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Associations Between Adolescent and Parent Media Connection and Perceptions of Emotional Climate in the Home

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ASSOCIATIONS BETWEEN ADOLESCENT AND PARENT MEDIA CONNECTION

AND PERCEPTIONS OF EMOTIONAL CLIMATE IN THE HOME

by

Laura A. Woodland

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

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ABSTRACT

Associations Between Adolescent and Parent Media Connection and Perceptions of

Emotional Climate in the Home

by

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Utah State University, 2021

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Department: Human Development and Family Studies

The objective of this study is to better understand the relationship of family

connection through technology (text/phone calls and social networking) and the

perception of emotional climate in the home. This study used extant data from the

Flourishing Families Project. The sample included adolescents and parents from 469

families and their responses to two quantitative measures: Media Connection (predictor

variable) and Family Assessment Device (outcome variable). Family systems theory was

the theoretical framework for this study due to the interactive nature of two variables

being measured. Responses from both an adolescent child and their primary caregiver

were analyzed. Data was analyzed from Wave IV and included a cross-sectional linear

regression analysis for three main research questions. R1: How does a child's report of

the frequency of connection with their parents through media relate to their ability to

express emotions in the home? R2: How does the primary caregiver's report of the

frequency of connection with their child through media relate to their ability to express

emotions in the home? R3: How does the family's average report of the frequency of connection with their family through media relate to their ability to express emotions in the home? No significant associations were found between variables for all three research questions. Suggestions are given for future research regarding media connection and emotional climate in the home.

(61 pages)

PUBLIC ABSTRACT

Associations Between Adolescent and Parent Media Connection and Perceptions of
Emotional Climate in the Home

Laura A. Woodland

An overwhelming increase in technology and media use this past decade has been found to affect family relationships in various ways. Devices such as cell phones, tablets, and computers, have been found to both be the means of bringing family members closer together by communicating from a distance, while also disrupting and straining family connection, in particular the adolescent to parent relationship. Data from the Flourishing Families Project was used to analyze the varying perceptions of adolescent and parents regarding technology communication with one another and their personal perception of the emotional climate in the home. Results from this study showed no significant relationship between primary caregiver and adolescent child reports of the frequency of communication with each other through technology and their perception of their ability to express emotions in the home. Results also imply that high amounts or frequencies of adolescent and parent technology communication with one another does not predict a negative emotional climate in one's home. Other contextual elements such as tone of voice, warmness of the parent-adolescent relationship, and other factors should be studied to understand the impact of different motives and types of communication in the home.

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<div align="right">Laura A. Woodland</div>

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CHAPTER I

INTRODUCTION

Family Media Connection and Emotional Climate

Over the last decade, research regarding technology (Anderson & Jiang, 2018; Lenhart et al., 2010) and its use among adolescents (Chibbaro et al., 2019; Dickerson & Saul, 2016; Gentile et al., 2011; Mahler, 2015; Mason, 2008; Snakenborg et al., 2011) have become increasingly popular. Much of this research brings to light valuable information for parents, researchers, and policy makers about the many dangers associated with technology which may become prevalent during their child's teen years. However, fewer articles discuss the opportunity technology brings into the home of drawing families together and building relationships of warmth and connection (Coyne et al., 2014; Padilla-Walker et al., 2012).

An effective way of assessing the positive impact of daily activities and family communications on the interpersonal relationships that exist within the home is by measuring a family's emotional climate, or the emotional quality of subsystems or interpersonal relationships in the home (Hickey et al., 2019). Unfortunately, no research has looked at associations between family emotional climate (FEC) and family technology use or family technology communication. Much of the preexisting research that has looked at emotional climate in general focuses on evaluating the emotional climate of school classrooms and academic settings (Brackett et al., 2011; Reyes et al., 2012; Rivers et al., 2013; Tran, 1998).

A clear gap currently exists in the literature between the frequency of technology communication between family members and the emotional climate of a home. This gap provides cause to investigate positive uses of family media such as media connection in the home and its association with the emotional climate of an immediate family. The purpose of this study is to examine the interaction between a family's emotional climate and a family's frequency of connection through interactive technology referred to as *Media Connection.*

Media Connection and FEC Through the Lens of Family Systems Theory

Past literature has used family systems theory to frame how an individual's use of media in the home can influence the interpersonal relationships and feelings of connection in the home and how these may influence positive family relationships (Padilla-Walker et al., 2012; Coyne et al., 2014). Intentional uses of technology to build connection such as family movie time, thank you texts, and the sharing of funny social media posts, may all contribute to positive outcomes such as higher levels of disclosure among adolescent boys and positive family functioning for adolescent girls (Coyne et al., 2014). Similarly, time spent together as a family watching TV, connecting through cell phones, and playing video games together has been found to be associated with higher levels of family connection (Padilla-Walker et al., 2012). Each of these findings demonstrate how individual actions and choices with daily media use among family members can influence the way siblings, parents, and children connect and relate to each other and create an energetic, cohesive, and functional family environment.

From the opposing perspective, unfolding research has uncovered a potential threat to family cohesion and functioning. This threat, termed technoference or phubbing, has been defined as "interruptions to social interactions because of technology" (Stockdale et al., 2018, p. 219) and can cause spouses (McDaniel & Coyne, 2016), children (Jennings, 2021), and adolescents (Stockdale et al., 2018) to feel disconnected from one another and lead to other negative effects. Therefore, technology use, when used in a manner that disrupts real life interpersonal communication between family members can potentially lead a family system into a state of entropy, chaos, and dysfunction.

Adolescent Development and Parent-Adolescent Relationships

A developmental perspective brings to light the considerations which should be taken when addressing the parent-adolescent relationship, in order to most effectively use technology to improve a family system's functioning. A 200% increase in mortality rate (Dahl, 2004) sets the adolescent phase of life apart from children as well as emerging adults because of the heightened levels of impulsive action taking and emotional responses (Shulman et al., 2016). While parents may naturally assume their teen would like more independence and distance from parents during this phase of life, research findings suggest that technoference from parents towards teens is associated with negative outcomes (i.e., depression, anxiety, etc.) for adolescent children (Stockdale et al., 2018). Similarly, reduced parental monitoring has been found to be associated with increases of adolescent alcohol use and early onsets of marijuana use (Rusby et al., 2018). These findings may suggest to parents an inadvertent cry for parental connection

is taking place between their adolescent and them. Further research supports this idea, by noting that an increase in parental monitoring during this crucial phase is associated with lower levels of delinquent behaviors among adolescents (Yun & Cui, 2019). Research on parent-adolescent relationships and the intentional and positive actions that may be taken by parents to improve family relationships are therefore crucial to be conducted in the field of family research.

Flourishing Families Project

This study was conducted using extant data from the *Flourishing Families Project (FFP)*. This data collection was conducted by the Brigham Young University Research Group in the School of Family Life. This study reviews the association between two variables in the *FFP*, *Media Connection (Family-level)* and *Family Assessment Device*. *Media Connection* at the family level, is a variable from Wave IV of the data that asks for measures of frequency of technology interactions among family members. For example, questions such as "How often do you use social networking sites (such as Facebook) to connect with your child? (How often do you use social networking sites (such as Facebook) to connect with your parent?)" were used to assess the frequency of communication between primary caregivers and adolescent children via technology. The global *Family Assessment Device (FAD)* mean score was used to assess the emotional climate of the home at the same point in time, Wave IV. Adolescent children and primary caregivers responded with a 4-point Likert scale to statements such as "We cry openly" and "We are reluctant to show our affection for each other." Finding the association

between these two variables provides further insight into how the frequency of technology use effects family processes and subsystems.

