

Cartoons, Parasocial Relationships, and Social Ability in Children

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ABSTRACT

Pre-existing research on children's parasocial interactions with cartoon characters has already explored the relationship between the screen and the mind, but it has not properly explored the extent of this topic. The pandemic has opened a new view of research for many interested in exploring how likely media characters are able to influence the development of social ability within children. The present study's aim is to identify the extent to which parasocial relationships formed with cartoon characters impact the social development of children aged 3 to 5. This paper uses a combination of surveys and interviews to accurately detail the impact of parasocial interactions on children's behavior. Participants of this research consisted of 64 parents of varying ages who answered the questionnaire on the behalf of their young children (3-12). An additional participant was a child specialist interviewee. Results of this paper signify that younger children are more prone to forming relationships with cartoon characters, consequently adopting their behaviors more firmly. The results were partitioned into two categories, positive social development, and negative social development. It was thus concluded from this paper that parasocial relationships can facilitate both positive and negative social development with its intensity depending on how often a child interacts with their favorite character. Findings of this paper can be further used to broaden research on personality development as well as urge the education system to adopt positive cartoons to facilitate positive social development.

Introduction

During the COVID-19 pandemic, the worldwide lockdown enclosed everyone into their homes, locking them with only one consistent partner: technology. Since the Pandemic, screen time has increased in all demographics due to prolonged isolation; however, the consequence of this sudden rise is seen most dramatically in adolescents and their development of social ability (Hassinger-Das et al., 2020). Young children who had little to no prior experience with relationship building were forced into lockdown, completely halting their development of tangible relationships with others. As social beings, humans are inclined to form relationships, thus children in lockdown, with their prolonged exposure to media, develop a special one-sided emotional connection with characters they witness online. The premise of this research is to identify the extent to which adolescents have developed an attachment to media characters and if that attachment has contributed to the development of their social behaviors. Pre-existing research on children's parasocial interactions with cartoon characters has already explored the relationship between the screen and the mind, but it has not properly explored the extent of this topic. The pandemic has opened a new view of research for many interested in exploring how likely media characters are able to influence the development of social ability within children. Thus, this study aims to identify the extent to which children, ranging from ages 3 to 5, develop their social ability by forming a parasocial relationship with their favorite cartoon characters during the times of COVID-19.

Literature Review

Attachment

Early attachment experiences with caregivers shape an infant's future interactions and relationships later in life. During COVID-19, children lost real interactions with caregivers as displacement and isolation increased (Hassing-Das et al., 2020). With ample free time, children were more inclined to explore media and become attached to fun and attractive animations. Typically, these false personas would not impact the pre-existing mind of an adult because the lack of tangibility is evident and can be separated from reality, however, "parents report that their children think that their *favorite* onscreen characters are *real*" (Calvert and Richards, 2016). Children cannot properly separate reality from cartoons, especially since the preventive methods of the pandemic prevent real social interaction. Since the belief that these characters are real people are etched into the children, they tend to adopt the behaviors and grow forms of attachment to these fake personas. A child's learning is presumably better with live figures due to the notion of reality versus fantasy that exists with real people and animated characters (Rosaen et al., 2008). The impact of animated role models on the social behavior of children will be the premise of this research.

Social Realism

Social realism is defined as the extent to which an individual views their favorite media character as being able to exist in the real world as compared to being pretend and imaginary (Aguiar et al., 2018). This notion is a prime component of parasocial relationships that is important to consider when concerning children due to their dynamic imagination (Calvert and Richards, 2014). Despite the characters being cartoony, they hold realistic components that are designed to convey a strong sense of realism through the way they move and act, impacting children's discretion between reality and falsehood (Aguiar et al., 2018). For instance, "nonhuman media characters speak, walk on two feet, and convey emotion through human-like facial expressions" (Aguiar et al., 2018). This depiction of fake characters is overlooked by adults, but for children lacking any social development, they tend to adopt realistic-looking animatronics as models for social development. As children come to believe in the reality of these characters, they might begin trusting them as friends. The idea of social realism is essential to the formation of a parasocial relationship and the attachment behaviors that are associated with the development of the relationship.

