

EFFECT OF VIDEOGAME PLAY AND EXTRACURRICULAR ACTIVITIES ON PARENT PERCEIVED SOCIO-EMOTIONAL FUNCTIONING IN CHILDREN AND ADOLESCENTS

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Abstract: *Background:* Videogames have become a large part of children and adolescents' everyday life and social interaction. Tanner (2007) reports that over 90% of children play videogames and this is likely an understatement. Previous research has shown a significant effect between playing videogames and aggressive and hostile behavior; however, there is some disagreement about the magnitude of the effect and what factors contribute to aggression and social skills. *Purpose:* The current study aimed to add to the literature regarding videogames and adolescent socio-emotional functioning, specifically the impact of videogame play on social skills and problem behaviors of children and adolescents as perceived by parents using a regression analysis. In addition, a relatively unknown predictor in this area, involvement in extracurricular activities, was included in the analysis. *Material and Method:* The sample included parents ($N = 114$) of 4 to 17 year old children who were recruited through a social networking site. Parents completed a demographic form and the Strengths and Difficulties Questionnaire in order to assess for social/emotional functioning. *Results:* The results suggested that none of the predictors were significant in predicting social skills and socio/emotional functioning at the .05 level. Future directions and limitations are discussed.

Keywords: Videogames, Social Functioning, Emotional Functioning, Extracurricular Activities.

Tanner (2007) reports that over 90% of children play videogames and that figure may be an underrepresentation. Videogames have become

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part of American culture and play a major role in entertainment in children's daily life (Kallio, Mayra, & Kaipainen, 2011; Newman, 2004; Yee, 2006). In fact, United States consumers spend an estimated 4.5 billion dollars annually on videogame consoles, content, and accessories (NPD Group, 2011). The recent increase in videogame use has lead researchers to examine the effects of videogames on various domains such as aggression (Carnagey & Anderson, 2005; Gentile, Lynch, Linder, & Walsh, 2004), addiction (Chappell, Eatough, Davies, & Griffiths, 2006; Young, 2009), psychotherapy (Ceranoglu, 2010), school performance (Din & Calao, 2001; Ip, Jacobs, & Watkins, 2008), and healthcare (Kato, 2010).

Videogames encompass a wide array of hardware and mediums including cell phones, game consoles, computers, and handheld systems. The types of videogames have expanded exponentially since the early years of gaming. For example, one of the most iconic and simple games is *Pong*, where the user simply had to keep a ball from entering their side of the screen by bouncing it off of a paddle; however, current videogames range from basic concepts to full encompassing story lines, online interactions, and even gameplay that can take over 100 hours to complete. The prevalence of videogame use and impact on culture has become so engrossing that videogames are now advertised on soft drink cups, pizza boxes, and in commercials. Colwell and Kato (2003) suggest that playing videogames may replace friends for some children and social isolation is a possible outcome of spending too much time engaged with videogames as opposed to peer interactions. Although this connection between playing videogames and potential impact on socio-emotional functioning has been recognized, the literature has been inconsistent in findings and further exploration is warranted.

EFFECTS OF VIDEOGAMES ON SOCIO-EMOTIONAL FUNCTIONING

Negative Effects

Aggression and hostility. Although the effects of videogames have been noted in regards to social functioning for adolescents, the majority of research in this area has focused on aggression. Anderson et al. (2008) used a longitudinal design to examine the effects of violent videogames

in two different cultures, the United States and Japan. When controlling for gender and previous aggression, playing violent videogames was significantly associated with aggressive behavior. Additionally, a recent meta-analysis conducted by the same author revealed similar findings between western and Japanese culture (Anderson et al., 2010). The results suggested that violent videogames are significantly related to increased aggressive behavior and a decrease in empathy and prosocial behavior. The meta-analysis conducted by Anderson et al. examined not only short term effects of videogames (e.g., right after playing a violent videogame) but also longitudinal effects. The authors found over 130 articles from both western and Japanese literature. Aggression was measured in multiple ways such as the degree of an adverse stimuli given to someone after playing a game (such as electric shocks) or questionnaires/reports from parents, teachers, and the child or adolescent. The authors also examined the degree to which playing violent videogames affected empathy, which was usually measured with self-report. Finally, prosocial behavior was also examined by providing someone with assistance, providing support (money), or self-report. The overall results of the meta-analysis suggested that playing violent video games is associated with increased aggression, cognition, and decreased empathy both in the short and long term duration. Although the results showed that violent videogames significantly increased aggression and decreased empathy and prosocial behavior, the different measures across cultures were not identical and the use of these measures may explain some of the variance as opposed to true similarities or differences between cultures.

