing up in a very reading oriented home environment may have also recalled experiencing more basic psychological need support during shared-reading activities with their parents. Home reading environment and basic psychological need support were each positively correlated with reading attitude and reading identity. These results may indicate that participants with stronger current reading attitudes and reading identities were more likely to have recalled a more reading oriented home environment and more basic psychological need support during their childhood. Finally, reading attitude was positively correlated with both reading identity and daily time spent reading. This may suggest that those who have a more positive attitude toward reading are more likely to have a stronger reading identity and are more likely to spend more time on daily leisure reading.

Table 2. *Descriptive Statistics for Study Variables*

Variable	# Items	Scales	Range of Responses	n	M	SD	Skew	Kurtosis
Demographics								
Age	1	Self-reported number.	18-29	214	24.61	2.61	-.37	- .23
Gender	1	1 = men; 2 = women	1-2	214	1.81	.39	-1.62	.62
Home Reading Environment	6	1 = strongly disagree; 5 = strongly agree	13-30	214	25.58	4.10	-.88	.28
Basic Psychological Need Satisfaction	9	1 = never; 5 = always	14-45	212	37.53	6.34	-1.14	.98
Reading Attitude	9	1 = strongly disagree; 4 = strongly agree	9-36	210	28.13	5.22	-.67	.53
Reading Identity	2	1 = strongly disagree; 4 = strongly agree	2-8	213	6.65	1.39	-1.00	.71
Daily Time Reading	1	1 = I don't read for enjoyment; 5 = More than 2 hours a day	1-5	212	2.43	1.03	.46	-.28

Table 3: *Correlation Matrix for Study Variables*

Variables	1	2	3	4	5	6
1. Age	–					
2. Gender	.13					
3. Home Reading Environment	.09	.11				
4. Basic Psychological Need Satisfaction	.13	.20**	.65**			
5. Reading Attitude	.14	.07	.41**	.25**		
6. Reading Identity	.02	.21**	.43**	.34**	.52**	
7. Daily Time Reading	.03	-.12	.16*	.02	.42**	.16*

*$p \leq 0.05$, ** $p \leq 0.01$

Main Analyses: Hierarchical Regression Analyses

We conducted three separate regression analyses to examine the retrospective impact of growing up in a home reading environment and having experienced basic psychological need satisfaction during childhood shared reading experiences on adults' current reading attitudes, reading identities and daily reading habits. In addition to normalcy, we tested for other assumptions necessary for regression analyses and found no concerns. Specifically, the Durbin-Watson statistic was 2.07 for Reading Attitude, 1.95 for Reading Identity, and 1.89 for Daily Reading Habit, suggesting that the independent error assumptions for each of the regressions had likely been met. In addition, the variance inflation factor (VIF) ranged from 1.013 to 1.849 and the tolerance statistics ranged from .54 to .99. These values all fell within the accepted cut-off ranges (Field, 2018), thus there was no indication of bias due to multicollinearity among the predictor variables.

The hierarchical regressions for Reading Attitudes, Reading Identity, and Daily Reading Habit resulted in adequately fitting models with a significant amount of variance in each criterion variable; $F(4, 203) = 10.73$, $p < .001$, $F(4, 206) = 14.27$, $p < .001$, and $F(4, 205) = 2.88$, $p = .02$ respectively.

Table 4: *Regression analyses*

Predictor	Reading Attitude			Reading Identity			Daily Reading Habit		
	Step 1	Step 2	Step 3	Step 1	Step 2	Step 3	Step 1	Step 2	Step 3
1. Age	.14	.10	.10	-.01	-.05	-.05	.05	.03	.04
2. Gender	.05	.01	.01	.21**	.17**	.16*	-.13	-.14*	-.13
3. Home Reading Environment		.39**	.43**		.42**	.37**		.17*	.25**
4. Basic Psychological Needs			-.05			.07			-.12

$*p \leq 0.05$, $**p \leq 0.01$

Table 4 reports the standardized β coefficients from the regression analyses for our Reading Attitude, Reading Identity, and Daily Reading Habit models. The results of the analyses indicate that a home reading environment had a significant positive impact on adults' current reading attitudes, $\beta = .43$, $p < 0.001$, adjusted $R^2 = .16$, reading identities, $\beta = .37$, $p < 0.001$, adjusted $R^2 = .20$, and daily reading habit, $\beta = .25$, $p = 0.006$, adjusted $R^2 = .04$. Contrary to our hypothesis, this direct effect persisted even after including basic psychological need satisfaction, which was unrelated to reading attitude, identity, or daily reading habit. Because there was no

significant association between basic psychological needs satisfaction and the criterion variables, there was no notable evidence of mediation.

Discussion and Implications

Although there are numerous empirical articles on the importance of various forms and quantities of reading exposure for fostering childhood reading achievement and reading habits, we addressed two gaps in the literature in the current study. Namely, we chose (1) to move beyond childhood reading and focus on the under-examined area of recreational reading in adulthood, and (2) to focus attention on the psychological impact of developing in a highly reading-appreciative home environment. Our overarching purpose for this study was to understand how the recalled childhood home reading environment and its associated psychological need satisfaction related to adults' leisure reading. We focus our discussion on three main results. First, we describe and examine the current reading habits of this sample. Second, we mention a few interesting differences between men and women. Third, we contrast the effect of a childhood home reading environment with the basic psychological needs that it met. Within this, we offer suggestions for why basic psychological needs were not related to any of the criterion measures of adult leisure reading. Finally, we conclude with limitations and directions for future research.

Current Reading Habits

To better comprehend participants' current reading habits, we asked them to report approximately how many of each of the six provided reading material types they had read for pleasure in the past month. These items were used to illustrate the ways in which participants chose to read for pleasure. Contrary to previous research on reading habits of this population

(e.g. BookNet, 2018a), almost all of our participants reported reading at least once in the past month, the majority of which reported reading more than one type of reading material.

Reading material preferences. Among the six reading material types, our participants appeared to prefer newspapers/news apps and blogs as their primary resources for leisure reading, with magazines falling into third place. These results are consistent with previous findings that adolescents and adults appear to favour online accessible resources for leisure reading activities (e.g. Chen, 2007; Cull, 2011; Notten, & Becker, 2017). Regarding the more traditional book-format reading materials, participants reported reading fiction books the most and audiobooks the least. Given the age and gender demographics of our sample, these results are consistent with previous empirical studies which have found that, internationally, women and younger adults tend to prefer fiction books over non-fiction books for leisure reading (e.g. Lee, 2018; Silber & Triplett, 2015; Throsby, Zwar, & Morgan, 2017). Researchers have also shown that adults tend to read audiobooks the least compared to print book or ebook formats (e.g. BookNet, 2018b; Lee, 2018), which is in accordance with our findings.