Brain Malleability

Neural plasticity plays a critical role in shaping both cognitive and behavioral developmental processes throughout one's childhood and beyond (Fandakova and Hartley, 2020). Plasticity includes the formation and elimination of synaptic connections as well as the recognition ability of the brain networks (Zatorre et al., 2012). The similarities and differences between personalities can be credited to this functional aspect of the brain that allows humans to be shaped through what they learn and through what they are exposed to. Such a factor enables the brain to be highly malleable during certain ages where neuroplasticity is the strongest. From birth to about age 5, the brain is highly malleable, however the levels of white matter substrate that help plasticity drop after the time period, before surging up again at ages 9 or 10 (Fandakova and Hartley, 2020). It is during these crucial periods that positive and negative influences shape the behavior of children. The over-exposure to media characters during COVID-19 has caused children to view cartoon characters as real beings, making them the most influential factor on personality development, aside from parental influence. Children are susceptible to rapid growth and change in personality during the high malleability periods which is why the formation of parasocial relationships with certain characters can induce both negative and positive social change. This paper will take into consideration the malleability periods and the development of a parasocial relationship in influencing social growth of a child.

Influence of Parents and Media

Parents play an important role in the shaping of their children, and in some ways in the shaping of their child's parasocial relationship with a media character (Calvert and Richards, 2016). Specifically, parents who are more inclined to encourage their children to treat a media character as if they were a human being foster a stronger one-sided relationship between the child and a character. Children are better at mimicking behaviors and actions when the one they are mimicking is believed to be real. The child is inclined to view characters as real beings and learn their behaviors more actively when the idea that the animations are human and should be treated as such is implemented into the child. However, the opposite is also true. Parents who are concerned about the amount of time their child spends on devices can put limitations on screen time and sever the formation of a strong parasocial relationship. Children during the COVID-19 lockdown experienced a spurt in access to media which increased their likelihood of being on screen, consequently, parents also experienced an increase in preventing their children from watching too much television or spending time on a device (Hassing-Das et al., 2020). Children gain experience and learn about social cues mostly through their media character in a time where tangible interactions are limited, however with parents limiting that formation of a relationship causes children to significantly lessen the bond they develop with their favorite character (Aguilar et al, 2018).

Methods

Instruments

This research was conducted through a questionnaire on Google Forms. The questionnaire consisted of a total of 5 scale based, multiple choice questions. An additional free response question was also provided to the participants to fill to the best of their ability. Questions such as "Does your child show behaviors that reflect how their favorite character may act?" were asked to determine if children had developed an attachment to their favorite cartoon character. Questions concerning the behavior and the personality of the child during the pandemic were asked to get data on the impact of COVID-19 on child development. To assess the development of parasocial relationships questions concerning the amount of time spent watching cartoons were asked. Additionally, parents were also asked to give an inference on the number of toys their child had that represented their favorite cartoon. This was asked as the increased prevalence of characters in a child's life can cause the parasocial relationship to become stronger. While this was the most convenient method to collect data, the possibility that it was more difficult for participants to fully express themselves when typing out their responses rather than answering them verbally should be noted.

Data was also collected through an interview with a child developmental specialist who works with young children in a school setting. To expand my data set, I conducted narrative interviews as the second part of the mixed methods study. Narrative interviews are interviews which seek to reconstruct experiences and events from an interviewee's life (Jovchelovitch, 2007). These interviews follow specific guidelines that implores the interviewer to ask questions in a chronological order. They need to ask questions about events which chronologically occurred first before moving on to events that occurred at later dates. Narrative interview was selected as the secondary method of acquiring data since they can effectively gather detailed narratives from interviewees. The interview was conducted for approximately 15 minutes and questions focused on the role of the specialist and her everyday interactions with adolescents. Questions such as "How long have you been working with children?" and "How would you describe your everyday life at work?" were asked before questions such as "How likely do you think it is for children to adopt the behaviors of cartoon characters?" and "Does developing an attachment to cartoon characters have the ability to influence how social children become?" to maintain the chronological sequence of a narrative interview.