Conclusion and Research Questions

Overall, much research has assessed negative uses and outcomes of technology use among adolescents (Chibbaro et al., 2019; Dickerson & Saul, 2016; Mahler, 2015; Mason, 2008; Snakenborg et al., 2011) and the negative outcomes of technology use in interpersonal family relationship (Jennings, 2021; McDaniel & Coyne, 2016; Padilla-Walker et al., 2012; Stockdale et al., 2018). No prior research has connected technology use with a family's emotional climate and most research on emotional climate has been done in relation to classroom and educational settings (Brackett et al., 2011; Reyes et al., 2012; Rivers et al., 2013; Tran, 1998). However, dependent on the context of technology use, its implications of its use in the home and between family members can have either a positive or negative effect on family processes. Parents' appropriate use of technology can serve as a positive tool of family functioning by teaching adolescents and others in the home how to appropriately balance technology use with interpersonal relations (Nikken, 2017). On the other hand, when technology is used to disrupt interpersonal communication between family members, it may serve as a negative tool to increase dysfunction in family relationships (McDaniel & Coyne, 2016; McDaniel et al., 2018; McDaniel & Radesky, 2018). With the use of family systems theory as the lens for this research project, I propose the following research questions.

RQ1: How does an adolescent child's report of the frequency of connection with their parents through media relate to their ability to express emotions in the home?

R2Q: How does the primary caregiver's report of the frequency of connection with their adolescent child through media relate to their ability to express emotions in the home?

RQ3: How does the family's average report of the frequency of connection with their family through media relate to their ability to express emotions in the home?

These research questions will effectively allow me to address the gap that currently exists in the literature between a family's use of technology for the purpose of connection and communication in the home and the perceived emotional climate of both adolescent children and primary caregivers.

CHAPTER II

LITERATURE REVIEW

Technology, media, and cell phone use have become a prevalent topic of discussion over the last decade (Anderson & Jiang, 2018; Lenhart et al., 2010). Topics surrounding technology use and its impact on daily life have become especially crucial when looking at communication through media (i.e., social media messages, texting, emailing, etc.) and the effect it has on family relationships and development during a child's formative years (Kelly & Ocular, 2020; Sivrikova et al., 2020; Zahra & Alanazi, 2019). Technology use has been found to be especially important in home and family settings, as it has the potential to interfere with and significantly stifle these primitive and crucial relationships such as those between romantic partners (McDaniel & Coyne, 2016) and relationships between parents and adolescent children (Stockdale et al., 2018). Because technology can potentially impede family relationship wellbeing, it seems likely that technology and media connection among family members would have an association with the overall family emotional climate.

Emotional climate is a construct often used to evaluate educational settings (Reyes et al., 2012; Washington & Zandvakili, 2019). This construct allows researchers to grasp an individual's overall perceptions of their ability to express emotions in a given environment. While this construct has often been used to evaluate school settings for young children, it has also been used to evaluate home environments (Hickey et al., 2019) and helps to determine the "emotional quality of family subsystems" (Hickey et al., 2019, p. 3244) or interactions between family members. For the purpose of this paper, I will be looking at emotional climate within the home as it pertains to parents and

adolescents within an immediate family and the impact of media connection at a family-level on increasing or decreasing a family member's perception of the emotional climate in the home.

Technology Interactions in the Home

The salience of technology use has risen in part from an exponential growth in accessibility and usage among adults, adolescents, and even children. In 2010, the Computer Industry Almanac projected the sale of 170 million personal computers with a 69% increase in sales between the years 2010 and 2014. As of the year 2019, 81% of American adults owned a smartphone and 96% owned a cellphone (Pew Research Center, 2019). A report from 2020 of children's daily technology usage showed that children's interactive technology use is largely dedicated to viewing TV, videos, and gaming (89%), whereas the use of technology for academic and social development activities such as reading, homework, and video-chatting only made up a total of 5% of the average child's daily technology use (Rideout & Robb, 2020). Children not only suffer emotionally and socially from their own technology use, but also from the interfering technology and media use of parents (Newsham et al., 2020). Parental technology distractions cause children to experience interference in what should be their most reliable and most intimate relationship at a young age.

While there still may be some disparity in the frequency of social media use among older and younger generations (Bell et al., 2013), what once was solely an adolescent experience for the Millennial generation (Johansson et al., 2016), has now become a multi-generational tool and necessity (Bruggencate et al., 2019; Golant, 2019).

Besides adolescents, ninety-eight percent of children eight years of age and under have a TV in the home, with no significant difference among households of low and high income (Rideout & Robb, 2020). Additionally, four-in-ten senior citizens, ages 65 and older now own a smartphone with eight-in-ten overall owning a cellphone, either a smartphone or flip phone (Anderson & Perrin, 2017). Even more recently, the ongoing worldwide pandemic of Corona Virus (COVID-19) has caused a 1000% increase of demand for the platform, Zoom (Wiederhold, 2020). This platform and others similar to it enable videoconferencing and have been used by 300 million users as of April 2020, as a means of delivering online education from grade school to grad school, as well as providing a capacity for parents and adults to attend work meetings from home. Although these mediums of technology are used individually, their use influences a collective family environment. Needless to say, the prevalence of technological devices in our society across all generations, relationships, and settings makes the case for an increased need to understand how these devices are being used and what the implications are of their use among family members of all ages and stages within the home setting.

Emotional Climate

"[A] family's emotional climate is…influenced by the history of interactions between parents and their children" (Kapetanovic & Skoog, 2020, p.2). Over time, these interactions build an environment, on a spectrum from positive to negative, within which the children and parents interact. Negative emotional climates tend to lead to poorer child and adolescent outcomes (Woods et al., 2020). A negative family emotional climate, characterized by high strain and low support, is linked to later negative health outcomes,

while a positive emotional climate such as in a classroom setting is often linked to higher academic achievement due to an increase of student engagement (Reyes et al., 2012). Emotional climate as a construct of family life, has been reviewed to understand adolescent development (Kapetanovic & Skoog, 2020) but has not been reviewed to look at the impact of technology use as a predictor of a family's emotional climate. It should also be noted that emotional climate has most often been studied in educational settings (Brackett et al., 2011; Reyes et al., 2012; Rivers et al., 2013; Tran, 1998) to understand the impact of a classroom's emotional climate on student learning. For this paper, however, I will look at a family emotional climate (FEC) (Woods et al., 2020) within the confines of an immediate family who lives together.

Family Systems Theory

Due to the interactive nature of both of these constructs, emotional climate and media connection between family members, it seems most fitting to apply the family systems theory to this study. This theory has been used in past research to study technology's influence on daily family relations and interactions (Padilla-Walker et al., 2012; Coyne et al., 2014). In a basic systems theory, the system is a set of objects that relate to one another to create a "super entity" (Smith & Hamon, 2017). While each person in the family may act individually, the communication and actions of one member of a family system influence and affect the actions of other members in the system or the entire entity. However, when it comes to technology use, this effect can be either positive or negative for family relationships. Although technology use often happens on an individual basis through the emergence of personal laptops, tablets, and cell phones,

according to family systems theory, these individual actions influence the actions and communication patterns of other members in a system. This study will provide a clearer understanding about what effect technology use has on family relationships when it is used to connect primary caregivers and adolescent children through text messages, phone calls, and social networking communication.

At different points in time, the entire family system will lean either towards a state of *energy* or *entropy* based on the amount of intentionality and undivided attention that family members give in their subsystems and to the family unit as a whole (Smith & Hamon, 2017). If media is used negatively to avoid or interrupt personal family interactions, then entropy would likely follow. Terms in research such as technoference (McDaniel & Coyne, 2016; Stockdale et al., 2018) and cphubbing (Jennings, 2021) support this idea that media used to interrupt family communication can bring about disconnect and create an environment of entropy. Entropy, according to family systems theory, brings about chaos and disconnect as family members learn to drift apart from one another. A family in entropy is not tied together by family rituals or routines. However, families that use technology as a part of their rituals and routines, are using technology in a positive way to create connection in the family (Coyne et al., 2014), and subsequently the system will lean towards a state of energy. These family members who take opportunities to connect with siblings and parents through technology and other means, bring energy into the home and dispel a state of entropy.