Overall, participants reported reading far fewer books than non-book reading materials while leisure reading. Numerous researchers have identified decreasing trends in book reading among younger adults (e.g. Huang, Capps, Blacklock, & Garza, 2014; Huang, Orellana, & Capps, 2016). While some researchers have attributed the increased time spent using smart devices (i.e. phones, tablets, etc.) over print books as indicative of the 'demise' of leisure reading (e.g. Twenge, Martin, & Spitzberg, 2018), this may not necessarily be an accurate representation of the current leisure reading habits of this population. Instead, technological advancements in the range and variability of reading formats available through digital media, along with individuals' familiarity and frequent use of digital media, may have led to a shift in how adults

read for enjoyment (e.g. Gee, 2007; Huang, Orellana, & Capps, 2016). Additional research focused on the connection between electronic media and leisure reading is needed in order to capture shifting perspectives.

Text-length and limited leisure time also significantly impact adult reading choices (Foasberg, 2014; Palani, 2012). Many Canadian adults between the ages of 18-29 are commencing and learning to navigate the next phase of their lives as they transition into adulthood. Transitions during this phase may include, but are not limited to, moving out (Statistics Canada, 2017), commencing postsecondary studies and/or entering full-time employment (Statistics Canada, 2019b), getting married/becoming common-law (Statistics, Canada, 2019c), becoming new parents (Provencher, Milan, Hallman, D'Aoust, 2018), etc. All of these factors encompass numerous competing demands for individuals' time and attention, and thereby act to reduce the overall amount of time that these adults may be able to dedicate to any form of leisure activity. Therefore, it may be necessary for future researchers to consider the proportion of time spent on leisure reading with regard to the overall quantity of time that adults are dedicating to leisure; rather than merely comparing leisure reading time in relation to other leisure activities (e.g. BookNet Canada, 2018a; Bureau of Labor Statistics, 2019).

Previous researchers have found that postsecondary students and professionals at this age frequently appear to prefer non-book and electronic reading resources for leisure reading, as these forms of reading materials tend to require shorter durations of sustained attention than traditional book and print reading formats (e.g. Foasberg, 2014; Palani, 2012). The choice to pursue reading formats that require less time commitments may be more indicative of the individual having to adapt their leisure reading habits and desires to fit within the context of their schedule availabilities. Since most books have longer text-lengths than non-book formats,

individuals who have very limited time to devote to reading may take longer to complete a book than those with more time. Therefore, the quantity of books that participants reported reading in one month may not reflect the number of times they chose to read from a book for enjoyment. Future researchers may want to consider examining how often individuals choose to dedicate any amount of leisure time to book reading, rather than focusing on the quantity of books read, to gain a more accurate estimate of their actual leisure reading of books.

Additionally, given the ease of accessibility of less traditional reading formats through the use of smart devices, it is unsurprising that individuals appear to use these types of reading materials more frequently than printed books. The popularity of smart devices and ebooks for leisure reading has also been rising in recent years (BookNet, 2018b) because these formats are more easily accessed and transported throughout the day (Marshall & Ruotolo, 2002). Cost has been identified as another significant factor in choice of leisure reading format, with many adults stating affordability as their primary reason for choosing digital content over printed books (Baron, Calixte & Havewala, 2017). Despite the observed favouritism for article and/or online reading formats among our sample population, it is also important to note that less than one quarter of participants had reported *exclusively* reading these non-book formats. More recently, companies have begun to develop book summary websites and apps to accommodate for the reported lack of time for leisure reading. For example, Blinkist© is a smart device app that provides users with highly condensed text and audio summaries of the key concepts of thousands of nonfiction books (www.blinkist.com). The concept behind this platform is that it enables users to continue to read and gain information from books while improving the efficiency and accessibility of the activity over traditional book reading methods. While some may argue that this reading method may diminish the overall experience of more traditional reading methods, it

does indicate that the interest in book reading remains, despite the difficulties that adults experience when attempting to fit it into their daily lives. Moving forward, researchers should differentiate between print and electronic-based reading formats, and to identify if individuals are choosing to interact with book summary media, as this information may better illustrate adult book reading practices in the 21st century.

Gender Differences

Gender was significantly correlated with two variables in our analyses. Among our predictor variables, gender was positively correlated with recalled basic psychological need (BPN) satisfaction at the zero-order level but was not significantly correlated with recalled home reading environment. Our results indicate that, while there were no significant differences in the level of reading-orientation that men and women recalled experiencing within their childhood home environment, there were significant differences in how need supportive they recalled their parents being during shared book reading. This suggests that, although men and women reported similar home environments, women felt that they experienced notably more BPN satisfaction when they read with their parents than men. Previous researchers have found that parents typically spend more time reading with girls, and encouraging their reading habits, than they do with boys (e.g. Baker & Milligan, 2016; Merga & Roni, 2018). Therefore, it is possible that the women within our sample may have received more direct parental support and encouragement during shared book reading than the men, but it is difficult to determine whether this was truly the case for our participants given the retrospective nature of the BPN questionnaire.

Additionally, gender was positively correlated with current reading identity at the zero-order level. These results persisted at each level of the regression analysis for reading identity. The persistent effect of gender on reading identity is widely established in the empirical

literature, where girls consistently demonstrate higher reading achievement and stronger reading identities than boys (e.g. Meece, Bower Glienke, & Burg, 2006). The effect of gender became less significant when BPN satisfaction was entered into the model for reading identity, which suggests that BPN support during parent-child shared-book reading may moderate the effect of gender on reading identity development. This result is in line with previous research into the positive impacts of childhood shared-book reading, and parental support and positivity, on child reading identity development/achievement (e.g. Alsup, 2006; Sénéchal, 2006). Children of parents who demonstrate higher levels of BPN support during shared-book reading tend to report higher levels of intrinsic reading motivation and tend to leisure read more frequently, which can help to foster more positive reading identity development (Wang & Guthrie, 2004; Weigel, Martin & Bennet, 2006). Therefore, higher levels of BPN support in childhood may help to buffer the effects of gender stereotypes on reading identity development. Future researchers may wish to conduct a longitudinal study to examine the effects of parent BPN support during shared book reading, on later reading identity development.

Childhood Home Reading Environment and Psychological Need Support

For our main analyses, we sought to examine the effect of the recalled childhood home reading environment on adults' current leisure reading attitudes, reading identities, and daily leisure reading habits. Because past empirical literature had identified several BPN-related benefits from developing within a highly reading-oriented home environment (e.g. Baker & Scher, 2002; Sawyer, Cycyk, Sandilos, & Hammer, 2018; Weigel, Martin, & Bennet, 2006), we had hypothesized that the childhood home reading environment could act to support BPN satisfaction through parent-child reading related interactions, such as shared-book reading.

The childhood home reading environment was significantly positively correlated with all three criterion variables, such that higher levels of recalled reading-orientation and reading-positivity/valuation in the home environment was linked to more positive current reading attitudes and cognitions, greater confidence in self-reported reading ability, and more time spent on daily leisure reading. Childhood home reading environment was positively associated with each of the criterion variables, at the zero-order level. These relationships persisted in each of the regression analyses, even when controlling for age and gender. This illustrates that adults who reported growing up in a more reading-oriented home environment felt more positively toward reading, felt more competent in their reading abilities, and spent more time reading for enjoyment regardless of their age or gender.

