Research Proposal

Jaci McKenzie Hansen

University of Arkansas at Little Rock

Introduction

Technology can be a great resource for communicating and getting information. It is also a great way to pass time. However, too much technology use can be a dangerous thing to a child's development. According to previous research, there is a correlation between high amounts of screen time and negative effects on child development. Little research has been done on parental screen time and the influence that has on children's screen time.

A qualitative research study would help in investigating parental screen time and the influence it has on children's screen time. Parents could be given surveys to answer about their childhood and parenting style, as well as their opinions on technology use. This could be followed by a week of self-reporting evaluations about the family's daily technology use in the household. A research study such as this one is crucial in helping to understand why children are exposed to more than the recommended screen time. It can also be beneficial to parents and other adult family members so they know how important their example is to the children in their care.

Background, Significance, and Aims of Study

Background

A correlation between negative effects in child development and high amounts of screen time has been found from previous studies. However, little research has been done on parental screen time and how it may influence a child's amount of screen time. Parents are models for how their children are to act. If parents participate in high amounts of screen time, it could negatively impact their children's amount of screen time, too. Since a correlation has already been determined between screen time and child development, parents should be educated on those negative effects. If parental screen time is related to child screen time, then we need to educate the parents on how their interactions with technology are impacting their children's interactions with it as well.

Little research has also been done on why parents may have high amounts of screen time. Finding a motive for why parents spend so much time using technology could also be important for their child's development.

Significance and Aims of Study

Parents are a child's first teachers and role models. Children will imitate and act the way that their parents show them how to. Parents' interactions with technology will be imitated by the child, which then could lead to negative consequences in their development. Educating parents on technology use to protect their children should be a priority. Technology is also not just a danger for children, but it is a danger to adults, too. Becoming aware of your screen time and how it impacts those around, especially your child(ren), is a necessary thing to do in today's society.

This investigation on parental screen time could potentially address the problem of high amounts of child screen time, by providing a possible cause for it. High amounts of parental screen time could be impacting and influencing their children's behavior by setting negative examples or by having a misinformed view of recreational technology use.

While the investigation is primarily focusing on the correlation between parental screen time and child screen time, the surveys that will be given at the beginning could potentially be a part of the baseline research to investigate the motives for screen time used by adults. This research could potentially lower the amount of screen time that parents use.

Key Terms and Concepts

Screen time - the time that someone spends in front of a digital screen, including: a television, a computer, a smartphone, a tablet, or any other electronic device. For the purposes of this study, screen time will be considered recreational; meaning that the main use of the screen will not be for work or educational purposes.

Literature Review

The amount of time a child has with digital media, whether it be television, smartphones, computers, or tablets, has some correlation to the amount of parental involvement and attitudes towards technology in the child's life. It is important for us to understand this correlation so we can better understand the impact that screen time has on child development.

Many children today grow up with their parents working, so caring for the children is not always done by one or both parents. In the study done by Christakis, Lozano, Tandon, and Zhou (2011) suggests that preschoolers are cared for in one of the following categories: parental care only, home-based child care, center-based child care, and Head Start. Using other variables such as race, age, sex, family income, mother's education, marital status, and employment; they conducted a bivariate analysis to calculate the total daily screen time for each of the child care categories.

The study determined that more than 80% of children were in the care of someone other than their parents. It also determined that on average, the children in the study were exposed to 4.1 hours of screen time inside the home and 0.4 hours in child care. Children who were in child care, excluding parental child care, had an average of 3.5 hours of daily screen time. The children who had the least amount of screen time during child care were those who attended

child care centers. However, the study concluded that in total, 66% of all children exceeded the recommended 2 hours of screen time. (Christakis et al., 2011)

The results of the study show that preschoolers are spending more than the recommended amount of daily screen time. (Christakis et al., 2011) In order to lower that amount, the recommended number of hours for preschool children should be discussed not only with parents, but with other caregivers and child care centers.

Child care is not the only factor that can play into the increased amounts of a child's screen time. Parental attitudes and a child's home setting can also be factors. In another study, the results stated that "parents gave education, entertainment, and babysitting as major reasons for media exposure". (Christakis, Meltzoff, and Zimmerman, 2007)

In the study conducted by Lauricella, Ridout, and Wartella (2015), they acknowledged the two theories for how children learn. They either learn by watching their parents and how they interact with different people and objects, or they learn because of molar activities that happen within a concentric system. Both theories apply to the idea that a parent's interaction and attitude about technology can influence the way their child will feel about technology.

In the study they had parents complete an online survey to determine the impacts they believe that television, computers, and mobile devices have on their children. The results of the study showed that 98% of parents owned at least one television in their home, 86% owned a computer, 69% owned a smartphone, and 48% owned a tablet. (Lauricella et al., 2015) The surveys then showed that parents had a positive attitude toward all devices, but indicated that the attitudes toward televisions and computers were higher. In every screen time category -- television,

computers, smartphone, and tablets -- the study showed that the parents' positive attitudes toward the technology led to increase use in child screen time. (Lauricella et al., 2015)

Parents are the first teachers for children and their habits, beliefs, and ideas usually are passed down to them. Educating and changing the attitudes and behaviors in the parents would be the most effective way in decreasing the amount of screen time that our children use. The study done by Carson and Janssen (2012) measured the number of preschool children who watched television or played video games, while evaluating if interpersonal, intrapersonal, and physical environmental factors played a role. The study concluded that a large portion of screen time in the preschool children that participated was caused by the factors within the home.