A family system is a social system with the related objects being persons of the family. The whole system of the family is made up of different subsystems or one-on-one relationships which influence the overall family system. Parents make up the executive

subsystem of a home, with parent-to-child relationships being a cross-generational subsystem, and siblings as well create their own subsystems. Technology influences are seen in each of these various types of family relationships such as spousal and parental relationships. Much research has uncovered the negative impact that technology may have in a spousal relationship (McDaniel & Coyne, 2016), coparenting relationships (McDaniel et al., 2018), and parenting relationships among parents of adolescents (Stockdale et al., 2018). Also, in the past decade researchers have begun to uncover the positive ways in which technology may influence these family subsystems (Coyne et al., 2014; Padilla-Walker et al., 2012).

According to family systems theory, one family subsystem, which may be influenced by gender, interests, or other identifying factors which draw individuals closer together, and any changes in a subsystem's unique dynamics, has the potential to change the entire family social system (Smith & Hamon, 2017). If these changes reflect a more functional and healthy family cycle, then the overall family system will move towards a more organized and functional system. One parent learning to engage with a child instead of attending to their push notification, may create a more cohesive relationship with their child (Stockdale et al., 2018) and can turn a family system away from a repeated negative technology pattern to a more positive technology use outlet. However, if one member begins to use technology to the point that it generates *technoference*, a disruptor of in-home interpersonal communication, then the entire family unit has the potential to move toward the aforementioned state of entropy, characterized by disorganization and chaos.

Family Roles

Family systems and subsystems consist of roles for each person in the home (Smith & Hamon, 2017). In regard to technology, some families may have parents who take on the role of *discipliner*, to punish inappropriate technology use among family members, or perhaps an obedient child may submit to the role of *rule follower* when an inappropriate television show is chosen without parental approval.

An author of current research on parental involvement of technology use has identified three different roles parents take on when it comes to a child or adolescent's use of media (Jennings, 2021). First, she proposes that parents with technology in the home take on the role of *mediator*. With this role, they serve as an interpreter of a child's media interactions. They also set rules for a child's media interactions, such as what content is and is not appropriate for children to watch. Additionally, as a mediator, they serve as a co-viewer in experiencing media alongside their child. Second, parents typically serve a role as *monitor* to varying degrees. Parents may monitor an adolescent's use of technology by looking through apps, social media sites, text messages, and even tracking the location of their child's cellphone when they are away from home (Andersen, 2016). Lastly, in the schema of technology use at home, parents take on a *modeling* role (Jennings, 2021). Parents who engage with technology to the point that it generates cphubbing (child phone snubbing), snub or ignore their child to use a smartphone or other electronic device. This practice may serve as a way parents are teaching their children to use technology. Cphubbing teaches children how to use their phones and electronic devices by observing their parents' behavior as a model. This can

cause a vicious cycle with both parents and children disconnecting from one another during what could be bonding family time.

Family Rules

"A family's rules differentiate it from other family systems and delineate its boundaries" (Smith & Hamon, 2017, p. 149). Family rules impact emotional expression in the home, religious practice, career orientation, etc. by determining what behaviors and interactions are and are not appropriate. Similar to the idea that a family's emotional climate is founded after a history of interactions (Kapetanovic & Skoog, 2020), family rules are shaped over time after patterns are formed based on reoccurring interactions between different members of the family system (Padilla-Walker et al., 2012). Family systems theory breaks down these family rules into explicit and implicit rules. While explicit rules are verbally stated and agreed upon, implicit rules carry the most weight in determining behavior and punishing or encouraging certain interactions among family members (Smith & Hamon, 2017). Both implicit and explicit rules exist in a family concerning technology use, as well as emotional and negative expression in the home.

Adolescent Development and Technology Use

Adolescent Development

The present study will review the technology communication between adolescent children and their parents along with the adolescent child's and the primary caregiver's perception of emotional climate in the home. Understanding the basics of adolescent development is necessary in order to process the potential impacts that technology use

may have on an adolescent's interpersonal relationships with parents and family members.

Due to the onset of puberty around age 12 for boys and age 11 for girls (Shulman et al., 2016), and the socially constructed termination of the adolescent phase around age 18 (Arnett, 2000), this period is recognized as a time when physical and physiological changes begin to occur for a child. Because of these changes, adolescent children are likely to seek out more privacy from parents and other sex family members (Bello et al., 2017). Despite the adolescent message of a desire for privacy, the outcome of parental involvement in adolescents' lives suggests teens do seek and desire to have meaningful relationships with their parents. For example, American adolescents' delinquent behavior significantly decreases with the presence of perceived parental warmth (Yun & Cui, 2019). Similar findings suggest that a poorer parent-adolescent relationship and lower parental monitoring may lead to earlier onsets of substance use such as binge drinking and the use of marijuana (Rusby et al., 2018). However, adolescents may not consistently seek out their parents' attention or may want more privacy (Bello et al., 2017), leading parents to believe their child only wants distance and increased independence from the parent. Parents of adolescents may find a great deal of flexibility is required in order to permit their growing child the opportunity to exercise increased autonomy one moment, and then have them turn to the parent for comfort the next (Robin & Foster, 1989, p. 10).

Although adolescents may not explicitly demonstrate a desire for close relationships with parents (Bello et al., 2017) research recognizes the parent-adolescent relationship as being one of the most important relationships for adolescents (Branje, 2018) and points out the role that parents may proactively play in distancing themselves

from their adolescent child through disruptive uses of technology (Stockdale et al., 2018). These two points are important for parents to recognize: first, the salience of their relationship with their budding adolescent, and second, the behaviors in which they, as the authoritative figure, may engage leading them to feel distant from their adolescent child.

An exponential growth in cognition and physical development combined with low behavioral and emotional control, have been shown to lead adolescents to a period of an increased mortality rate by 200% during this stage of life (Dahl, 2004). These rapid increases in cognitive and physical development alongside the lack of behavioral and emotional control, cause an increased need for parents to take on an active monitoring role in their adolescents' use of media. Reward sensitivity or an impulse to seek excitement and pleasure is at its highest point during these adolescent years (Shulman et al., 2016). If adolescents do not have parental mediation and monitoring of technology use, youth may be set up to act more impulsively rather than logically due to the rapid increases in cognitive and physical development as well as a lack of emotional and behavioral control in youth. These vulnerable and unmonitored online encounters can then spill-over into the adolescent's face-to-face interactions (Lim, 2016). Parents can help adolescents by recognizing and teaching that not all technology use is inherently bad and may provide an example to teach their adolescent healthier technology and media pathways (Jennings, 2021).

Technology communication and the use of media and technology in the home are often seen through the lens of a misconception that technology only has the capacity to disrupt and distance family relationships, since this is found as one purpose of technology

in the home (McDaniel & Coyne, 2016; McDaniel et al., 2018). However, with much research uncovering the potentially negative effects of technology communication in the home, it is imperative to discover positive ways in which parents and adolescents today can work together and use technology to increase the connection and support they desire in their relationship (Bello et al., 2017).

Parenting Adolescents

It is imperative to understand the adolescent to parent relationship in order to understand the possible influences of technology in the home. Parent and adolescent relationships are prone to suffering to some degree the effects of a technology saturated society and to weaken interpersonally due to a concept known as *technoference* (McDaniel & Coyne, 2016; Stockdale et al., 2018). Technoference also known as *phubbing* is a disruption in interpersonal communication caused by technology. Technoference caused by parents in the parent to adolescent relationship is associated with negative outcomes for teens such as a decreased perception of parental warmth which is associated with teen anxiety, depression, and online acts such as cyberbullying. Similarly, technoference caused by the adolescent is associated with less positive outcomes for teens such as the aforementioned anxiety, depression, and cyberbullying acts (Stockdale et al., 2018). McDaniel and Radesky (2018) report that technoference caused by a parent sends the message that technology is more important to the adult than the child. Similarly, another study found that the act of phubbing from parents was associated with symptoms of depression in adolescents (Xie & Xie, 2020). When used in a manner that disrupts in-person communication, technology use in the form of

technoference or phubbing appears to do more harm than it does good for interpersonal family relationships.