These results validate the large body of previous research on the home reading environment that demonstrates how individuals' reading attitudes, reading identities, and leisure reading habits are related to childhood reading-related experiences (e.g. Baker Scheer, Mackler, 1997; Mol & Bus, 2011). Our results extend the previous home reading environment literature by providing novel insight into the continued effects of this environment beyond adolescence. Furthermore, our findings suggest that valuing, promoting, supporting and facilitating reading experiences during childhood can have implications for later reading-related cognitions and behaviours. Early positive experiences with reading in the home, and subsequent positive associations and interactions with reading, may foster reading-related parenting practices and the subsequent reading experiences of future generations (Sawyer, Cycyk, Sandilos, & Hammer, 2018; Swain, Cara, & Mallows, 2016).

BPN satisfaction was significantly correlated with reading attitude and reading identity at the zero-order level but, contrary to our predictions, there were no significant effects of BPN

observed in the regression analyses, after entering age, gender and home reading environment. We had chosen to use shared book reading as the context for need satisfaction because it had been included within the majority of previous conceptualizations of the home reading/literacy environment (Boerma, Mol & Jolles, 2017; Hamilton, Haylou-Thomas, Hulme, & Snowling, 2016). Shared book reading had frequently appeared to be positively associated with various reading skills (e.g. Sénéchal, 2006), reading attitudes and motivation (e.g. Baker, Scher, & Mackler, 1997), and positive parent-child interactions (Ganotice, Downing, Mak, Chan, & Lee, 2017). Therefore, we had expected BPN supportive interactions during this experience to foster intrinsic reading motivation, which would, in turn, underlie the effects of the childhood home reading environment. However, there was no evidence that suggested that BPN support during shared book reading mediated the relationship between childhood home reading environment and later reading attitudes, identities and reading habits. In other words, the positive impact of growing up in a reading-oriented home environment on later reading behaviours and cognitions, could not be attributed to the degree of BPN support that participants had recalled experiencing during shared book reading with their parents.

In explaining these unexpected results, we offer two ideas. First, the restriction of the measurement of BPN satisfaction to shared book reading neglected to account for other ways in which BPN satisfaction may have occurred within the home reading environment. While some individuals have referred specifically to recollections of their childhood shared book reading experiences as motivators behind their current reading practices (e.g. Sawyer, Cycyk, Sandilos, & Hammer, 2018; Swain, Cara, & Mallows, 2016); it is possible that those who did not recall frequently reading with their parents may have participated in several other reading related BPN supportive experiences with their parents during childhood. Talking about books with their

parents, receiving praise and encouragement for their reading pursuits, choice of reading materials, listening to audiobooks together, etc. may have contributed to BPN satisfaction and helped to foster intrinsic reading motivation; however, none of these sources were measured in our study. In fact, many researchers have conceptualized positive home reading interactions more broadly (e.g. Baker & Scher, 2002; Merga & Moon, 2016). Several studies have found that the observation of parental leisure reading habits and enthusiasm (e.g. Stephens, Erberber, Tsokodayi, Kroeger, & Ferguson, 2015), parent-child reading-related discussions (e.g. Ganotice, Downing, Mak, Chan, & Lee, 2017), and the facilitation of access to reading materials in conjunction with shared-book reading (e.g. Gottfried, Schlackman, Gottfried, & Boutin-Martinez, 2015) are all associated with positive reading outcomes. Therefore, although the results of our study did not show BPN support as playing a mediational role in the relationship between the childhood home environment and later reading attitudes, identities, and habits, this does not mean that BPN support may not contribute to adults' reading practices and cognitions in other ways. It should also be noted that although we sought to examine the role of BPN satisfaction as an intrinsic reading motivation supportive factor on later reading, we neglected to assess participants' current levels of intrinsic reading motivation. Future studies should seek to separately examine the quality and degree of BPN support, of parent-child reading related interactions, the level of reading-orientation in the home environment (e.g. quantity of reading materials in the home), and the degree of later intrinsic reading motivation. As leisure reading benefits have been shown to continue across the lifespan (e.g. Vemuri & Mormino, 2013), the establishment, and promotion, of BPN supportive parenting practices in relation to children's reading experiences may be important in fostering intrinsic motivation for later leisure reading practices in adulthood.

Second, it is also important to take into consideration that the measures of home reading environment and BPN were significantly positively correlated at the zero-order level. Therefore, it is possible that the home reading environment items may have overlapped too much with BPN support within their childhood home reading environment. Upon re-examination of our researcher-developed home reading environment questionnaire, we identified two items that appeared to be closely related to experiencing autonomy (i.e. "My parents let me choose what to read") and relatedness (i.e. "Reading was viewed as something fun in my house") aspects of BPN support within the home reading environment (Appendix B). We chose to develop our own items for measuring the recalled reading orientation of the home environment as we had been unable to find a previously developed measure that adequately captured our interpretation of a reading-oriented home environment. Unfortunately, in doing so we failed to identify the overlap in measured BPN support in our predictor variable items. Therefore, despite achieving adequate reliability results for both measures, we were unable to separate the influence of BPN support from the overall experience of a reading-oriented home environment. This may explain why BPN did not appear to significantly affect current reading attitudes, reading identities, and reading habits over and above the home reading environment. Perhaps a "purer" measure of home reading environment would have allowed BPN to serve the mediational role we had expected. Future studies should take care to separate the psychological (e.g. "reading was viewed as something fun…") and environmental (e.g. "there were lots of books…") aspects of the home reading environment, to better examine the influence of each of these aspects on reading cognitions and habits.

Nonetheless, this study was the first to explore the associations of childhood reading experiences into adulthood. Despite the lack of empirical research into the psychological factors

that influence adult reading beliefs and habits, and the decreases in more traditional reading material usage, our findings illustrate that most adults between the ages of 18-29 continue to read for enjoyment and the impact that early reading experiences may have on the establishment of positive reading-related cognitions and recreational reading practices in adults.

Limitations and Directions for Future Research

The results of the current study should be interpreted with consideration of the following three limitations: First, the participants in our study represent a convenience sample of Canadian adults, recruited through friends-of-friends via social media platforms, and are predominately Caucasian. As such, the results of our study cannot be generalized to other geographic locations and ethnicities. Future studies may wish to examine potential differences in these associations across countries and ethnic groups, particularly among those who may differ in how reading is promoted, valued and conceptualized. Additionally, while it was advantageous to recruit a large sample, which included both postsecondary and non-postsecondary participants, the use of social media advertisement and an internet-based survey method meant that our sample was restricted to those with an internet-accessible device. These factors would have greatly limited the variability of participants, as those who did not have access or who do not use social media would not have had the opportunity to participate. Future research might explore a wider range of sampling methods to improve the generalizability of the results.