Participants

Sixty-four participants of the research study were parents of various ages who answered the questionnaire on the behalf of their young children. The questionnaire asked about the child's time spent on their devices during quarantine along with any attachment they might have formed to a character. Parents were also asked to explain if they noticed any change in their child's behavior that reflected their favorite character. Individuals were chosen regardless of gender, ethnicity, or grades however since age acts as an identifying factor, parents with children older than 12 were excluded from the study. Though the study focuses on children between ages 3 and 5, the age range was extended to 12-year-olds in order to generate comparison between the level of parasocial relationships formed. Parents were chosen as they are more likely to notice and remember the behavior changes in their children. Additionally, children 12 and under would not be able to accurately fill out the questionnaire which made parents the optimal participants for this research. The other significant participant was a child development specialist who has been working with children in elementary schools for over 10 years. Since the specialist works closely with children, her participation was important in gaining an understanding of the everyday behaviors and changes in adolescents. Participation in the interview was completely voluntary and the individual was chosen due to their certification.

Study Design

A two-part, mixed-methods study was conducted. This mixed-methods approach consisted of a qualitative survey as well as a narrative interview. A survey method approach allowed for qualitative analysis of an adolescent's behavior as it related to their consumption of cartoon media following COVID-19 isolation. A narrative interview, on the other hand, provided professional insight into the development of a child's mind as observed by a specialist. A study with a combined method as such was optimal for this research as opposed to a study conducted with just a survey. The development of adolescents is a specialized topic that requires the insights of experts in the field which is why it was essential to conduct an interview with a child development specialist. A mixed methods approach was the best choice to explore the effects of parasocial relationships in children. Previous research on the topic largely focuses on content analysis of studies related to child development and sometimes consists of longitudinal case studies. Content analysis in this scope focuses largely on the development of the brain and is much more biological than the focus of this research. Longitudinal studies take long amounts of time and follow up that would not be feasible for this particular study. The feasibility of the mixed methods approach as well as the collection of sufficient data makes this option the best for this study.

Procedures

Potential subjects for the questionnaires were compiled through convenience and snowball sampling. Snowball sampling is a form of recruitment technique in which research participants are asked to assist researchers in identifying other potential subjects. The surveys were completely voluntary, and participants were made aware of the nature of the study. As mentioned in the "Instruments" section of this paper, there were two surveys that were made through Google Forms and sent out to participants. Google Forms is the easiest and the most convenient to access which was likely to be appealing to the participants as they were more willing to be a part of the study. The survey was open for about two to three weeks following the data collection and the development of the questions.

The interview was done near the end of the survey period as it could provide strong support to the data gathered by the questionnaires. The interviewee was selected based on her certification and her long-term involvement with young children. The interview was held on Microsoft Teams for approximately fifteen minutes due to the busy schedule of the expert and the wide accessibility of online meeting apps. All questions for the interview were read out-loud and pre-selected to support the topic of research, allowing for the interview to be brief yet informational. The

entire interview was recorded and transcribed so that information provided could not be misinterpreted or excluded from the paper.

Results

Responses from a total of 64 individuals were collected through a questionnaire. An additional interview was conducted for expert opinion which provided qualitative data.

Interview

The interview was conducted over a Microsoft Teams meeting. The audio recording was transcribed through the use of an online transcription device. The transcribed interview is provided in *Appendix 1*. Questions such as “do you think that the lack of social interaction causes children to see these cartoon characters as their friends and adopt characteristics?” were asked to which the interviewee replied that children tend to adopt behaviors of characters they are constantly interacting with. An example regarding the influence of having Lincoln Loud as a favorite character was explored by the interviewee. She explained that a number of children who have claimed to favor Lincoln Loud tend to be loud and disruptive in the classroom. This concern was also brought up during talks with the parents and it was confirmed that the children most enjoy the cartoon Loud House and have picked up the behaviors from the characters. Additional questions concerning the social development of children were also asked. The interviewee explains that children think in pictures at first which is why they tend to replicate the behaviors they witness online. The interviewee provided personal experience as well as experience that she encountered throughout her career, especially her experiences with children after the pandemic. Questions regarding the high incidence of media exposure within youth were asked to which the interviewee explained that parents treat cartoons and other forms of media as a babysitter for their children.