Negative Uses of Media

In a broader perspective, the field of adolescence, parenting, and technology communication research often seems to focus on negative findings regarding technology use. For example, research has addressed teen issues such as cyberbullying (Snakenborg et al., 2011; Mason, 2008) which may cause parents to fear technology communications and its invisible platforms for communication on social media.

Going beyond basic forms of cyberbullying, researchers note instances of severe sexual violence and racial discrimination that have been discovered in research as being a prevalent concern that is increasingly circulating social media platforms (Dickerson & Saul, 2016; Mahler, 2015). Research has also uncovered increasing numbers of adolescents as being identified as having habitual or addictive behaviors regarding technology use (Chibbaro et al., 2019). Longitudinal research on gaming suggests that pathological videogaming is more than a temporary phase for most adolescents and 84% of intensive gamers continue to follow similar gaming patterns two years later (Gentile et al., 2011). All of these areas of research focus on negative consequences stemming from technology use and provide an unbalanced perspective on the potentiality that stems from modern day technology communications. Additionally, none of this research addresses technology use as a direct communicative pattern among members of an immediate family.

Positive Uses of Media

Although much of the available research on technology is focused on the negative elements of its impact in the lives of adolescents and parents, the *Flourishing Families Project* (*FFP*) has recognized and identified certain positive elements such as family media connection in their past research (Padilla-Walker et al., 2012). Dr. Coyne et al.'s (2014) research on technology has discovered that 90% of adolescents and parents report using technology as a part of their family traditions. These traditions in technology are seen when families watch certain movies or listen to certain songs around a holiday season, gather to watch the Superbowl and other sports, or go to the movies to celebrate a family member's birthday. Another positive use of technology was seen with 82% of parents who reported using media to bring up serious issues. When TV shows and movies portray or discuss issues that are controversial or that conflict with family values (i.e. body image, substance abuse, bullying, etc.), parents have an opportunity to clarify and teach adolescents regarding these sensitive topics (Austin, 1993). These issues may otherwise go undiscussed or may be too uncomfortable for parents to address head on. Additionally, these positive uses of media in the home were positively associated with parental involvement suggesting that a healthy use of media in the family may help parents and adolescents (boys and girls) create shared realities which may "bridge the generation gap" (Coyne et al., 2014, p.679).

Conclusion

The prevalence of technology use has increased exponentially over the past decade (Anderson & Jiang, 2018; Lenhart et al., 2010). The integration of media in daily life now goes beyond the adolescent population (Johansson et al., 2016) and is now

considered a necessary and daily tool across all ages (Bruggencate et al., 2019; Golant, 2019). Because of its ever-present nature across all generations, technology has the potential to impact family relationships in both a negative (Stockdale et al., 2018; McDaniel et al., 2018; McDaniel & Coyne, 2016) and a positive manner (Coyne et al., 2014; Padilla-Walker et al., 2012). This research provides the case for understanding the associations between a family's use of media for connection as it relates to a family's emotional climate (FEC) (Woods et al., 2020) or the emotional quality of subsystems that exist in a family (Hickey et al., 2019). The study of FEC on adolescent and parent outcomes (Kapetanovic & Skoog, 2020; Woods et al., 2020) will add to the literature on family processes as FEC has yet to be researched as it relates to the influence of technology in the home. Family systems theory has already been used to analyze the effects of positive technology use among families (Padilla-Walker et al., 2012; Coyne et al., 2014). This theory allows researchers to identify how individual actions of technology use may impact family relations (Smith & Hamon, 2017), and it provides a lens to understand the relationship between technology communications among family members and the FEC in a home. Understanding ways for parents to positively integrate media in the home is crucial in their relationships with their adolescent children during a period when their child's impulsivity and thrill seeking is at an all-time high (Shulman et al., 2016) and at a time when adolescent children are more likely to want space and privacy from parent figures (Bello et al., 2017). Feelings of connection and warmth in the parent-adolescent relationship may be the means of diminishing delinquent behavior as research suggests current parental success is dependent on a guardian's ability to transcend all media platforms (Lim, 2016) and create a warm and loving environment

(Yun & Cui, 2019). Therefore, the following research questions are proposed to understand the relationship between family media connection and family emotional climate or the ability to express emotions in the home.

Research Questions

RQ1: How does an adolescent child's report of the frequency of connection with their parents through media relate to their ability to express emotions in the home?

>RQ1a: How does an adolescent child's report of the frequency of connection through text or phone call with their parent relate to their ability to express emotions in the home?

>RQ1b: How does an adolescent child's report of the frequency of connection through social networking sites with their parent relate to their ability to express emotions in the home?

RQ2: How does the primary caregiver's report of the frequency of connection with their adolescent child through media relate to their ability to express emotions in the home?

>RQ2a: How does the primary caregiver's report of the frequency of connection through text or phone call with their adolescent child relate to their ability to express emotions in the home?

RQ2b: How does the primary caregiver's report of the frequency of connection through social networking sites with their adolescent child relate to their ability to express emotions in the home?

RQ3: How does the family's average report of the frequency of connection with their family through media relate to their ability to express emotions in the home?

RQ3a: How does the family's average report of the frequency of connection with their family via text or phone call, relate to their ability to express emotions in the home?

RQ3b: How does the family's average report of the frequency of connection with their family via social networking sites, relate to their ability to express emotions in the home?

CHAPTER III

METHODS

The purpose of this study was to gain more understanding of the relationship between the frequency of media connection among family members and the emotional climate of a home. This study examined variables that are a part of a pre-existing data set from the *Flourishing Families Project (FFP).* The *FFP* is quantitative and longitudinal in format and was collected by a research team from Brigham Young University in the School of Family Life. In order to look at the relationship between media connection among primary caregivers and adolescent children and the emotional climate existing in a home, I used a cross-sectional research design, from data taken at Wave IV of VIII. Data from both an adolescent child and their primary caregiver, parent 1(P1), were analyzed to review the association between variables from each family member's perspective. Participant demographic items included age, gender, ethnicity, income, and marital status. The two measures from the *FFP* that were included in this study are *Media Connection (Family-level)* and *Family Assessment Device (FAD).* The global *FAD* mean score was used to measure the emotional climate or FEC in the home.

Research questions 1 and 2 were analyzed running a simple linear regression. Two regressions were run to treat *Media Connection* first as a continuous variable and second as a categorical variable. For research question 1, a simple linear regression was run to view how the adolescent child's perception of frequency of *Media Connection* associated with their self-reported global *FAD* mean score. The same analysis was run for research question 2, substituting the primary caregiver's reports for the child's report. Research question 3 was analyzed by averaging the adolescent child and primary

caregiver scores for the global mean *FAD* and *Media Connection* and then running a regression.

Participants

The sample for this study includes both the primary caregiver (P1) and the adolescent children of 469 families, at the time point of Wave IV. Families in this wave consist of 330 two-parent homes as well as 139 single-parent homes. The average age of the child participants in this sample at Wave IV is *M* age = 14.3, with the average age of mothers being *M* age = 46.2 years and the mean age of fathers for the Wave IV sample being *M* age = 48.3 years. Of the 469 families, 89 self-identified as being multi-ethnic. Additionally, 289 reported European American descent, while 56 reported being of African American descent. Only one family reported Hispanic as their ethnicity and four families were Asian-American. Sixty-point nine percent of mothers had received a bachelor's degree or higher while 69.7% of fathers reported the same educational level. The majority of families (60.6%) in the sample made between $60,000 and $149,000 in annual income, while 18.2% made less than $59,000 and 21.2% made more than $150,000. Of the single parents, 46.4%, were divorced, with 29.8% of single parents having never married. Smaller proportions of single parents classified as cohabiting (15.2%), widowed (4%), or in a committed relationship but not cohabiting (4.6%) (Day et al., 2011, p. 2).

Procedures

The *FFP* is a pre-existing dataset. The 500 families who agreed and qualified to participate were sent surveys at eight different time points, Waves I-VIII. For this particular time point, Wave IV, there were 469 family responses, a retention rate of 93.8% from the original 500 families who started this study. The variables that were analyzed in this study included the primary caregiver and adolescent child demographic information, the global *FAD* mean score, and *Media Connection (Family-level),* all at time point Wave IV.