Second, while obtaining the quantity of reading materials read is consistent with past research on adult reading practices (e.g. Foasberg, 2014; Palani, 2012), this may not have accurately reflected how often individuals chose to read each type of material. It may be that some individuals may require more time to finish certain types of reading materials, such as a book, depending on the text-length, the availability of leisure time, the material's portability, etc.

Therefore, while the quantity of materials read does provide an estimate of leisure reading habits and format preferences, it may not illustrate how often an individual chose to take time to leisure read. The list of reading materials also did not identify whether participants were choosing to read books using print or ebook formats. This information could act to illuminate whether the low levels of reported book reading could be associated with the type or format of the reading material. As a result, future studies may want to incorporate the frequency of time spent reading each material and may also seek to differentiate between technology-based and print-based reading material types, to gain more comprehensive understanding of adult reading habits. It should also be noted that almost all participants reported that they had read at least one type of reading material in the past month, which was inconsistent with previous adult reading habit research (e.g. BookNet, 2018a). Due to the self-selected nature of our recruitment method, caution may be warranted when interpreting these results. It is possible that many of those who chose to complete our survey were more inclined toward reading than the average population. Future studies may want to embed adult reading habit questions within a broader topic to decrease bias due to higher levels of reading interest.

Third, the final limitation we will address for the current study is the retrospective nature of the measures for our predictor variables. Although asking participants to report on their childhood reading-related experiences was necessary for the purposes of our study, the accuracy of participants' recollections of the level of need support that they had experienced during childhood should also be considered with some caution. Many participants would have had to think back 10-15+ years to respond to the retrospective items and may, therefore, have had more difficulty accurately recalling specific details of these childhood experiences. Future research should seek to examine the longitudinal impact of a reading-oriented home environment and

parental BPN support with participants who are currently children, and who are experiencing these factors first-hand.

Conclusion

This study provides new insight into the effects of the home reading environment on later reading attitudes, identities and habits. Although the childhood home reading environment has been previously associated with gains in numerous aspects of reading development (e.g. Gottfried, Schlackman, Gottfried, & Boutin-Martinez, 2015), the psychological experience of the home reading environment, and the duration of its influence beyond the childhood years, had been largely understudied. The results of this study indicate that providing access to reading materials and reinforcing the act of reading as something positive and valuable may significantly contribute to the development and reinforcement of positive reading attitudes, identities and habits into adulthood. Although our results did not directly support our hypothesis that the psychological factors at play within the home reading environment could be identified as the BPN satisfaction that individuals may have experienced during parent-child reading interactions, the role of BPN satisfaction cannot be completely discredited. The identified overlap between our two predictor variables indicates that BPN supportive interactions may occur more broadly with the home reading environment, and not exclusively within shared book reading interactions. The results of this study add to the current body of literature on the benefits and impacts of reading exposure and fostering positive reading-related interactions in childhood. These insights may provide valuable information for inclusion in educational interventions and for education for parents to help to support the establishment of later leisure reading practices and positive associations with reading into adulthood.

References

Alsup J. (2006). *Teacher identity discourses: Negotiating personal and professional spaces*. Mahwah, NJ: Lawrence Erlbaum

Annable, J. (2017). Reading habits of adults: What drives the choice to read or not read?. (Master Thesis). Department of Education and Human Development. The College at Brockport: State University of New York, USA. Retrieved from: http://digitalcommons.brockport.edu/ehd_theses/765

Atkinson, R., & Flint, J. (2001). Accessing hidden and hard-to-reach populations: Snowball research strategies. *Social Research Update, 33*, 1-4. Retrieved from: https://www.researchgate.net/publication/46214232_Accessing_Hidden_and_Hard-to-Reach_Populations_Snowball_Research_Strategies

Aunola, K., Stattin, H., & Nurmi, J. (2000). Parenting styles and adolescents' achievement strategies. *Journal of Adolescence, 23*(2), 205-222. doi:10.1006/jado.2000.0308

Aunola, K., Viljaranta, J., Lehtinen, E., & Nurmi, J. (2013). The role of maternal support of competence, autonomy and relatedness in children's interests and mastery orientation. *Learning and Individual Differences, 25*, 171-177. doi:10.1016/j.lindif.2013.02.002

Aznar, A., & Tenenbaum, H. R. (2015). Gender and age differences in parent–child emotion talk. *British Journal of Developmental Psychology, 33*(1), 148-155. doi:10.1111/bjdp.12069

Baker, L., & Scher, D. (1997). Home and family influences on motivations for reading. *Educational Psychologist, 32*(2), 69-82. doi: 10.1207/s15326985ep3202_2

Baker, L., & Scher, D. (2002). Beginning readers' motivation for reading in relation to parental beliefs and home reading experiences. *Reading Psychology, 23*(4), 239-269. doi:10.1080/713775283

Baker, M., & Milligan, K. (2016). Boy-girl differences in parental time investments: Evidence from three countries. *Journal of Human Capital, 10*(4), 399-441. doi:10.1086/688899

Becker, M. & McElvany, N. (2018). The interplay of gender and social background: A longitudinal study of interaction effects in reading attitudes and behaviour. *British Journal of Educational Psychology, 88*(4), pp. 529-549. doi: 10.1111/bjep.12199

Bindman, S. W., Pomerantz, E. M., & Roisman, G. I. (2015). Do children's executive functions account for associations between early autonomy-supportive parenting and achievement through high school?. *Journal of educational psychology, 107*(3), 756–770. doi:10.1037/edu0000017

Boerma, I. E., Mol, S. E., & Jolles, J. (2017). The role of home literacy environment, mentalizing, expressive verbal ability, and print exposure in third and fourth graders' reading comprehension. *Scientific Studies of Reading, 21*(3), 179-193. doi:10.1080/10888438.2016.1277727

BookNet (2018a, April 26). What are Canadians up to in their free time? *BookNet Canada*. Retrieved from: https://www.booknetcanada.ca/blog/2018/4/25/what-are-canadians-up-to-in-their-free-time

BookNet (2018b, April 27). Canadians and their reading habits. *BookNet Canada*. Retrieved from: https://www.booknetcanada.ca/blog/2018/4/27/canadians-and-their-reading-habits

Boschung, S. et al. (1999). Exploring literacy: How teachers and parents can collaborate to support early literacy. *British Columbia Teachers' Federation Research*. Retrieved from:

https://bctf.ca/uploadedFiles/Public/Issues/InclusiveEd/TeachingToDiversity/Projects/Ex

ploring%20Literacy.pdf

Bracken, S. S., & Fischel, J. E. (2008). Family reading behavior and early literacy skills in

preschool children from low-income backgrounds. *Early Education and Development,*

19(1), 45-67. doi:10.1080/10409280701838835

Bureau of Labor Statistics. (2019). *American time use survey*. Retrieved from:

https://www.bls.gov/tus/#charts

Calvo, T. G., Cervelló, E., Jiménez, R., Iglesias, D., & Murcia, J. A. (2010). Using self-

determination theory to explain sport persistence and dropout in adolescent athletes. *The*

Spanish Journal of Psychology, 13(2), 677-684. doi: 10.1017/S1138741600002341

Canadian Council on Learning. (2009). Why boys don't like to read: Gender differences in

reading achievement. *Lessons in Learning*. Retrieved from:

https://files.eric.ed.gov/fulltext/ED519285.pdf

Cassidy, J., Valadez, C. M., Garrett, S. D., & Barrera, E. S. (2010). Adolescent and adult

literacy: What's hot, what's not. *Journal of Adolescent & Adult Literacy, 53*(6), 448-456.

doi:10.1598/JAAL.53.6.1

Chazan-Cohen, R., Raikes, H., Brooks-Gunn, J., Ayoub, C., Pan, B. A., Kisker, E. E., . . .