To find these results, the study had the parents complete a questionnaire. They found from the questionnaire that age, parental attitudes, parental barriers, parental descriptive norms, parental screen time, and having a television in the bedroom all had a positive influence on the increased amounts of child screen time. Factors such as parental education, parental income, and parental self-efficacy had no influence on the increased amount of child screen time. (Carson and Janssen, 2012)

Parental influence on physical activity and screen time is also very important. The attitudes and behaviors that parents have toward technology could be lowering the amount of physical activity that their child is participating in. In the review done by Rissel, Xu, and Wen (2015) reinforces the argument that parents play a critical role in child development. The review concluded that there is strong evidence that parental influence is associated with children's physical activity and screen time, stating that "reducing parents own screen time can lead to decreased child screen time." (Rissel et al., 2015)

Research Design and Methods

To investigate the possible correlation between parental screen time and child screen time, a qualitative research study is necessary. Participants from the study will be recruited using flyers, phone calls, social media platforms, etc. Participants will need to have at least two children under the age of 12, have the other parent living in the same household, and have access to different types of technology. Participants will also need to be from different races and ethnicities in order to help make an accurate representation after the study is finished.

After the participants have been chosen, they will complete two surveys, with one asking about their childhood interactions with technology and the other asking about their attitudes towards technology, as well as their parenting styles. The childhood interaction survey will allow researchers to know what kind of interaction with technology the participants of the study had growing up. The parenting styles and attitude survey will provide researchers with a better understanding of how strict or lenient parents are toward their children's screen time usage.

Both adult participants will then self-report every evening about their technology use throughout the day, as well as their children's technology use. The results will then be put into charts and graphs to easily show if there is or is not a correlation between parental screen time and child screen time. The two pre-surveys will then be analyzed alongside the self-reported evaluation to give more insight on why the participants screen time amounts are the way they are. These analysis methods will be able to give us all of the information that we need to determine if a correlation exists or not.

Preliminary Suppositions and Implications

The results of this research could lower the amounts of screen time that is available to children, thus lowering the negative effects and consequences associated with screen time and child development. Child development can be hindered physically, mentally, and emotionally through screen time. Finding a solution to potentially stop those effects makes this research really important. While the research may be able to educate parents on how they can influence their child's screen time through their own, the goal of the research is not pass a policy or law that will regulate screen time for children or adults. Recommendations for children already exist, but parents may be able to benefit in a recommended amount of screen time usage, too.

If a correlation is found between parental screen time and child screen time amounts, future research on this topic may be able to conclude why parents use high amounts of technology. The surveys at the beginning of the research study will be able to help with baseline research for that specific topic. However, it is relevant to this study because parental attitudes, as well as their interaction with different technology in their childhood, could provide insight for their amount of screen time. Investigations for how parental screen time directly affects a child's physical, mental, and emotional development may also be an interesting topic that can be beneficial to child development research.

The proposed research topic, as well as the potential future studies, will be able to provide interventions and programs to help parents stick to the recommended amount of screen time for both their child and themselves. This could be through different health programs because the negative effects of screen time can affect the body in both physical and mental ways.

Families, including both parents and children, can greatly benefit from this research. While parents still get to make the ultimate decisions about the amount of screen time both they and their children have, the results of this study can help encourage or influence parents to cut down on the family's amount of screen time. Parenting books, articles, and other sources of reading material can help spread the word about the results of this research. Parents ultimately want what is best for their child. If lowering the amount of screen time in their lives, for both them and their children will help their child, then they will more than likely follow what the research says.

Conclusion

The research study of parental screen time and its influence on child screen time is important in finding a root cause for the high amounts of child screen time. These high levels have been proven to cause negative consequences in child development. If parents screen time is influencing the amount of screen time in their children, it is necessary to have that knowledge so that parents could be more conscious about their technological habits and their attitudes about technology. This study requires a qualitative research design because of the methods chosen to research the topic. The structure and design of the research study is the best way to get all of the information we need, as well as aid future research studies. The self-reporting strategy was the best way to not interfere with the daily lives of the participants. The surveys are necessary for the proposed research study, but the results could also be a baseline study for future research about parent's attitudes and motives about technology use. Having the participants take the surveys could help us understand the attitudes and reasoning behind the amounts of screen time by both parents and children. This study will contribute to the research already conducted by other experts on screen time and child development, as well as other technology and health related research. Technology is a great resource and can be very helpful; however, it can be dangerous. Continuing research on technology's influence in today's society is very important for the health and safety of our current and future generations.

References

Carson, V., & Janssen, I. (2012). Associations between factors within the home setting and screen time among children aged 0–5 years: A cross-sectional study. BMC Public Health,

12(1). doi:10.1186/1471-2458-12-539

Lauricella, A. R., Wartella, E., & Rideout, V. J. (2015). Young children's screen time: The complex role of parent and child factors. Journal of Applied Developmental Psychology, 36, 11-17. doi:10.1016/j.appdev.2014.12.001

Tandon, P. S., Zhou, C., Lozano, P., & Christakis, D. A. (2011). Preschoolers' Total Daily Screen

Time at Home and by Type of Child Care. The Journal of Pediatrics, 158(2), 297-300. doi:10.1016/j.jpeds.2010.08.005

- Xu, H., Wen, L. M., & Rissel, C. (2015). Associations of Parental Influences with Physical Activity and Screen Time among Young Children: A Systematic Review. Journal of Obesity, 2015, 1-23. doi:10.1155/2015/546925
- Zimmerman, F. J., Christakis, D. A., & Meltzoff, A. N. (2007). Television and DVD/Video Viewing in Children Younger Than 2 Years. Archives of Pediatrics & Adolescent Medicine, 161(5), 473. doi:10.1001/archpedi.161.5.473