The dataset for this study contains a sample of families which were selected from a purchased national telephone survey database called Polk Directories/USA. The research team for the *FFP* dataset used a stratified random sampling method to contact and invite eligible families to participate in the study. Eligibility for participating in this study was dependent on a family having a child between the ages of 10 to 14 and the family's location, with a requirement that the family live within the target census tracts to be considered for this study. A potential issue identified by the research team was the underrepresentation of families of a low socio-economic standing due to the source of extracting names for potential families. Therefore, additional participants were recruited via fliers and referrals in order to obtain a more socially diverse and representative sample (Day et al., 2011).

Eligible families were first contacted using a letter of introduction. Next, interviewers either made a phone call or home visit to confirm the families' eligibility and willingness to participate in the study. Third, interviewers made an appointment to conduct an in-home assessment of family interactions including a video tape of ongoing

interactions and questionnaires filled out by the respective family member participants. For Waves I-V very little information was missed with interviewers checking for mismarked or missing information with each filled-out questionnaire that was submitted (Day et al., 2011).

Measures

Measures from Wave IV were targeted for this analysis because adolescent child participants were older at this time point and on average were in an adolescent stage of life with the adolescent child's age averaging *M* age = 14.3 years old. By this age, according to research, a vast majority of teens, 95%, have access to a cell phone with nearly half, 45%, reporting being on their phone constantly (Anderson & Jiang, 2018). Therefore, analyzing the variable, *Media Connection,* while children are at an adolescent age provided the richest information regarding technology use as a means of communication between parent and adolescent family members. Although the *FFP* is a longitudinal data set, the quantitative measures for the *Media Connection* data were only collected during Wave IV. Therefore, the research design for this study is cross-sectional in nature, rather than longitudinal.

Media Connection (Family-level)

The first questionnaire to assess the *Media Connection (Family-level)* measure was included in Waves III-VIII of the *FFP*. In Wave IV, 11 items were included in this questionnaire. The majority of the 11 measures which were not used in this study included items that were passive in nature (watching TV, playing video games, etc.) or qualitative measures. Only three items assessed *Media Connection* as an active form of

communication (texting/phone calls, social networking, and emails). For this study,

phone calls/text messaging and social networking were assessed as an active form of

Media Connection. Primary caregivers and adolescent children were given the following

prompt: "**Adult**: For the questions below, please rate how often the following occurs with

your child." and "**Child**: For the questions below, please rate how often the following

occurs with your parent(s)". Participants responded to the questions at Wave IV with a

six-point Likert scale, 1 (*never*) to 6 (*more than once a day*). This first questionnaire

included two items of interest: "How often do you text or call your child on your cell

phone? (How often do you text or call your parent on your cell phone?)" and "How often

do you use social networking sites (such as Facebook) to connect with your child? (How

often do you use social networking sites (such as Facebook) to connect with your

parent?)". These measures did not come from a pre-existing subscale but were created by

a researcher on the PI group for this study.

Family Assessment Device

The *Family Assessment Device* or *FAD* measure was recorded at Waves I-VIII.

For Wave IV, the timepoint of this cross-sectional analysis, this measure included 20

items. These items were rated by family members on a four-point Likert Scale, from 1

(*strongly disagree*) to 4 (*strongly agree*) in response to the question "Does this statement

describe your family?". Items included statements such as "We don't show our love for

each other", "We cry openly", and "Even though we mean well, we intrude too much into

each other's lives." These 20 items were selected from the McMaster Family Assessment

Device (Epstein et al., 1983) which consisted of seven subscales and a total of 53 items.

All subscales from the General Functioning and Affective Responsiveness subscales were

included in these measures as well as two items in the Affective Involvement subscale. There was high internal consistency between the 20 items in the FAD global score at Wave IV (Parent: α= .90, 95% *CI* [.89, .91]; Child: α= .89, 95% *CI* [.88, .90]).

Looking at the association between these two variables allowed me to expand the current literature on technology use and family relations due to the heavy interaction between family members and technology in the home. The results of this study provide an increased understanding of how media connection among family members, specifically texting/phone calls and social media use, is affecting the family's emotional climate or FEC because of the myriad of ways in which connecting technology can both potentially enhance or deteriorate families' in-person relations.

R1: How does an adolescent child's report of the frequency of connection with their parents through media relate to their ability to express emotions in the home?

R2: How does the primary caregiver's report of the frequency of connection with their adolescent child through media relate to their ability to express emotions in the home?

R3: How does the family's average report of the frequency of connection with their family through media relate to their ability to express emotions in the home?

Analyses

For all analyses in this study, *Media Connection* serves as the independent variable with the global *FAD* mean score serving as the dependent variable. The global *FAD* mean score was used in order to analyze the emotional climate in the home.

Research questions 1, 2, and 3 were analyzed using simple linear regression models. For question 1, the adolescent child's score of *Media Connection* frequency for texting/calling a parent and for using social media to interact with parents were used. Each adolescent child participant's score from the survey was treated as both a continuous measure (1-6) as well as classified into one of three ordinal groups: 1(*Never*) and 2 (*Once a month*), 3 (*2-3 times a month*) and 4 (*Once a week*), or 5 (*Once a day*) and 6 (*More than once a day*). These scores of *Media Connection* with texting/calling and *Media Connection* with social networking were analyzed separately to show their association in respect to the adolescent child's report on the global *FAD* mean score. The global *FAD* mean scores was used to measure the child's perception of emotional climate in the home. Research Question 2 followed the same analysis substituting the primary caregiver's variables for the adolescent child's variables.

Research question 3 was also analyzed using a linear regression model. Average scores of the adolescents' and the primary caregivers' responses were taken to represent an overall score for each family in the sample. Because research question 3 takes the average scores of the primary caregiver and the adolescent child, the *Media Connection* variable was only treated as continuous. These average family scores predicted the global *FAD* mean score to assess an overall association between media connection and emotional climate in the home.

All analyses were run in R 4.0.3 (R Core Team, 2020). A significance level of .05 was used for all statistical analyses.
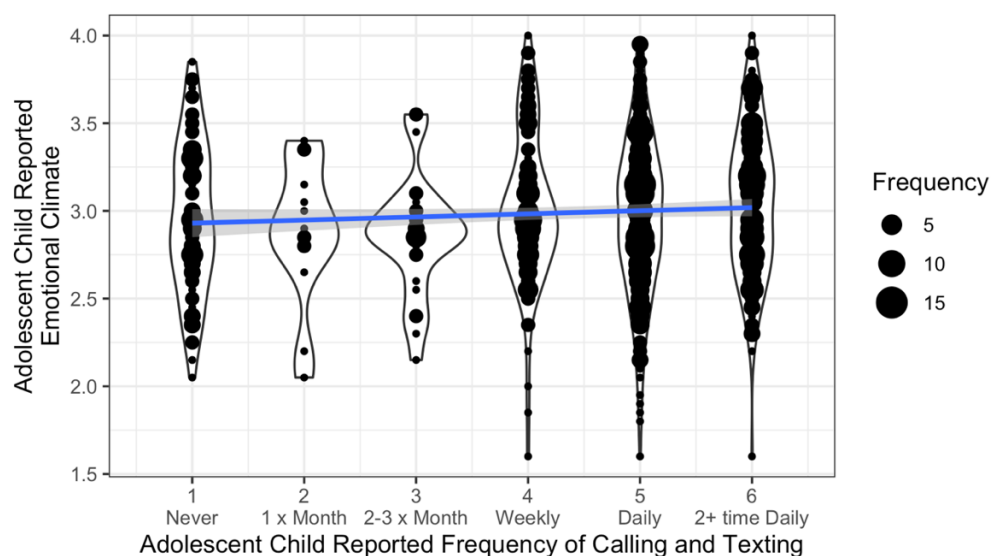
CHAPTER IV

RESULTS

Research Question 1a

For RQ1a, the distribution of *FAD* global scores reported by the adolescent child is displayed by adolescent child-reported frequency of calling and texting in Figure 1. No significant relationship was established when the frequency was treated as continuous, $b = 0.02$, $p = .103$, 95% *CI* [0.00, 0.04], adj $R^2 = .002$, nor categorical, $F(2, 584) = 0.62$, $p = .538$, adj $R^2 = -.001$.