Fuligni, A. S. (2009). Low-income children's school readiness: Parent contributions over

the first five years. *Early Education & Development, 20*(6), 958–977.

doi:10.1080/10409280903362402

Chen, S. (2007). Extracurricular reading habits of college students in Taiwan: Findings from two

national surveys. *Journal of Adolescent & Adult Literacy, 50*(8), 642-653.

doi:10.1598/JAAL.50.8.3

Collins, C, Moles, O, & Cross, M. (1982). *The home-school connection: Selected partnership programs in large cities.* Boston, MA: Institute for Responsive Education.

Cox, K. E., & Guthrie, J. T. (2001). Motivational and cognitive contributions to students' amount of reading. *Contemporary Educational Psychology, 26*(1), 116-131. doi:10.1006/ceps.1999.1044

Creswell, J. W. (2015). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research* (5th ed.)*.* Upper Saddle River, New Jersey: Pearson.

Cull, B. (2011). Reading revolutions: Online digital text and implications for reading in academe. *First Monday, 16*(6). doi:10.5210/fm.v16i6.3340

De Naeghel, J., Valcke, M., De Meyer, I. Warlop, N., van Braak, J. & Van Keer, H. (2014). The roles of teacher behaviour in adolescents' intrinsic reading motivation. *Reading and Writing, 27*(9), 1547-1565. doi: 10.1007/s11145-014-9506-3

Department of Education (2012). *Research Evidence on Reading for Pleasure*. London: Gov.UK. Retrieved from: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_ data/file/284286/reading_for_pleasure.pdf

Diaconu-Gherasim, L., & Măirean, C. (2016). Perception of parenting styles and academic achievement: The mediating role of goal orientations. *Learning and Individual Differences, 49*, 378-385. doi:10.1016/j.lindif.2016.06.026

Duff, D., Tomblin, J. B., & Catts, H. (2015). The influence of reading on vocabulary growth: A case for a matthew effect. *Journal of Speech, Language, and Hearing Research, 58*(3), 853–864. doi:10.1044/2015_JSLHR-L-13-0310

Field, A. (2018). Exploratory factor analysis. In J. Searmen (Eds.), *Discovering Statistics Using IBM SPSS Statistics – 5th Edition* (pp. 569-610). Thousand Oaks, California:SAGE Publications, Inc.

Finney, S. J., & DiStefano, C. (2013). Nonnormal and categorical data in structural equation models. In G. R. Hancock & R. O. Mueller (Eds.), *A second course in structural equation modeling* (2nd ed., pp. 439–492). Charlotte, NC: Information Age.

Frijters, J., Barron, R., & Brunello, M. (2000). Direct and mediated influences of home literacy and literacy interest on prereaders' oral vocabulary and early written language skill. *Journal of Educational Psychology, 92*, 466–477. doi:10.1037/0022-0663.92.3.466

Ganotice, F. A., Downing, K., Mak, T., Chan, B., & Lee, W. Y. (2017). Enhancing parent-child relationship through dialogic reading. *Educational Studies, 43*(1), 51-66. doi:10.1080/03055698.2016.1238340

Gee, J.P. (2007). *Social linguistics and literacies: Ideology in discourse*. London, UK: Rutledge.

Gordon, M. S., & Cui, M. (2012). The effect of School-Specific parenting processes on academic achievement in adolescence and young adulthood. *Family Relations, 61*(5), 728-741. doi:10.1111/j.1741-3729.2012.00733.x

Gottfried, A. W., Schlackman, J., Gottfried, A. E., & Boutin-Martinez, A. S. (2015). Parental provision of early literacy environment as related to reading and educational outcomes across the academic lifespan. *Parenting, 15*(1), 24–38. doi:10.1080/15295192.2015.992736

Hamilton, L. G., Hayiou-Thomas, M. E., Hulme, C., & Snowling, M. J. (2016). The home literacy environment as a predictor of the early literacy development of children at

family-risk of dyslexia. *Scientific Studies of Reading, 20*(5), 401-419.

doi:10.1080/10888438.2016.1213266

Hidi, S (2000) An interested researcher's perspective: The effects of extrinsic and intrinsic

factors on motivation. In C. Sansome and J.M Harackiewicz (Eds) *Intrinsic and Extrinsic*

Motivation: The Search for Optimal Motivation and Performance. NY: Academic Press.

Howard, V. (2011). The importance of pleasure reading in the lives of young teens: Self-

identification, self-construction and self-awareness. *Journal of Librarianship and*

Information Science, 43(1), 46-55. doi:10.1177/0961000610390992

Huang, S.H., Capps, M., Blacklock, J., & Garza, M. (2014). Reading habits of college students in

the United States. *Reading Psychology, 35*(5), 437–467.

doi:10.1080/02702711.2012.739593

Huang, S., Orellana, P., & Capps, M. (2016). U.S. and Chilean college students' reading

practices: A cross-cultural perspective. *Reading Research Quarterly, 51*(4), 455–471

doi:10.1002/rrq.144

IBM Corp. (2016). *IBM SPSS Statistics for Windows, Version 24.0*. Armonk, NY: IBM Corp.

Lavrakas, P. J. (2008). *Encyclopedia of survey research methods.* Thousand Oaks, CA: SAGE

Publications Ltd. doi: 10.4135/9781412963947

Lee, A. (2018). Physical and digital reading habits of adult Singaporeans. *Journal of Library*

Administration, 58(6), 629-643, doi:10.1080/01930826.2018.1491189

Levy, B. A., Gong, Z., Hessels, S., Evans, M. A., & Jared, D. (2006). Understanding print: Early

reading development and the contributions of home literacy experiences. *Journal of*

Experimental Child Psychology, 93(1), 63–93. doi:10.1016/j.jecp.2005.07.003

Logan, S., & Johnston, R. (2009). Gender differences in reading ability and attitudes: Examining where these differences lie. *Journal of Research in Reading, 32*(2), 199-214. doi:10.1111/j.1467-9817.2008.01389.x

Lopes, M.A., Ferrioli, E., Nakano, E.Y., Litvoc, J. & Bottino, C.M. (2012). High prevalence of dementia in a community-based survey of older people from Brazil: Association with intellectual activity rather than education. *Journal of Alzheimer's Disease: JAD*, *32*(2), 307–316. doi: 10.3233/JAD-2012-120847

Malanchini, M., Voronin, I., Plomin, R., Zhe, W., Schenker, V. J., Petrill, S. A., & Kovas, Y. (2017). Reading self-perceived ability, enjoyment and achievement: A genetically informative study of their reciprocal links over time. *Developmental Psychology*, *53*(4), 698-712. doi:10.1037/dev0000209

Mancini, A.L., Monfardini, C. & Pasqua, S. (2017). Is a good example the best sermon? Children's imitation of parental reading. *Review of Economics of the Household, 15*(3) 965-993. doi:10.1007/s11150-015-9287-8

Marshall, C. C., & Ruotolo, C. (2002). Reading-in-the-small: A study of reading on small form factor devices. In: *Proceedings of the 2nd ACM/IEEE-CS joint conference on Digital libraries* (JCDL '02), pp. 55–64. New York: ACM.