Specific qualities of videogames have been examined to determine their influence on violence in youth. Barlett, Harris, and Bruey (2008) examined the videogame *Mortal Kombat: Deadly Alliance* with the settings set to display different levels of blood during gameplay. Inside the game itself, the researchers altered the settings to show blood at the maximum, medium, low, or off level. This way, participants at different levels were exposed to varying amounts of blood whenever a character was attacked in the game. Participants in the maximum and medium blood level condition showed a significant increase in physiological arousal and hostility after playing the videogame. Specific content inside of videogames (such as blood or amount of violence) can significantly impact aggressive behavior. Additionally, Olson et al. (2009) found

that adolescents who play more mature rated games (generally games with more violence and blood) were more likely to engage in bullying behavior or get involved in physical fights; however, the authors found no significant relationship for delinquent behavior or being a victim of bullying.

The effect of violent videogames has been shown to have effects on aggression and hostility not only in the short term, but longitudinally. Willoughby, Adachi, and Good (2011) examined the effects of violent videogames with 1,492 9th through 12th graders at a high school in Canada. The participants were administered multiple measures in all four years of their high school education. Violent videogame play was a significant predictor of aggression when controlling for other variables with a small effect size in the low .20 range. The authors, however, relied solely on self-report measures so no direct observations were conducted in order to cross-validate factors such as hours spent playing videogames.

Hastings et al. (2009) examined a sample of 70 six to ten year old children and their parents. The researchers were interested in the effect violent videogames had on educational performance. Educational performance here was measured by parent self-report of grades or by providing the researchers with a copy of their child's report card. Questionnaires were sent home to participants regarding types of games played, time spent playing, and parental monitoring. Hastings et al. found that children who play more violent videogames are more likely to engage in delinquent behaviors measured by the Child Behavior Checklist (CBCL; Achenbach, 1991), such as stealing items outside of the home and have negative school outcomes as measured by the CBCL and grade point average; however, students who played *educational* games in the study were more likely to have positive educational outcomes such as better grades overall. Although this study was correlational in nature, the results suggest that it is not simply the act of playing a videogame that is negatively related to educational performance; it is the *content* of the videogame.

Gender differences have also been found in the negative effects of videogames. For example, Desai, Krishnan-Sarin, Cavallo, and Potenza (2010) found that playing videogames was related to an increase in reporting externalizing behaviors for girls but less internalizing. The authors of the study, based on the data they collected, suggested that

playing videogames was a social norm for adolescent boys and therefore was not related to potential negative health factors.

Social skills. Griffiths (2010) conducted a study involving undergraduate students examining computer videogame playing and social skills. Undergraduate students who spent more time playing computer videogames evidenced a higher degree of social anxiety. Griffiths hypothesized that this is likely due to the fact that individuals who play more computer games lower their incident rate of engaging in social behavior with peers, thus resulting in more social anxiety; however, the study was correlational in nature and only included undergraduate students. Additionally, Zamani, Kheradmand, Cheshmi, Abedi, and Hedayati (2010) found that students in second grade who scored higher on a computer game addiction questionnaire had less quantity and quality of social skills when compared to students who were not addicted to games. The outcomes measures consisted of parents completing questionnaires examining videogame play and social skills; however, other factors that could impact social skills such as involvement in extracurricular activities were not measured. The authors report that one important limitation to their study was the fact that there is a lack of consensus regarding a definition of videogame addiction, which is a consistent limitation across the videogame addiction literature.

Additionally, Funk, Baldacci, Pasold, and Baumgardner (2004) examined the relationship between exposure to violent media and desensitization and empathy in 4th and 5th graders. Students completed four self-report questionnaires regarding type of media they prefer, demographic information, and construct specific outcome measures which included the KID-Screen for Adolescent Violence Exposure (Hastings & Kelly, 1997), the Attitudes Towards Violence Scale: Child Version (Funk, Elliott, Bechtoldt, Pasold, & Tsavoussis, 2003a), and an empathy measure created by the researcher. Violent videogames were associated with decreased empathy, but not exposure to other violent media such as violent television programs; however, they were unable to find a significant relationship between exposure to real violence and increased desensitization.