Figure 1

Distribution of Adolescent Child-Reported Emotional Climate by Adolescent Child-Reported Frequency of Calling and Texting with Simple Linear Regression Line Overlayed for Research Question 1a
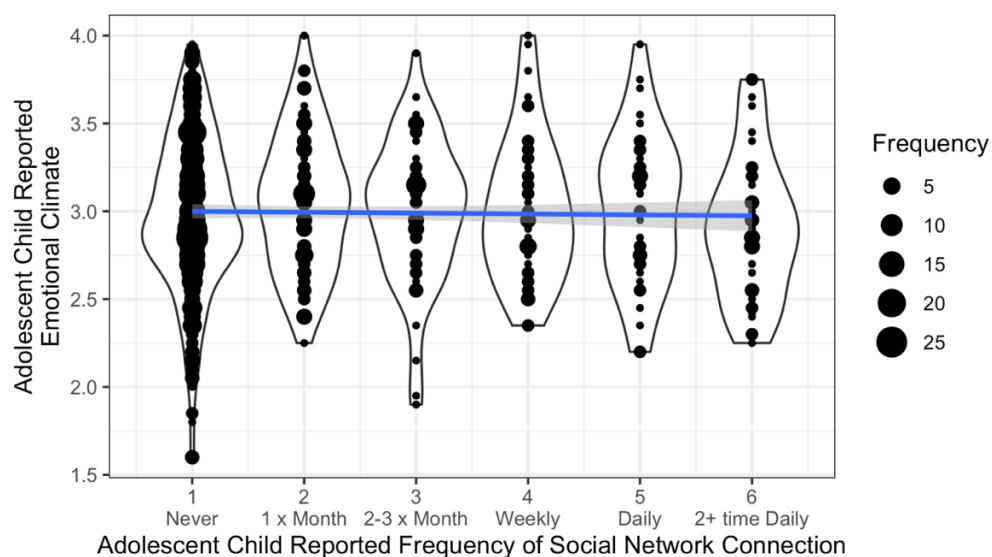

Note. Emotional Climate is measured by the Family Assessment Device, global score where higher scores reflect better family functioning.

Research Question 1b

For RQ1b, the distribution of *FAD* global scores reported by the adolescent child is displayed by adolescent child-reported frequency of connecting with a parent through social networking in Figure 2. No significant relationship was established when the frequency was treated as continuous, $b = -0.01$, $p = .639$, 95% *CI* [-0.03, 0.02], adj $R^2 <$ .001, nor categorical, $F(2, 613) = 0.31$, $p = .730$, adj $R^2 < .001$.

Figure 2

Distribution of Adolescent Child-Reported Emotional Climate by Adolescent Child-Reported Frequency of Connecting with a Parent through Social Networking with Simple Linear Regression Line Overlayed for Research Question 1b
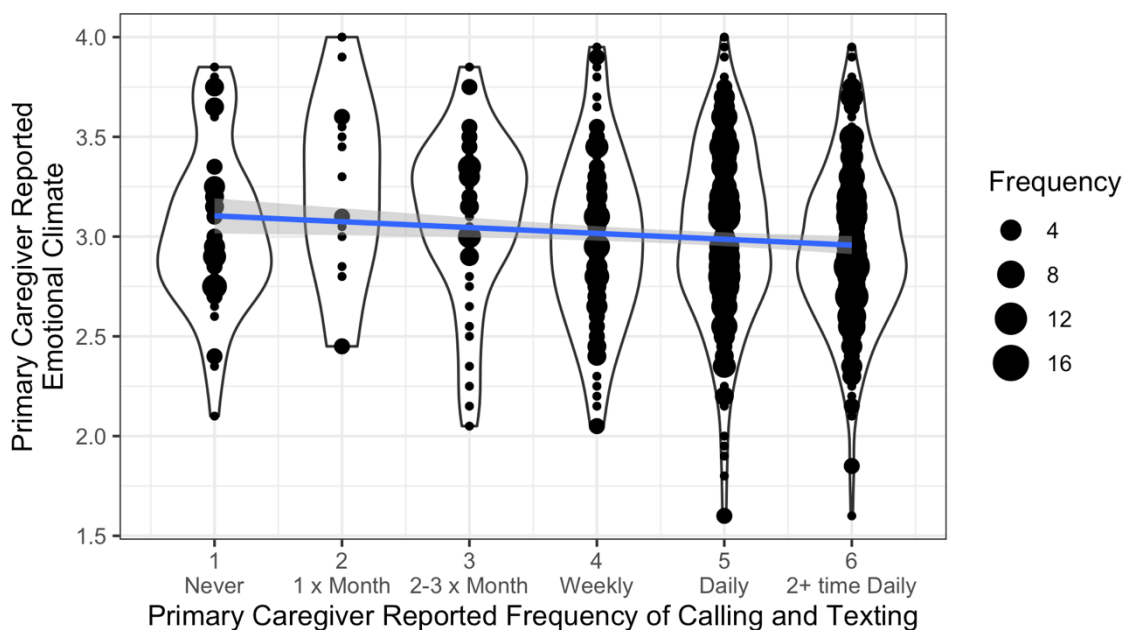

Note. Emotional Climate is measured by the Family Assessment Device, global score where higher scores reflect better family functioning.

Research Question 2a

For RQ2a, the distribution of *FAD* global scores reported by the primary caregiver is displayed by primary caregiver -reported frequency of calling and texting in Figure 3. No significant relationship was established when the frequency was treated as continuous, $b = 0.01$, $p = .366$, 95% *CI* [-0.01, 0.03], adj $R^2 < .001$, nor categorical, $F(2, 616) = 0.74$, $p = .480$, adj $R^2 < .001$.

Figure 3

Distribution of Primary Caregiver-Reported Emotional Climate by Primary Caregiver-Reported Frequency of Calling and Texting with Simple Linear Regression Line Overlayed for Research Question 2a
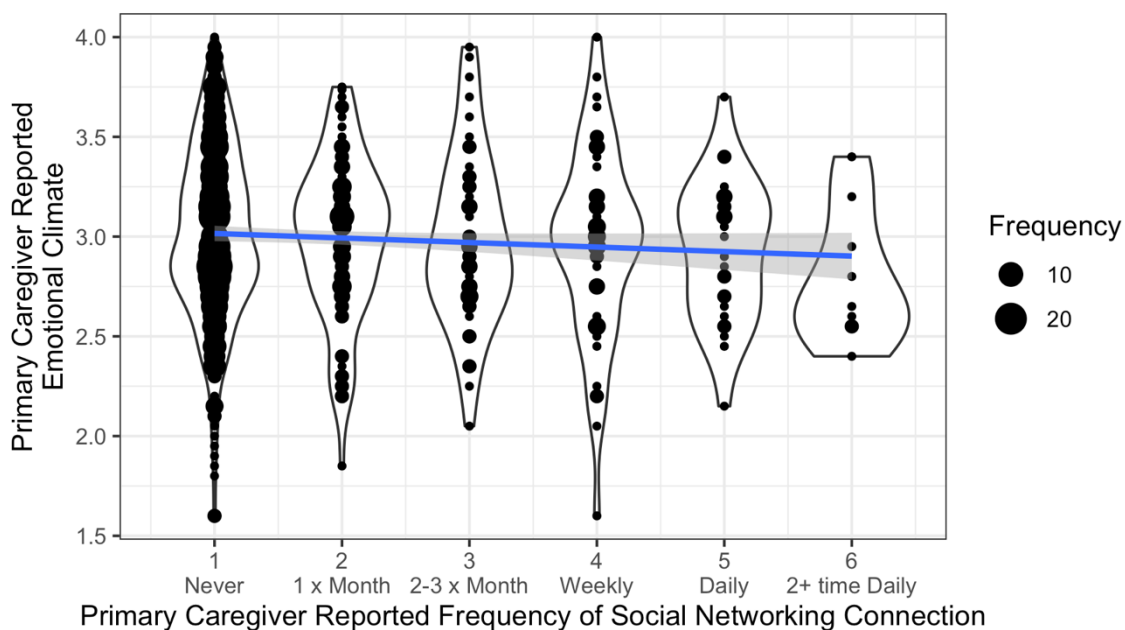

Note. Emotional Climate is measured by the Family Assessment Device, global score where higher scores reflect better family functioning.