McCreary, J. J. (2017). *Empathy, reading, and gender relationships* (Doctoral dissertation). Available from ProQuest Dissertations & Theses Global database. (Order No. 10278462).

McGeown, S. P., Duncan, L. G., Griffiths, Y. M., & Stothard, S. E. (2015). Exploring the relationship between adolescent's reading skills, reading motivation and reading habits. *Reading and Writing, 28*(4), 545-569. doi:10.1007/s11145-014-9537-9

McGeown, S., Goodwin, H., Henderson, N., & Wright, P. (2012). Gender differences in reading

    motivation: Does sex or gender identity provide a better account? *Journal of Research in*

    Reading, 35(3), 328-336. doi:10.1111/j.1467-9817.2010.01481.x

Merga, M. K. (2014). Are Western Australian adolescents keen book readers? *Australian*

    Journal of Language and Literacy. 37(3), 161–170. Retrieved from:

    https://www.researchgate.net/publication/269576698_Are_Western_Australian_adolesce

    nts_keen_book_readers

Merga, M. K. (2017). What motivates avid readers to maintain a regular reading habit in

    adulthood? *The Australian Journal of Language and Literacy, 40*(2), 146-156. Retrieved

    from: http://www.alea.edu.au/documenta/item/1567

Merga, M. K. & Moon, B. (2016). The impact of social influences on high school students'

    recreational reading. *The High School Journal 99*(2), 122-140.

    doi:10.1353/hsj.2016.0004

Merga, M. K., & Roni, S. M. (2018). Parents as social influences encouraging book reading:

    Research directions for librarians' literacy advocacy. *Journal of Library Administration,*

    58(7), 674–697. https://doi.org/10.1080/01930826.2018.1514841

Mol, S. E., & Bus, A. G. (2011). To read or not to read: A meta-analysis of print exposure from

    infancy to early adulthood. *Psychological Bulletin, 137*(2), 267-296.

    doi:10.1037/a0021890

Morgan, P. L., & Fuchs, D. (2007). Is there a bidirectional relationship between children's

    reading skills and reading motivation? *Exceptional Children, 73*(2), 165-183.

    doi:10.1177/001440290707300203

Morgan, P. L., Fuchs, D., Compton, D. L., Corday, D. S., & Fuchs, L. S. (2008). Does early

reading failure decrease children's reading motivation. *Journal of Learning Disabilities,*

41, 387–404. doi: 10.1177/0022219408321112

Moyser, M., & Burlock, A. (2018). Time use: Total work burden, unpaid work, and leisure.

Women in Canada: A Gender-based Statistical Report (7th ed.). Retrieved from:

https://www150.statcan.gc.ca/n1/en/pub/89-503-x/2015001/article/54931-

eng.pdf?st=m7MS5abq

Nathanson, S., Pruslow, J., & Levitt, R. (2008). The reading habits and literacy attitudes of

inservice and prospective teachers. *Journal of Teacher Education, 59*(4), 313-321.

doi:10.1177/0022487108321685

Niklas, F., Tayler, C., & Schneider, W. (2015). Home-based literacy activities and children's

cognitive outcomes: A comparison between Australia and Germany. *International*

Journal of Educational Research, 71, 75–85. doi:10.1016/j.ijer.2015.04.001

Notten, N., & Becker, B. (2017). Early home literacy and adolescents' online reading behavior in

comparative perspective. *International journal of comparative sociology, 58*(6), 475–493.

doi:10.1177/0020715217735362

OECD. (2010). *PISA 2009 Results: Executive Summary*. Retrieved from:

https://www.oecd.org/pisa/pisaproducts/46619703.pdf

Oldfather, P., & Wigfield, A. (1996). Children's motivations for literacy learning. In L. Baker, P.

Afflerbach, & D. Reinking (Eds.), *Developing engaged readers in school and home*

communities (pp. 89–113). Hillsdale, NJ: Erlbaum.

Ortlieb, E., Grandstaff-Beckers, G., & Cheek, E.H., Jr. (2012). Fostering reading excellence at every level of school through reading clinics. *The Clearing House, 85*(1), 1-6. doi:10.1080/00098655.2011.601356

Palani, K. K. (2012). Promoting reading habits and creating literate society. *International Reference Research Journal, 3*(2), 90-94. Retrieved from: https://pdfs.semanticscholar.org/e57a/53d3465e19fd2e67a9c45c6f30a2fca0bfb0.pdfatJune2018

Parault, S. J., & Williams, H. M. (2009). Reading motivation, reading amount, and text comprehension in deaf and hearing adults. *Journal of Deaf Studies and Deaf Education, 15*(2), 120-135. doi:10.1093/deafed/enp031

Park, H. (2008). Home literacy environments and children's reading performance: A comparative study of 25 countries. *Educational Research and Evaluation, 14*(6), 489-505. doi:10.1080/13803610802576734

Pomerantz, E. M., Grolnick, W. S., & Price, C. E. (2005). The Role of Parents in How Children Approach Achievement: A Dynamic Process Perspective. In A. J. Elliot & C. S. Dweck (Eds.), *Handbook of competence and motivation* (pp. 229-278). New York, NY, US: Guilford Publications.

Provencher, C., Milan, A., Hallman, S., & D'Aoust, C. (2018). Fertility: Overview, 2012 to 2016. *Report on the Demographic Situation in Canada* (Catalogue number 91-209-X). Retrieved from the Statistics Canada website: https://www150.statcan.gc.ca/n1/en/pub/91-209-x/2018001/article/54956-eng.pdf?st=q_hmaXiM

Rodrigo, V., Greenberg, D., & Segal, D. (2014). Changes in reading habits by low literate adults through extensive reading. *Reading in a Foreign Language, 26*(1), 73-91. Retrieved from:http://login.ezproxy.library.ualberta.ca/login?url=https://search.proquest.com/docview/1705666485?accountid=14474

Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist, 55*(1), 68-78. doi: 10.1037/0003-066X.55.1.68

Sawyer, B. E., Cycyk, L. M., Sandilos, L. E., & Hammer, C. S. (2018). 'So many books they don't even all fit on the bookshelf': An examination of low-income mothers' home literacy practices, beliefs and influencing factors. *Journal of Early Childhood Literacy, 18*(3), 338–372. doi:10.1177/1468798416667542