Jeong and Kim (2011) examined another important social skills construct, social self-efficacy. The researchers were interested in the relationship between attitudes about gaming and social self-efficacy.

The sample consisted of 600 middle and high-school students in South Korea. Social skills constructs were measured by self-report (such as how much social time the students spent with their family and friends). Children who engaged in more social activities with their parents were less likely to engage in problem videogame playing behavior. Family social time may play a vital role in preventing this problem behavior. The authors stated that "...gaming with children could be one of the proactive mediations by parents in preventing their children from the negative effects of gaming" (p. 219). This suggests that the act of solitary gaming without the involvement of others may be a predictor of developing problem videogame playing behavior.

NEUTRAL OR POSITIVE SOCIO-EMOTIONAL IMPACTS

Aggression and hostility. Not all studies in the literature have found a significant negative effect between playing videogames and socio-emotional functioning. Ferguson et al. (2008) conducted two studies examining the relationship between playing violent videogames and aggression. The first study included 101 undergraduate students, most of whom were Hispanic (48.5%). In the first study, the authors separated the participants into three groups. The first was assigned to a violent videogame, the second was assigned to play a comparable nonviolent game, and the third was given the choice of which to play. For the first study, the authors found that playing a violent videogame was not a significant predictor of aggressive behavior. The second study revealed that previous family violence (verbal and physical abuse) was a significant predictor of aggression as opposed to playing violent videogames. This study suggests that previous exposure to family violence is a stronger predictor of future crimes as opposed to exposure to violent videogames; however, the authors did indicate that an aggressive personality combined with exposure to violent videogames did predict future violent crimes. One limitation regarding these studies includes the correlational nature and the fact that only undergraduate students were included in the sample.

Social skills. In addition to Ferguson et al.'s (2008) findings, Gentile et al. (2009) conducted three experiments examining the potential effect

of videogames on prosocial behavior. The first study was a correlational study where secondary students from Singapore were asked to list their three favorite games and then complete a questionnaire regarding prosocial behavior. The authors, when controlling for age, sex, exposure to violent videogames, and time spent playing videogames, found that students who played games with more prosocial content reported to engage in more prosocial behavior. In the second study, the researchers asked students to rate the frequency of games they played with certain positive social behavioral scenes in them and then they asked how often the students engaged in certain prosocial behaviors. As with the first study, the researchers found that students who played more games with certain prosocial scenes in them engaged in more positive social behaviors. Finally, study three used an experimental design to determine if playing prosocial videogames would lead to prosocial behaviors. Participants were randomly assigned to play a violent videogame, prosocial game, or neutral one. Afterwards, they were asked to either help or hurt a partner with an activity. Participants in the prosocial group were significantly more likely to help after playing the game.

Another study conducted at a German university found positive effects of prosocial games (Greitemeyer, Osswald, & Brauer, 2010). The researchers separated the 56 participants into two groups, one which played a prosocial game (*Lemmings*) and the other a neutral game (*Tetris*). After playing the game for 10 minutes, the participants read a vignette and responded to questions regarding empathy. Even after replication, playing a prosocial game increased interpersonal empathy; however, the effects were only measured in the short-term, not longitudinally.

EXTRACURRICULAR ACTIVITIES

Extracurricular activities play an important role for children and adolescents (Howie, Lukacs, Pastor, Reuben, & Mendola, 2010). These can range from involvement in organized activities such as Boy Scouts or Girl Scouts, to playing sports for their school, to involvement in religious activities. Previous research has shown that children and adolescents who participate in extracurricular activities are more likely to have better educational outcomes, less problem behaviors, and better prosocial skills

(Cooper, Valentine, Nye, & Lindsay, 1999; Fletcher, Nickerson, & Wright, 2003; Fredricks & Eccles, 2008). Participation in extracurricular activities may act as a buffering effect for playing violent videogames and the potential impact on socio-emotional functioning. That is, individuals who engage in more extracurricular activities may offset some of the potential negative impacts of playing videogames. For example, Griffiths (2010) suggested that the act of playing videogames takes time away from meaningful peer interaction and, therefore, impacts social skills negatively. An adolescent who is involved in extracurricular activities such as band or sports will likely have more engaged time with peers even if they are playing excessive hours of videogames.