Research Question 2b

For RQ2b, the distribution of *FAD* global scores reported by the primary

caregiver is displayed by primary caregiver-reported frequency of connecting with their

adolescent child through social networking in Figure 4. No significant relationship was

established when the frequency was treated as continuous, $b = 0.003$, $p = .833$, 95% *CI* [-

0.02, 0.03], adj $R^2 < .001$, nor categorical, $F(2, 621) = 1.62$, $p = .199$, adj $R^2 = .002$.

Figure 4

Distribution of Primary Caregiver-Reported Emotional Climate by Primary Caregiver-

Reported Frequency of Connecting with their Adolescent Child through Social

Networking with Simple Linear Regression Line Overlayed for Research Question 2b
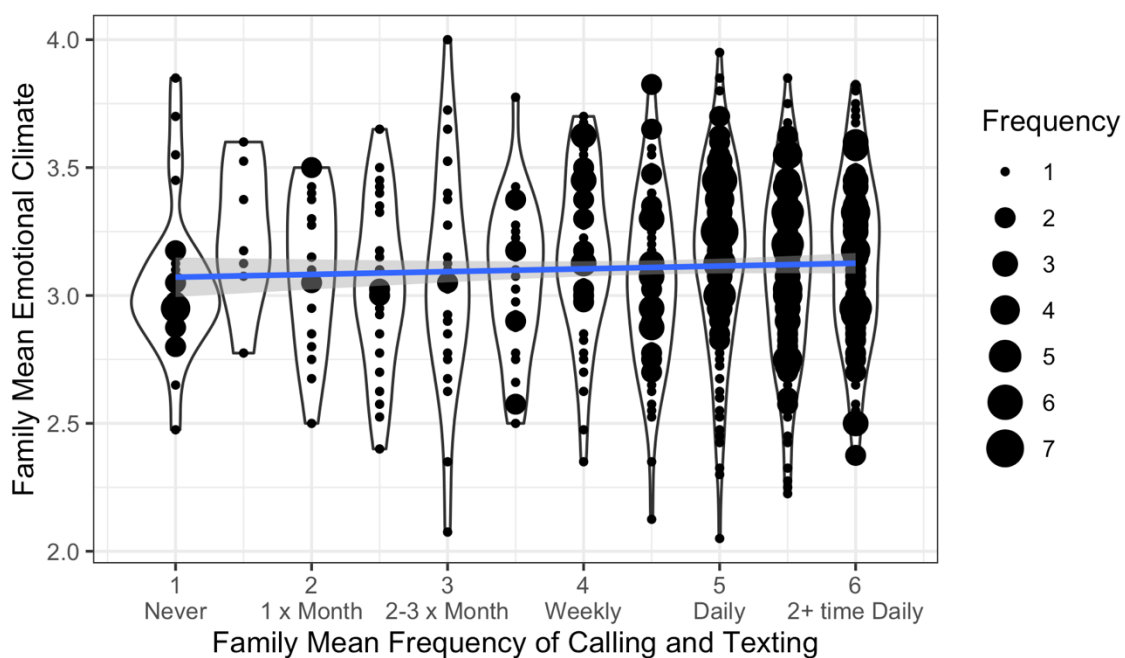

Note. FAD-global = Family Assessment Device, global score where higher scores reflect

better family functioning.

Research Question 3a

For RQ3a, the distribution of mean *FAD* global scores reported by both the adolescent child and the primary caregiver is displayed by the mean family-reported frequency of calling and texting in Figure 5. No significant relationship was established, $b = 0.01$, $p = .293$, 95% *CI* [-0.01, 0.03], adj $R^2 < .001$.

Figure 5

Distribution of Family-Reported Emotional Climate by Family-Reported Frequency of Calling and Texting with Simple Linear Regression Line Overlayed for Research Question 3a

Note. Emotional Climate is measured by the Family Assessment Device, global score where higher scores reflect better family functioning. For family measures the adolescent child and primary caregiver measures are averaged.

Research Question 3b

For RQ3b, the distribution of mean *FAD* global scores reported by both the

adolescent child and the primary caregiver is displayed by the mean family-reported

frequency of connecting with each other through social networking in Figure 5. No

significant relationship was established, $b = -0.004$, $p = .725$, 95% *CI* [-0.03, 0.02], adj R^2

< .001.

Figure 6

Distribution of Parent-Reported Emotional Climate by Family-Reported Frequency of

Connecting with their Family Member through Social Networking with Simple Linear

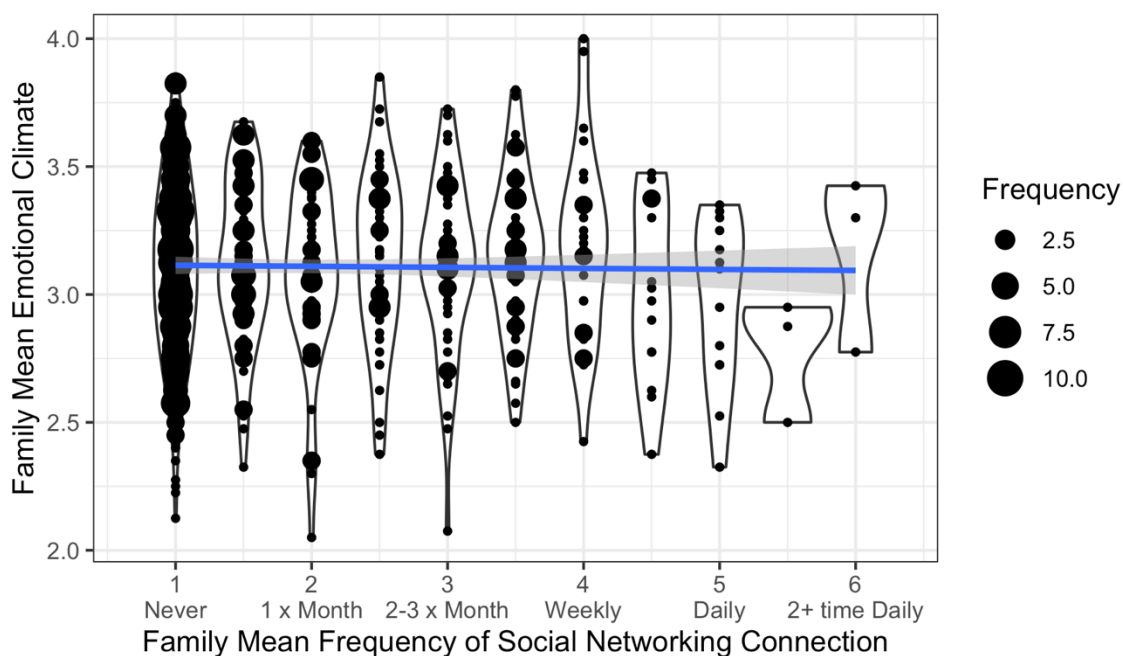*Regression Line Overlayed for Research Question 3b*

Note. Emotional Climate is measured by the Family Assessment Device, global score

where higher scores reflect better family functioning. For family measures the adolescent

child and primary caregiver measures are averaged.

CHAPTER V

DISCUSSION

Research Question 1

With Research Question 1 (RQ1) I sought to find an association between the frequency of media connection and emotional climate in the home from the perspective of the adolescent child. The results of the linear regression analysis suggest no significant association between the adolescent child's report of frequency of media connection via texting/phone calls or social networking with the adolescent child's self-report of the emotional climate within the home.