Sénéchal, M. (2006). Testing the home literacy model: Parent involvement in kindergarten is differentially related to grade 4 reading comprehension, fluency, spelling, and reading for pleasure. *Scientific Studies of Reading, 10*(1), 59-87. doi:10.1207/s1532799xssr1001_4

Sénéchal, M., Pagan, S., Lever, R., & Ouellette, G. P. (2008). Relations among the frequency of shared reading and 4- year-old children's vocabulary, morphological and syntax comprehension, and narrative skills. *Early Education and Development, 19*(1), 27–44. doi:0.1007/s11145-011-9310-2

Scarborough, H.S., & Dobrich, W. (1994). On the efficacy of reading to preschoolers. *Developmental Review, 14*(1), 245–302. doi: 10.1006/drev.1994.1010

Scher, D. and Baker, L. (1994). *Attitudes towards reading and children's home literacy environment*. (Unpublished master's thesis), University of Maryland, College Park, Maryland. Retrieved from: http://files.eric.ed.gov/fulltext/ED418767.pdf

Schiefele, U., Schaffner, E., Moller, J., Wigfield, A., Nollen. S., & Baker, L. (2012). Dimensions of reading motivation and their relation to reading behaviour and competence. *Reading Research Quarterly, 47*(4), 427-463. doi: 10.1002/RRQ.030

Schunk, D.H., Pintrich, P.R., & Meece, J.L. (2008). *Motivation in education: Theory, research, and applications*. Upper Saddle River, NJ: Pearson/Merrill Prentice Hall.

Silber, B., & Triplett, T. (2015). A decade of arts engagement: Findings from the survey of public participation in the arts, 2002-2012. Research Report no. 58, *National Endowment for the Arts*. Retrieved from: https://www.arts.gov/sites/default/files/2012-sppa-jan2015-rev.pdf [accessed June 26, 2019].

Smith, M. C. (1990). Reading habits and attitudes of adults at different levels of education and occupation. *Reading Research and Instruction, 30*(1), 50-58. doi:10.1080/19388079009558033

Smith, M., & Wilhelm, J. D. (2004). "I just like being good at it": The importance of competence in the literate lives of young men. *Journal of Adolescent & Adult Literacy, 47*(6), 454-461. Retrieved from: https://www.jstor.org/stable/40018721

Statistics Canada. (2017). *Young adults living with their parents in Canada, 2016 census*. (Catalogue number 98-200-X2016008). Retrieved from Statistics Canada website: https://www12.statcan.gc.ca/census-recensement/2016/as-sa/98-200-x/2016008/98-200-x2016008-eng.pdf

Statistics Canada. (2019a). *Daily average time spent in hours on various activities by age group and sex, 15 years and over, Canada and provinces* [Table 45-10-0014-01]. Retrieved from: https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=4510001401

Statistics Canada. (2019b). *Population, aged 15 to 29, non-students and students by type of institution attended, age and labour force status* [Table 37-10-0107-01]. Retrieved from: https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=3710010701

Statistics Canada. (2019c). *Estimates of population as of July 1st, by marital status or legal marital status, age and sex* [Table 17-10-0060-01]. Retrieved from: https://www150.statcan.gc.ca/t1/tbl1/en/cv.action?pid=1710006001

Stephens, M., Erberber, E., Tsokodayi, Y., Kroeger, T., & Ferguson, S. (2015). Is reading contagious? Examining parents' and children's reading attitudes and behaviors. [Policy Brief No. 9]. *International Association for the Evaluation of Educational Achievement*. Retrieved from: https://files.eric.ed.gov/fulltext/ED574312.pdf

Sullivan, A., & Brown, M. (2013). *Social inequalities in cognitive scores at age 16: The role of reading*. London: Centre for Longitudinal Studies. Retrieved from: http://discovery.ucl.ac.uk/1473708/

Swain, J., Cara, O., & Mallows, D. (2017). 'We occasionally miss a bath but we never miss stories': Fathers reading to their young children in the home setting. *Journal of Early Childhood Literacy, 17*(2), 176–202. doi:10.1177/1468798415626635

Taylor, M. (2011) Life course outcomes of cultural practices - Instrumental benefits? *Paper presented at the annual meeting of the American Sociological Association Annual Meeting, Caesar's Palace, Las Vegas, NV Online*.

Tenenbaum, H. R., & Leaper, C. (2003). Parent-child conversations about science: The socialization of gender inequities? *Developmental Psychology, 39*(1), 34-47. doi:10.1037/0012-1649.39.1.34

Throsby, D., Zwar, J., & Morgan, C. (2017). *Australian Book Readers: Survey Method and Results*. North Ryde: Department of Economics, Macquarie University. Retrieved from: https://www.australiacouncil.gov.au/workspace/uploads/files/australian-book-readers-24-05-592762e0c3ade.pdf

Toepoel, V. (2017). Online survey design. In Fielding, N., Lee, R., & Blank, G. *The SAGE Handbook of online research methods* (pp. 184-202). London: SAGE Publications Ltd doi: 10.4135/9781473957992

Twenge, J. M., Martin, G. N., & Spitzberg, B. H. (2018). Trends in U.S. adolescents' media use, 1976–2016: The rise of digital media, the decline of TV, and the (near) demise of print. *Psychology of Popular Media Culture*. Advance online publication. doi:10.1037/ppm0000203

Vemuri, P. & Mormino, E.C. (2013). Cognitively stimulating activities to keep dementia at bay. *Neurology, 81*(4), 308–309. doi: 10.1212/WNL.0b013e31829c5f05

Wang, J. H. Y., & Guthrie, J. T. (2004). Modeling the effects of intrinsic motivation, extrinsic motivation, amount of reading, and past reading achievement on text comprehension between U.S. and Chinese students. *Reading Research Quarterly, 39*, 162-184. doi:10.1598/RRQ.39.2.2

Weigel, D. J., Martin, S. S., & Bennett, K. K. (2006). Mothers' literacy beliefs: Connections with the home literacy environment and pre-school children's literacy development. *Journal of Early Childhood Literacy, 6*(2), 191-211. doi: 10.1177/1468798406066444

Whitten, C., Labby, S., & Sullivan, S. (2016). The impact of pleasure reading on academic success. *The Journal of Multidisciplinary Graduate Research, 2*(4), 48-64. Retrieved

from: https://www.shsu.edu/academics/education/journal-of-multidisciplinary-graduate-research/documents/2016/WhittenJournalFinal.pdf

Wilhelm, J. D., & Smith, M. W. (2016). The power of pleasure reading: What we can learn from the secret reading lives of teens. *English Journal, 105*(6), 25-30. Retrieved from http://login.ezproxy.library.ualberta.ca/login?url=https://search.proquest.com/docview/1808331038?accountid=14474

Wilson, R.S., Boyle, P.A., Yu, L., Barnes, L.L., Schneider, J.A. & Bennett, D.A. (2013). Life-span cognitive activity, neuropathologic burden, and cognitive aging. *Neurology, 81*(4), 314–321. doi: 10.1212/WNL.0b013e31829c5e8a

Yarosz, D. J., & Barnett, W. S. (2001). Who reads to young children?: Identifying predictors of family reading activities. *Reading Psychology, 22*(1), 67-81. doi:10.1080/02702710121153

Appendix A

Information Letter
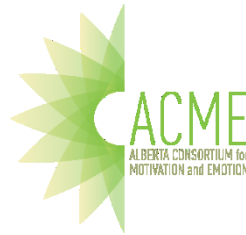
Study Title: The Impact of Body Image and Home Literacy on Current Academic and Non-Academic Practices and Emotions

Principal Investigator: Dr. Lia Daniels, lia1@ualberta.ca, 780-492-4761

Research Coordinators: Devon Chazan, chazan@ualberta.ca; Julia Farmer, jfarmer@ualberta.ca

Introduction: The current research is designed to help two Masters' students in the Alberta Consortium for Motivation and Emotion research group collect their thesis data.