Howie, Lukacs, Pastor, Reuben, and Mendola (2010) examined archival data from the Centers for Disease Control and Prevention, National Center for Health Statistics to examine how participation in activities outside of school impacts children's behaviors and social skills. Activities outside of school were measured by guardian response. These included questions regarding sports, various school organizations, religious activities, and scouts. Problem behaviors and social skills questions were administered to the guardians regarding items such as bullying, being disobedient, and understanding other people's feelings. The authors found that participation in sports and clubs was related to better social skills; however, there was not a significant effect on behavior, only social skills.

Participation in extracurricular activities has also been shown to be correlated with less depressive symptoms (Mason, Schmidt, Abraham, Walker, & Tercyak, 2009). The researchers assessed multiple variables in adolescents presenting at a medical clinic. Depressive symptoms were measured via a self-report questionnaire and extracurricular activities were assessed in a similar manner, asking the adolescents specific questions about clubs and organizations. The authors highlight the importance of an adolescent's social environment (including extracurricular activities) in regards to depressive symptoms.

PURPOSE OF THE CURRENT STUDY

The current research examining the effects of videogames on children and adolescents' social/emotional functioning has been

mixed but suggests that videogames overall may have a negative impact. Additionally, the current research is lacking in our knowledge of how extracurricular activities impact these outcomes and if it can be a protective factor for children and adolescents. The current study attempted to further investigate videogames and their effect on children and adolescent's socio-emotional functioning and examine a relatively unknown predictor in this area, hours spent in extracurricular activities. The impact of involvement in extracurricular activities as a predictor in addition to time spent playing videogames and types of games played is largely unknown. The current study attempted to answer the following questions:

1. Do hours spent playing videogames, types of videogames played, gender, hours involved in extracurricular activities, and age of child predict parent perceived prosocial skills in children and adolescents?

2. Do hours spent playing videogames, types of videogames played, gender, hours involved in extracurricular activities, and age of child predict parent perceived emotional/behavioral functioning in children and adolescents?

METHOD

Participants & Setting

Participants included 116 parents of children and adolescents between the ages of 4 and 17. The mean age of the parents was 37.13 with the majority being female (74%), from Texas (64.7%), and at least had a bachelor's degree (58%). The average age of the children and adolescents the parents reported on was 9.08 years of age with the majority being male (60.5%). Additionally, the majority of the children and adolescents were Caucasian (80%). Parents were excluded from the study if they did not have a child who was between the ages of 4 and 17 because this is the age range of the social skills measure. Participants were offered the chance to be entered to win one of two \$25 gift cards for participating in the study and were recruited through Facebook. An event was created on the social networking site and individuals were invited to attend. A recruitment script was included in the event and participants were invited to invite others to take the survey as well.

Because most of the participants were from the researchers' friends on the site, the sample was largely a convenient one.

Upon accessing the online survey through Surveygizmo, parents were provided a cover letter which explained the purpose of the study and provided contact information for the principal investigator and faculty advisor. Green (1991) recommended a minimum number of participants of $104 + k$, with k representing the number of predictors. Since the number of predictors in the current study was five, we exceeded the goal number of 109. Additionally, Field (2009) recommends between 80 and 100 participants for a regression to detect a medium effect size with five predictors. According to this criterion, the current study meets the minimum requirement to detect a medium effect size.

MEASURES

Demographic Questionnaire. A demographic questionnaire was administered to determine the following variables: sex of child, ethnicity, parent level of education, ESRB rating of games their child typically plays, estimated time per week their child engages in extracurricular activities, and estimated hours their child plays videogames per week.