With nearly half of teens being online constantly (Anderson & Jiang, 2018) there may be a need for a more accurate report of media connection frequency, since adolescent children may misperceive the amount of time they do or do not spend communicating with parents through texts/calls and social media platforms. Further research suggests that the effects of technology use on adolescent well-being is unclear and may benefit from longitudinal studies regarding technology and its effects on adolescents (Orben, 2020).

Research Question 2

Similarly, with Research Question 2 (RQ2) I sought to find an association between the frequency of media connection and emotional climate in the home. However, this question looked at the association between the two variables from the perspective of the primary caregiver. The results of this linear regression analysis also suggest no

significant association between the primary caregiver's report of frequency of media connection via texting/phone calls or social networking with the primary caregiver's self-report of the emotional climate within the home.

As reviewed in previous research, lower levels of parental monitoring are associated with increased adolescent delinquent behavior (Rusby et al., 2018). Also, increases in technoference from parents to adolescent children have been found to be related to more negative teen outcomes such as anxiety, depression, and cyberbullying, but are mediated by parental warmth (Stockdale et al., 2018). It is likely that what is being said and how it is being said to an adolescent child is just as important as the frequency of media connection between adolescent children and their primary caregivers. Further research supports the notion that the quality of interactions between adolescent children to primary caregivers such as parenting style (positive parenting) and tactics (praising, supporting autonomy, etc.) (De Stone et al., 2016; Yap et al., 2015) do matter. However, these aspects of a family subsystem cannot be tracked by analyzing a simple frequency of media connection and its association to the primary caregiver reported emotional climate in the home.

Research Question 3

Branje (2018) states that the parent-adolescent relationship is one of the most important relationships for adolescents. Research Question 3 (RQ3) was created with the intent to find an association of the parent's and adolescent's averaged reports of their frequency of media connection and its association with the averaged report of emotional climate in the home. The results of the linear regression analysis for this question also

suggest no significant association between the family's average report of frequency of media connection via texting/phone calls or social networking with the family's average report of the emotional climate within the home.

One concern with analyzing the overall family media connection and its association with emotional climate in the home was that adolescent children and primary caregiver scores might be significantly different and unable to present an accurate overall emotional climate in the home. However, understanding the overall emotional climate of the home does seem necessary and useful to understand as past research has found implications for negative family climates and ambivalent family climates in predicting future health concerns and morbidity (Woods et al., 2020). Due to the circular nature of causality in family subsystems (Smith & Hamon, 2017), it is essential to view the overall perception of a family's emotional climate as well as the self-reported emotional climate separately as adolescents and parents.

Lastly, with overall family reports as the focus of this research question, another important element is the context of past literature regarding emotional climate reports. Past studies have most often measured the emotional climate of environments such as academic setting rather than the emotional climate of a home or family setting (Reyes et al., 2012; Washington & Zandvakili, 2019). With limited research available regarding emotional climate reports from a family setting, many gaps still remain in understanding exactly what elements shape and determine a positive versus a negative climate. Many confounding or contributing variables may be discovered as researchers continue to pose varying research questions to regarding the emotional climate within the home. These variables may include tone of voice on phone calls, topics and purpose of adolescent to

parent media connection, and other contextual information regarding family communication.

With past research noting the salience of the adolescent-parent relationship (Branje, 2018) and in particular the importance of parents using technology in effective ways to build connections with teens (Bello et al., 2017) particular attention should be paid to associations of technology use and perceptions of emotional climate from both a parental and adolescent perspective. While these findings show no significant associations, based on the importance of the parent to adolescent relationship it is likely and probable that various associations may surface once researchers control for specific variables such as gender, income, or race.

Limitations

Various limitations should be noted in regard to this study. First, the study was created using extant data. Therefore, data was limited to what was provided by the *FFP* research team with no ability to collect further data from the participants of the study. Second, the data was collected a decade ago. This fact brings with it the implications that teen and parent cell phone use would have increased exponentially over the past 10 years. Therefore, the sample size, though large for its time, may not be big enough to represent the current technology user population. Similarly, because the data was collected 10 years ago, we can assume that adolescents and parents were using cell phones less often and had access to fewer interactive technology devices. Therefore, of the adolescent child and primary caregiver reports, it is hard to say what percentage of adolescent children and primary caregivers actually had a social media account and/or cell phone to call and text

on, and which were not contacting each other because they did not have access to these resources. Because of less access to cell phones and lower overall social media usage ten years ago, we cannot assume that adolescents and parents in this study all had access to social media and cell phones.

Future Research

The results of this study may be due to a lack of true association or not having the power to detect an existing association between these two variables. Although this sample had a rather large sample size, analysis of a single, self-reported Likert item may have limited ability to capture differences in true frequency of use. This is especially true considering the sparsity of technology use during the time frame of data collection. A decade ago, adolescent use of social media and cell phones was not as prevalent as it has now become (Lenhart et al., 2010; Anderson & Jiang, 2018). Aside from the increasing frequency of technology use in daily family life, it would be beneficial to look at the quality of technology communication that exists between primary caregivers and adolescent children. For example, are text messages and phone calls used to berate or punish one another? Is technology communication done with love and warmth? Or is the tone of family members typically indifferent? From the frequency reports of technology communication in this study, it is not possible to determine certain elements of communication such as the tone or the role a family member is playing in that conversation. A parent's role as a *model* of technology communication may have a different impact than a parent's role of *monitoring* or *disciplining* a child's technology use and communication (Andersen, 2016; Jennings, 2021). It may be insightful to run

analyses on the quality and types communication, and moods present during adolescent child to primary caregiver interactions through technology. Understanding the tone and context behind these family interactions would provide more insight as to how the style of communication is influencing the family system at large.

Future research may also benefit from using a more sensitive measure for emotional climate in the home. To assess the emotional climate of the home, the measure for *Family Assessment Device* was used in this study. However, in past literature on the measure of emotional climate, other subscales have been used. Kapetanovic and Skoog (2020) looked at two aspects of adolescent perceptions of the emotional climate in the home. The first aspect was an adolescent's perception of connectedness to parents, and the other is adolescent perception of being overly controlled. Subscales such as these or a new subscale may be more sensitive at detecting what elements of emotional climate are affected by technology communication. It should also be noted that previous research has defined emotional climate as being "influenced by the history of interactions between parents and their children" (Kapetanovic & Skoog, 2020, p.2). This history implies a research design that is longitudinal in nature. Therefore, future research would greatly benefit by designing a study of the associations between media connection and emotional climate in a longitudinal nature.

Researchers may greatly benefit from diving further into the quality of technology communication that is happening and the family roles that are being played out between adolescent children and their primary caregivers (Andersen, 2016; Jennings, 2021). In addition, looking at using a more sensitive subscale to measure emotional climate and considering a longitudinal research design may better address the longitudinal nature and

definition of this particular construct (Kapetanovic & Skoog, 2020). Reassessing how these two variables were measured will give researchers a better idea of how technology use within family relationships is affecting the state of energy or entropy inside the home. Perhaps technology is such a common part of family life, that it is no longer considered negative or positive. On the other hand, if further research is done to analyze the types of communication and revisit the measures for emotional climate, a stronger association may show up between these two variables.

Conclusion

This study sought to understand the association of adolescent child to primary caregiver media connection with the adolescent children's and the primary caregivers' perceptions of the emotional climate in the home. This was done by investigating three research questions:

RQ1: How does an adolescent child's report of the frequency of connection with their parents through media relate to their ability to express emotions in the home?

RQ2: How does the primary caregiver's report of the frequency of connection with their adolescent child through media relate to their ability to express emotions in the home?

RQ3: How does the family's average report of the frequency of connection with their family through media relate to their ability to express emotions in the home?

The results of my study found no significant association for any of the proposed research questions. This may be due to a true lack of significant association between the

two variables measured, or it may be that the measures of these two variables need to be refined to pick up on sensitive details in the association. Future researchers can look into this by seeking to understand the quality of media connection occurring between adolescent children and primary caregivers, and looking to assess emotional climate, through a more comprehensive subscale.

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