The purpose of this study is to collect quantitative data related to two different research aims. The first research aim revolves around the feelings and perceptions one holds about their body as well as its relation to various achievement outcomes. The second research aim focuses on past and present pleasure reading habits.

What will you be asked to do: Participation is completely voluntary. To participate in this study, you need to complete this online survey. It should take no more than 10 minutes of your time. Your consent is implied by completing the survey. Once you complete the survey your information cannot be removed, as the survey does not include any identifying information. However, participation can be withdrawn at any time during the survey until the survey is virtually submitted. To thank you for your participation in our research, at the completion of the survey, we will donate $1 to your choice of a charity; either one related to promoting reading abilities or to Edmonton's chapter of the Eating Disorder Support Network of Alberta.

What are the benefits/risks: Potential benefits include participants' opportunity to reflect upon their own practices and emotions, however, while participants will have the opportunity to advance the general state of knowledge about our research topics through the long-term impacts of the study, there are no explicit or personal benefits to participating in this research. There are no known risks associated with participation in the study.

What happens with the data: The data will be entered into a computer software, which will have no identifying information from participants, and be stored on password protected computers. Only the principle investigator and her research team will have access to the data. All research assistants have signed confidentiality forms. The results for the study will be disseminated by means of conference presentations, publications in academic journals and included in students' thesis/dissertation projects.

Appendix B

Study Questionnaire Items

<u>Home Reading Environment Questionnaire:</u>

Thinking back to your childhood, please rate the degree to which you agree/disagree with the

following statements:

1. My parents told me reading was important.

1	2	3	4	5
(Strongly disagree)	(Disagree)	(Neutral)	(Agree)	(Strongly Agree)

2. My parents saw reading as a good way to spend time.

1	2	3	4	5
(Strongly disagree)	(Disagree)	(Neutral)	(Agree)	(Strongly Agree)

3. Reading was viewed as something fun in my house.

1	2	3	4	5
(Strongly disagree)	(Disagree)	(Neutral)	(Agree)	(Strongly Agree)

4. My parents let me choose what to read.

1	2	3	4	5
(Strongly disagree)	(Disagree)	(Neutral)	(Agree)	(Strongly Agree)

5. There were lots of books in my house.

1	2	3	4	5
(Strongly disagree)	(Disagree)	(Neutral)	(Agree)	(Strongly Agree)

6. My parents would take me to the library or bookstore to get new books.

1	2	3	4	5
(Strongly disagree)	(Disagree)	(Neutral)	(Agree)	(Strongly Agree)

Basic Psychological Need Satisfaction Scale – relationship Domain Questionnaire

Remember a time when you were in elementary school and rate the degree to which you agree or disagree with the following statements:

1. When my parent/guardian and I read together, I felt free to be myself.

1	2	3	4	5
(Never)	(Rarely)	(Sometimes)	(Often)	(Always)

2. When my parent/guardian and I read together, I felt like a competent person.

1	2	3	4	5
(Never)	(Rarely)	(Sometimes)	(Often)	(Always)

3. When my parent/guardian and I read together, I felt loved and cared about.

1	2	3	4	5
(Never)	(Rarely)	(Sometimes)	(Often)	(Always)

4. When my parent/guardian and I read together, I often felt inadequate or incompetent.

    1   2   3   4   5

    (Never)   (Rarely) (Sometimes) (Often)   (Always)

5. When my parent/guardian and I read together, I had a say in what happened and could voice my opinion.

    1   2   3   4   5

    (Never)   (Rarely) (Sometimes) (Often)   (Always)

6. When my parent/guardian and I read together, I often felt a lot of distance in our relationship.

    1   2   3   4   5

    (Never)   (Rarely) (Sometimes) (Often)   (Always)

7. When my parent/guardian and I read together, I felt very capable and effective.

    1   2   3   4   5

    (Never)   (Rarely) (Sometimes) (Often)   (Always)

8. When my parent/guardian and I read together, I felt a lot of closeness and intimacy.

    1   2   3   4   5

    (Never)   (Rarely) (Sometimes) (Often)   (Always)

9. When my parent/guardian and I read together, I felt controlled and pressured to be certain ways.

      1   2   3   4   5

(Never)   (Rarely) (Sometimes) (Often)   (Always)

<u>Reading Attitude Survey – McCreary 2017</u>

<u>Books</u>

About how many of each did you read for pleasure during the last month?

_____ non-fiction book(s)

_____ fiction book(s) (novel)

_____ audiobook(s)

_____ magazine(s)

_____ blog(s)

_____ newspaper(s)/ news app

Daily Reading Habit

About how much time per day do you read for enjoyment?

_____ I don't read for enjoyment

_____ 30 minutes or less

_____ Between 30 and 60 minutes

_____ 1 to 2 hours a day

_____ More than 2 hours a day

<u>About Reading</u>

Reading Attitudes

1. I only read if I have to

    Strongly Disagree   Disagree   Agree   Strongly Agree

2.   Reading is one of my favorite activities.

    Strongly Disagree   Disagree   Agree   Strongly Agree

3. I like talking about what I read with other people.

    Strongly Disagree   Disagree   Agree   Strongly Agree

4. I find it hard to finish what I start reading.

    Strongly Disagree   Disagree   Agree   Strongly Agree

5. I feel happy if I receive something to read as a present.

    Strongly Disagree   Disagree   Agree   Strongly Agree

6. For me, reading is a waste of time.

    Strongly Disagree   Disagree   Agree   Strongly Agree

7. I read only to get information that I need.

    Strongly Disagree   Disagree   Agree   Strongly Agree

8. I cannot sit still and read for more than a few minutes.

    Strongly Disagree   Disagree   Agree   Strongly Agree

9. When I read, I sometimes get totally absorbed.

Strongly Disagree   Disagree   Agree   Strongly Agree

Reading Identity

10. I am a poor reader.

Strongly Disagree   Disagree   Agree   Strongly Agree

11. I am a strong reader.

Strongly Disagree   Disagree   Agree   Strongly Agree