Parents Questionnaire

Parents were asked questions regarding their children since the required age group was too young to complete the questionnaire. When asked how old their child was, 13.6% had children that were 12, 20.2% had children that were 11, 21.8% had children that were 10, 14.7% had children that were 8, 6.3% had children that were 5, 11.5% had children that were 3, and 3.9% had children that were 4.

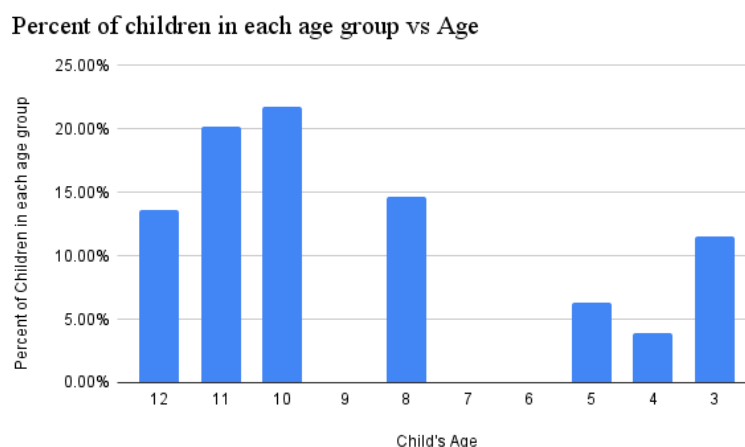


Figure 1: Percent of Children in Each Age Group

This information was included to give context to the age range of the data being collected since the focus of the study was to understand the development of social ability in young children. Initially, the parents were asked if their child’s screen time had increased during the quarantine which led to about 84.4% answering yes and the other 15.6% answering no. Parents were then asked if their child enjoyed watching cartoons. Out of the total respondents, 89.6% of the participants claimed that their child enjoyed watching cartoons while the other 10.4% claimed that they did not. The 10.4% of the respondents were then disregarded as the rest of the questions did not apply to these individuals. The rest of the respondents were asked to list their child’s favorite character and to note their child’s sociability in general. The question “How often does your child watch shows with their favorite character?” was asked on a 1-5 scale basis with 1 being 1-2 hours per day and 5 being 6-7 hours per day. Most of the respondents, 48.3%, claimed that their child was a 3, they watched the cartoons often but not to the extent of it being extremely often. 17.2% of the respondents rated their child a 1 on the scale while 34.5% rated their child a 5. 6.8% rated their child a 2 and 13.2% rated their child a 4 (Figure 1).

How Often Do Children Watch Their Favorite Cartoon

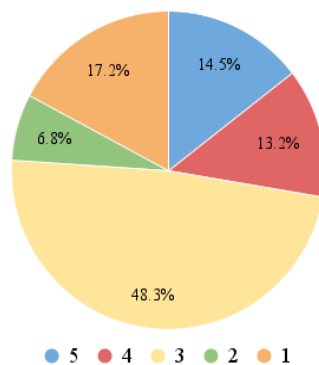


Figure 2: How Often Do Children Watch Their Favorite Cartoon

Respondents were also asked if their child had any toys or merch from their favorite character. 71.6% of the respondents said yes while the 28.4% replied no. Parents who answered yes were then prompted to answer how much merchandise their child had. This was done through a 1 to 5 scale, as well. 1 meant that the child had only 1 or 2 toys while 5 meant that the child had more than 10 toys. 39.6% of the respondents claimed that their child had more than 10 toys that represented their favorite character while only 6.8% claimed that their child had 1 or 2 toys representing their favorite character. 7.1% of the respondents claimed they had about 3-5 toys, 14.3% claimed they had 5-8 toys, and 32.2% claimed they had 8-10 toys (Figure 2).