Strengths and Difficulties Questionnaire (SDQ). The SDQ is a rating scale designed to briefly measure constructs in the area of social skills and problem behaviors (Goodman, 1997). The current study only used the parent rating form. The first four scales of the SDQ are added together to form a Total Difficulties score. The Pro Social Behavior scale was used to assess social skills and the Total Difficulties score was used to assess behavioral/emotional functioning. Parents completed one of two forms of the SDQ. One version is intended for children aged 4-10 years old and the second version is intended for adolescents aged 11-17 years of age. Standardization of the SDQ (for the United States version) included 9,878 individuals from households across the country who participated in the 2001 National Health Interview Survey. Internal reliability for the parent version of the instrument has a mean Cronbach alpha of .70 (Goodman, 2001; Muris, Meesters, & van den Berg, 2003). The Total Difficulties composite scale when isolated has a reliability coefficient of .84. Additionally, test-retest reliability has been shown to

be .62 after a four to six month interval (Goodman, 2001). The SDQ has also demonstrated strong discriminate and convergent validity and the Total Difficulties scale has been shown to be highly correlated ($r = .70$) with the Child Behavior Checklist Total Score (Goodman, Ford, Simmons, Gatward, & Meltzer, 2000; Muris, Meesters, & van den Berg, 2003).

PROCEDURES

Participants for the study were recruited only through Facebook. Once recruited, the online survey included a cover letter explaining confidentiality along with the study materials. In order to be entered for a chance to win a gift card, participants had the opportunity to access a second survey after completing the original survey to input their personally identifying information; it should be noted that this identifying information was not matched to responses on the survey. Participants completed two forms, the demographic questionnaire and the parent form of the SDQ (Goodman, 1997) appropriate to their child's age. The online survey also specified that if the individual filling out the form has more than one child/adolescent in the age range of the study, they should complete the survey on the child with the earliest birthday in the year.

RESULTS

Participants were excluded from data analysis if any part of their data were missing. This was decided so that the regression analysis would be the most conservative model possible. The final analysis included 114 participants (two were excluded). In order to measure parent's perceptions of how closely they monitor their child's videogame play, two questions were included in the questionnaire. Both questions were assessed on a seven point Likert scale with one corresponding to no confidence and seven corresponding to very confident. The first question was "How confident are you in your estimate of how many hours your child/adolescent plays videogames per week?" Parents endorsed this item an average of 6.25 out of 7. The second question asked parents "How confident are you in your estimate of the type of videogames

your child/adolescent typically plays?” The question yielded similar results in an average of 6.63 out of 7. These questions indicated that the current sample likely felt very confident in their knowledge of what type of games their child typically plays and how long they typically play videogames per week. One possible explanation for the relatively high endorsed confidence levels was that the sample collected included a majority of younger children and, theoretically, parents of younger child are probably more likely to monitor their child’s videogame playing.

Table 1 displays the frequencies of the types of videogames played. As noted earlier, the average age of the children was 9.08 years of age, which provides a possible explanation as to why only 30 played videogames rated Teen or Mature.

Table 1. *Frequency of ESRB Rated Games*

ESRB Game Rating	Frequency	Percent
Early Childhood (EC)	30	26.3
Everyone (E)	46	40.4
Everyone 10 Plus (E10+)	8	7.0
Teen (T)	15	13.2
Mature (M)	15	13.2
Total	114	100

Table 2 displays the data for how many hours the parents endorsed that their child was involved in extracurricular activities per week.

Table 2. *Hours Involved in Extracurricular Activities*

Hours	Frequency	Percent
0 Hours or NA	14	12.3
1-3	16	14.0
4-6	35	30.7
7-9	21	18.4
10-12	14	12.3
13-15	5	4.4
16-18	6	5.3
19-21	1	.9
Greater than 21	2	1.8
Total	114	100

The largest category fell in the 4-6 hour range with only three parents reporting more than 19 hours.

The data in Table 3 reports how often parents reported that their child played videogames per week. It is important to note that all parents reported that their child or adolescent played at least one to three hours per week. One explaining for this is that parents who read the recruitment script on Facebook may have perceived that if their child did not play videogames then they were not eligible for participation. The majority of parents (48.3%) reported that their child plays one to three hours per week with only three reporting greater than 21 hours.

Table 3. *Hours Playing Videogames Per Week*

Hours	Frequency	Percent
0 Hours or NA	0	0
1-3	55	48.2
4-6	23	20.2
7-9	12	10.5
10-12	10	8.8
13-15	3	2.6
16-18	3	2.6
19-21	5	4.4
Greater than 21	3	2.6
Total	114	100

A standard regression analysis was performed in order to answer the first research question which hypothesized that gender, types of videogames played, hours played videogames per week, hours involved in extracurricular activities, and age would significantly predict pro social skills in children and adolescents. The regression was completed between the dependent variable (Pro Social scale on the SDQ) and the independent variables. The analysis was conducted using SPSS version 18. Assumptions were tested by examining normal probability plots of residuals and scatter diagrams of residuals versus predicted residuals. No violations of normality, linearity, or homoscedasticity of residuals were detected. Box plots revealed that 5% of the cases were within three standard deviations of the mean and no cases greater than three

standard deviations. This suggested that no outliers were influencing the results of the analysis.