Amount of Merchandise of Favorite Character

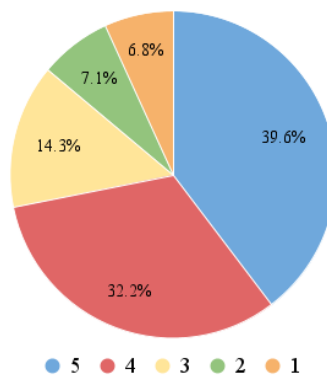


Figure 3: Amount of Merchandise of Favorite Character

Parents were also asked to note any changes in their child’s behavior in the free response section of the questionnaire since their increased screen time usage. The comments were optional, and the ones gathered are presented under the “Overall Changes in Social Development” part of this section. Multiple characters were listed with different experiences noted by the parents. Mabel from *Gravity Falls*, SpongeBob from *SpongeBob SquarePants*, George from *Curious George*, Katara from *Avatar: The Last Airbender*, Spiderman from *The Amazing Spiderman*, and Monkey D. Luffy from *One Piece* were all listed once. Bluey from *Bluey*, Gumball Watterson from *The Amazing World of Gumball*, Lincoln Loud from *Loud House*, and Aang from *Avatar: The Last Airbender* were all mentioned more than once.

At the end of the questionnaire, parents were asked to look back at their responses and give an overall rating, on a scale from 1 through 5, on how often their child was interactive with their favorite character. This question asked parents to consider the hours their child watched their favorite character during the pandemic and any changes in behavior that were similar to their child’s favorite character. 63.6% of the respondents rated their child a 5, 12.8% rated their child a 4, 10.3% rated their child a 3, 7.9% rated their child a 2, and 5.4% rated their child a 1.

Overall Changes in Social Development

Age	Positive Social Development	Cartoon Characters	Parasocial Relationship Level (1-5 scale; 1-low relationship 5-high relationship)
4	“Recently, she has become very optimistic. She is also very adamant about dressing in the same clothes as Mabel”	Mabel	5
5	“She likes to sing songs about every little thing and loves to tell adults about her different activities”	SpongeBob	4
5	“Tends to behave like George. He helps with cooking and likes to ask a number of questions about everything.”	George	5
8	“She loves being around her older brothers as of lately.”	Bluey	4
3	“Makes up creative and interesting games to include family in”	Bluey	3
10	“Has become very responsible and civil. Very caring and compassionate.”	Katara	2

Age	Negative Social Development	Cartoon Characters	Parasocial Relationship Level (1-5 scale; 1-low relationship 5-high relationship)
5	“Jumps around the house and likes to climb on furniture pretending to be spider-man”	Spiderman	5
8	“Developed a need to attack and fight his other toys”	Monkey D. Luffy	3
11	“Has learned snarky remarks and likes to retort back during conversations”	Gumball Watterson	2
12	“Sarcastic and sneaky about plans”	Gumball Watterson	4
8	“Comfort using electronics”	Lincoln Loud	2
5	“Combative”	Lincoln Loud	4
3	“Loud and over-active”	Lincoln Loud	5
10	“Impulsive”	Aang	3
10	“Mischievous and likes to sneak up on people”	Aang	1

Discussion

The study was designed to identify the extent to which attachment to cartoon characters during the COVID-19 impacted the social development of adolescents. For proper analysis of the results, the overall personality of a character as well as how often the child watched and interacted with the character will be analyzed.

After examining the results, it can be concluded that attachment to various forms of media itself provides the most significant social changes in younger children, ranging from ages 3 to 5, especially after the overexposure of media during the COVID-19 pandemic. The 48.3%, 13.2%, and 34.5% of the respondents that claimed that their children watched cartoons for hours that fell in the scale 3, 4, and 5 were often a part of the 10.3%, 12.8%, and 63.6% that rated their child’s interaction level with the character as a 3, 4, and 5. This means that these individuals were at levels 4 or 5 in the parasocial relationship level as they had high levels of interactions with characters. The increased usage of media during the pandemic allowed for the children to increase their interaction with their favorite characters, thus enabling a stronger parasocial relationship. It is also important to note that the incidence of the formation of a parasocial relationship was increased when children had physical toys that portrayed their favorite cartoon characters. 39.6% of the individuals who claimed that their child had more than 10 toys representing their favorite character were more likely to fall in the higher levels of the parasocial relationship scale. It is evident in this case that the more a child interacted with characters, the stronger their bond became. Children who were reported to have high interactions with cartoon characters were often the ones who were classified as having higher levels of parasocial relationship which in turn increases the character’s influence on children and allows their social abilities to be altered.

The chart provided under “Overall Changes in Social Behavior” explored the different levels of interaction and the severity of the positive or negative social development as it relates to the level of parasocial relationship. The

children who had high parasocial relationship levels of 4, or 5 were mostly younger children aged 3 to 5. Children between the ages of 3 and 5 displayed the most significant influence on behavior as it related to their level of parasocial relationship. A 3-year-old, a 5-year-old, and an 8-year-old were all reported to have Lincoln Loud from the *Loud House* as their parasocial bond. However, the 3-year-old and the 5-year-old had a parasocial relationship level of 5 and 4, respectively, which differed from the parasocial relationship level of the 8-year-old. Though the assessment of parasocial relationship was done by the interviewer, it is apparent in the justification of the parent that the 3-year-old and the 5-year-old that were “loud and overactive” and “combative” were much more receptive of the behavior portrayed by Lincoln Loud as compared to the 8-year-old who was reported to find “comfort using electronics.” Similarly, the 10-year-olds with Aang from *Avatar: The Last Airbender* had a much less change in social development due to a parasocial relationship as they were reported to be “impulsive” and “mischievous” yet the character showed no signs of having such traits. These individuals also fell on levels 3 and 1 of the parasocial relationship scale which corresponds with the lack of influence on the children’s social ability. The interviewee claimed that younger children tend to think in pictures first, making cartoons highly appealing to this crowd. It is possible that these age groups develop a much stronger parasocial bond with cartoon characters as they are at an age where the brain is highly malleable. Such factors make this group the most susceptible to positive and negative social development resulting from parasocial bonds.

The findings from the results were able to conclude that the stronger the parasocial bonds, the more influenced a child’s social ability becomes. It is evident from the chart that children reporting parasocial relationships of 4 and 5 were more likely to exhibit behaviors that were similar to their favorite character. This pattern was present in both positive and negative social development. Children aged 3 to 5 were more likely to exhibit positive character traits such as optimism, collaboration, kindness, and curiosity when they had a stronger parasocial relationship with characters that were positive and kind (Overall Changes in Social Development). Children with SpongeBob and Curious George as their favorite characters had parasocial relationship levels of 4 and 5. These children were reported to have a change in behavior that was much like that of the characters, proving that parasocial relationships have the ability to impact the social development of children to a great extent. Negative social behaviors were also manifested in young children who had favorite characters that engaged in a lot of violence. A 5-year-old with the parasocial relationship level of a 5 had Spiderman as his favorite character. This child was reported to enjoy jumping on furniture and climbing around the house, a negative trait most often displayed by Spiderman. It is highly likely that the high attachment levels caused the child to adopt the most profound behavior of Spiderman, even though it can be considered highly negative.

Fulfillment of Gaps in the Research

From the beginning, research has been conducted on the development of adolescents and the factors that influence them. Prior research has been conducted on attachment styles and the influence of media however, none have focused on the extent to which social ability of children develops by the formation of parasocial relationships with favorite cartoon characters. By identifying social developments within children and comparing them to the amount of attachment formed, a strong relationship between the impact on social ability and parasocial relationships was able to be formed. In determining the highly influential role of parasocial relationships within children ranging from 3 to 5 during COVID-19, this study was able to fill the gap in the preexisting research and opened the door for future research to be studied.