The regression analysis revealed that the model did not significantly predict social skills in children and adolescents, $F_{(5, 107)} = .80, p > .10$. R^2 for the model was .04, and the adjusted R^2 was -.01. Table 4 displays the unstandardized coefficients (B), intercept, and standardized regression coefficients (β) for each variable.

Table 4. Regression Analysis for Pro Social Behavior

Variables	B	SE B	β
Constant	7.64	.73	
Gender	.49	.37	.14
ESRB	-.06	.23	-.04
Hours Playing Videogames	-.02	.11	-.02
Hours in Extracurricular Activities	.11	.10	.11
Age of Child	.00	.07	.00

Note. $R^2 = .04$

In terms of individual relationship between the independent variables and the Pro Social Behavior subscale, gender ($t = 1.31, p > .10$), ESRB rating ($t = -.25, p > .10$), hours played videogames per week ($t = -.20, p > .10$), hours involved in extracurricular activities per week ($t = 1.12, p > .10$), and age of child ($t = -.02, p > .10$) were each non-significant in predicting social skills.

A second standard regression analysis was performed in order to answer the second research question which hypothesized that the independent variables would significantly predict socio/emotional functioning. The regression was completed between the dependent variable (Total Difficulties scale on the SDQ) and the same five independent variables. The same assumptions were tested as the first analysis. No violations of normality, linearity, or homoscedasticity of residuals were detected. Box plots revealed less than 5% of the cases were within three standard deviations and only one greater than three. Because there was only one case in this range (less than 1%), we decided to keep the datum in the analysis.

The regression analysis revealed that the model did not significantly predict emotional/behavioral functioning in children and adolescents,

$F_{(5, 107)} = .51, p > .10$. R^2 for the model was .02, and the adjusted R^2 was -.02. Table 5 displays the unstandardized coefficients (B), intercept, and standardized regression coefficients (β) for each variable.

Table 5. *Regression Analysis for Total Difficulties Scale*

Variables	B	SE B	β
Constant	7.03	2.45	
Gender	.32	1.24	.03
ESRB	-.29	.75	-.07
Hours Playing Videogames	.57	.36	.19
Hours in Extracurricular Activities	.06	.34	.02
Age of Child	-.08	.22	-.06

Note. $R^2 = .02$

In terms of individual relationship between the independent variables and the Total Difficulties subscale, gender ($t = .26, p > .10$), ESRB rating ($t = -.38, p > .10$), hours played videogames per week ($t = 1.58, p > .10$), hours involved in extracurricular activities per week ($t = .17, p > .10$), and age of child ($t = -.37, p > .10$) were each non-significant in predicting emotional/behavior functioning.

DISCUSSION

The current study attempted to determine if five predictors (gender, types of videogames played, hours played videogames per week, hours involved in extracurricular activities, and age of child) significantly predicted social skills and overall emotional/behavioral functioning in children and adolescents. Data were collected through Facebook and included parents of children and adolescents between the ages of 4 to 17 year olds. The dependent variables were the Pro Social and Total Difficulties scales from the SDQ. All information was gathered online through Surveygizmo.

The current study found that none of the five predictors significantly predicted social skills or emotional/behavioral functioning in children and adolescents. This finding is in contrast to some of the previous literature such as Anderson et al. (2008) and Barlett, Harris, and Bruey

(2008) who found a significant effect of playing violent videogames and increased violence and hostility. Additionally, Griffiths (2010) found that undergraduate students who played more computer games had increased anxiety levels. The current study is more in line with Ferguson et al. (2008) who suggests that other factors besides playing violent videogames play a more important role in negative emotional behavior such as aggression such as a previous history of family violence.

Although the findings from the regression analysis were not significant, the findings from the study are a meaningful addition to the literature base in terms of the potential impact of violent games and hours of videogame play on *younger* children. The parents from the current sample appeared to monitor their child's videogame play closely and restricted the types of games played (only 30 of the 113 parents reported that their child plays videogames rated Teen or Mature most often). An important factor regarding the impact of violent videogames may be parental monitoring. Some parents may pay special attention to the type of media their child consumes while some may just let their child sit in their room and play/watch whichever form of entertainment they choose. Additionally, there may be cultural differences in how children experience videogames that may play a significant role in how children experience videogames and online play (see Jackson et. al., 2008).

LIMITATIONS AND FUTURE DIRECTIONS

The current research has several limitations and should be interpreted with caution. The first limitation is that only parent responses were examined as part of the analysis. Only the self-report of parents were examined in the analysis which may affect the outcome of the study. Because of the reliance on self-report, we were unable to verify the data (e.g., time spent playing videogames, types of games typically played, etc.). There could be a discrepancy between how many hours parents believe their child plays versus what they actually play. Additionally, the average age of the children/adolescents reported on in this study was close to 9 years of age. Although data were collected for both children and adolescents, it may be more appropriate to separate the age categories as opposed to combining them. A majority of the research

conducted in this area examined adolescents or college-aged students, who are typically more independent than children and are more likely to play more violent videogames (e.g., Barlett, Harris, & Bruey, 2008; Ferguson et al., 2008; Olson et al., 2009).

Sampling bias likely exists in that the majority of the parents were friends of the researchers on Facebook and may have exhibited a certain type of parenting style. For example, it may be the case that parents who are more involved in their child's activities or are in a higher socio-economic bracket (constant access to a computer) may have been more likely to complete the survey. Additionally, the current sample was a convenient sample and likely did not encompass the attitudes and beliefs of the typical parent. This is suggested by the demographic data collected through the questionnaire (e.g., the majority of the parents endorsed being Caucasian and female).

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VIDEOŽAIDIMŲ IR UŽKLASINĖS VEIKLOS REIKŠMĖ SUBJEKTYVIAM TĖVŲ SAVO VAIKŲ IR PAAUGLIŲ SOCIALINIO IR EMOCINIO FUNKCIONAVIMO VERTINIMUI

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Santrauka. Mokslinė problema. Videožaidimai tampa vis svarbesne vaikų ir paauglių kasdienio gyvenimo ir socialinių sąveikų dalimi. L. Tannerio (2007) duomenimis, videožaidimus žaidžia daugiau nei 90 % vaikų ir mažai tikėtina, kad šis rodiklis būtų perdėtas. Ankstesniais tyrimais buvo nustatytos sąsajos tarp vaizdo žaidimų žaidimo ir agresyvaus elgesio; tačiau nesutariama, kokio stiprumo įtaką daro žaidimai ir kokie veiksniai lemia vaikų agresyvumą bei socialinius įgūdžius. **Tikslas.** Šio tyrimo tikslas – papildyti žinias apie vaizdo žaidimų ir socialinio-emocinio funkcionavimo paauglystėje sąsajas, ypač akcentuojama videožaidimų reikšmė vaikų ir paauglių socialiniams įgūdžiams ir probleminiam elgesiui, kuris atskleidžia per tėvų požiūrį. Tikslui pasiekti taikoma regresinė analizė. Papildomai atsižvelgiama į užklausinę veiklą, retai analizuojamą tokio pobūdžio tyrimuose. **Metodai.** Tyrime dalyvavo

114 tėvų, auginančių vaikus nuo 4 iki 17 metų. Dalyvauti tyrime tėvams buvo siūlo-
ma per socialinį tinklalapį. Tėvai atsakė į demografinius klausimus ir užpildė „Galių ir
sunkumų klausimyną“, kuriuo buvo vertinamas vaikų socialinis ir emocinis funkcio-
navimas. **Rezultatai.** Tyrimo rezultatai atskleidė, kad nė vienas iš analizuotų veiksmų
statistiškai reikšmingai ($\alpha < 0,05$) neprognozavo vaikų ir paauglių socialinio ir emo-
cinio funkcionavimo. Straipsnyje aptariamos tolesnių tyrimų kryptys ir šio tyrimo
ribotumai.

Pagrindiniai žodžiai: videožaidimai; socialinis funkcionavimas, emocinis funkcionavi-
mas, užklausinė veikla.

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