Implications

Hopefully, this paper will enable caretakers to re-evaluate the amount of screen time they offer their children. The data found in this research implied that children who had developed a more profound attachment to cartoons during

isolation developed a more negative social behavior. In modern society, the increased access to media has enabled adolescents to form attachments to online figures which has resulted in a wide range of problems such as “sleep, addiction, anxiety, sex related issues, behavioral problems, body image, physical activity, online grooming, sight, headache, and dental caries” (Bozolla et al., 2022). This paper specifically focuses on the behavioral issues children experienced as a result of developing an attachment to characters during isolation. Primary caretakers should take into consideration that adolescents are susceptible to new changes thus, characters are most influential to these individuals. This paper will be helpful for caretakers to control how much and how often their child is exposed to media.

This research paper also enables the education system to view positive cartoon media as a way to encourage positive socialization among children. The research identified that children who most often developed an attachment to positive and optimistic media were more likely to showcase positive behavior development. The ability of the media to broaden the horizons of the youth and act as a tool for learning has been met with much optimism already (Anderson et al., 2001). The addition of this research will enable teachers and administrators to practice incorporating cartoons into their curriculum to help children learn positive social skills. Moreover, the development of parasocial relationships with characters involved with educational channels can be instrumental in aiding children in understanding concepts such as STEM and language learning. In some instances, parasocial relationships become a part of the intelligent character model designed to teach children academic topics, by having socially meaningful characters such as Dora the Explorer provide “socially contingent feedback to children (Calvert et al, 2014).”

Limitations

The respondents in the questionnaire often listed their child’s favorite cartoon instead of listing their favorite character which adds a flaw to the data as the researcher is unable to determine if a specific character is stimulating a change in behavior or if the entire show is contributing to the changes in the adolescent’s behavior. It is difficult to understand which specific character the adolescent is attached to and the researcher is forced to assume that all characters are playing a part in emotional development of a child rather than forming a specific parasocial relationship with a character. This was a major setback to the results as a large set of data could not be used to analyze the effects of parasocial relationships and media characters on young children.

Conclusion

This study aimed to find a relationship between the increased use of media in children and the formation of parasocial relationships in facilitating social ability. Quantitative and qualitative data were both collected and displayed different social development in children during the COVID-19-time frame. After analyzing the data collected, it was found that children who had a more profound exposure and interaction with their favorite character during COVID-19 were more likely to adopt their behaviors. A strong parasocial relationship was formed between children and characters because COVID-19 allowed for children to be exposed to media for more than 2 hours a day. The outcomes of the one-sided relationships were both positive and negative, however, the more a child interacted with the character, the more intensely their behaviors replicated that of the character. The qualitative data provided professional insight on the influence of parasocial relationships in fostering change in social ability as it detailed on the experience of the professional with kids who have come out of COVID-19 and primarily enjoy cartoons. Through the cooperation and patience of the participants, the entire research was smooth flowing and allowed for proper data to be collected.

Future Research

This study acts as a catalyst to future research. Interviews can be expanded to include a diverse set of pediatric medical professionals across the country that can give dense information regarding the development of an adolescent's behavior as it correlates to their consumption of media. One could also investigate the prevalence of cartoons in each individual's childhood in addition to finding a personality type to determine the influence of parasocial relationships on the development of an individual.

The five-factor model is the most widely used and empirically supported model of personality types. It consists of the five personality types: "Neuroticism, Extraversion, Openness (to experience), Agreeableness, and Conscientiousness" (Chmielewski and Morgan, 2013). These five broad trait dimensions of personality represent the individual differences people might hold. In terms of this specific topic, additional research can be conducted on determining an adolescent's personality type as well as determining their favorite character's personality type to further compare and contrast their behaviors. Since these traits act as an umbrella to a variety of different personality types, having a set standard of broad traits will allow for both characters and adolescents to fall in a wide range without straying too far from the standard.

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