SOCIAL RESEARCH REPORTS
ISSN: 2066-6861 (print), ISSN: 2067-5941 (electronic)

DIGITAL GAME, CYBERBULLYING AND RISK FOR TEENAGERS

Mhana KHATIB

Social Research Reports, 2018, Vol. 10, Issue 3, pp. 19-27
The online version of this article can be found at:
www. researchreports.ro

Published by:
Expert Projects Publishing House

Covered by Index Copernicus International
www.indexcopernicus.com

Directory of Open Access Journals
www.doaj.org
On behalf of:
Center for Program and Social Development

Aditional services and information about Social Research Reports
can be found at:
www.researchreports.ro

DIGITAL GAME, CYBERBULLYING AND RISK FOR TEENAGERS

Mhana KHATIB[1]

Abstract

Digital games are an integral part of the daily routine of children and teenagers. More than 95% of them spend a large part of their free time to it (Greenberg, Sherry, Lachlan, Lucas & Holmstrom 2010). Since many of the games contain blatant elements of violence, by the last few years there is an argument regarding the influence these games have on violent aspects of the personalities and behavior of the players. Due to the centrality of digital games in the leisure culture of children and teenagers, it is especially important to understand the impact of violent digital games on this age group. A large part of the digital games, including multiplayer games that have become part of almost all types of users in recent years, include a main component of violence. Most teenagers in modern western societies use the internet and computer games in various places (home, school, and friends) and on various devices (computer, tablet, cell phone). According to a survey performed in the United States in 2010, 84% of ages 8-18 have access to the internet from their homes, an increase of about 14% of the estimated home-based approach five years earlier, and it was also found that young people spend about two and a half hours a day using computers. In Europe, 60% of ages 9-16 use the internet almost every day, for an hour and a half on average, and the average age of joining is 9 years old (Livingstone *et al.*, 2011). In Israel, 86% of ages 12-18 use the internet every day.

Keywords: risk, internet, digital games, compulsiveness, aggression, cyberbullying.

Introduction

Risk behaviors on the Internet

Any person who behaves in order to protect, promote or maintain their health, regardless of his understanding of his health, is considered to have a healthy behavior (Eglite, Vintila, Grinfelde, & Kantike, 2012). Throughout their lives, people are confronted with events, different life situations, and challenges that they have to deal with and develop their existence (Tudorel, Macsinga, & Virga, 2013).

[1] West University of Timisoara, Timisoara, ROMANIA. E-mail: mhana_ch73@walla.co.il

The involvement of adolescents in dangerous behaviors is considered a natural and normal developmental phenomenon. It has been demonstrated that offline social support, have a negative effect on Internet addiction (Tudorel & Vintila, 2018). To create a good relationship is to choose from the range of possible behaviors, those who provide harmony with the other person (Goian, Vintila, & Bucur, 2012).

The literature considered that Internet gaming disorder it could lead to internet addiction (Vintila & Tudorel, 2018). According to the article of Greene *et al.* (2000), there are two ways to look at this phenomenon: the first, as a normal developmental stage in which adolescents seek the appropriate behavior, and the second, as a negative by-product of cognitive development, i.e. egocentricism. According to the normal / adaptive approach, involvement in risk behaviors is associated with a poor assessment of the risk in a given situation resulting from lack of maturity or lack of experience. According to the egocentricism approach, which characterizes adolescence so much, there are situations in which adolescents find it difficult to recognize the need for judgment since they are overwhelmed by feelings of lack of vulnerability and uniqueness. One of the arenas where the adolescent's misjudgment may lead them to behave dangerously is the internet environment. For example, their flawed consideration may cause them to reveal sensitive information about themselves, to bully others or to make contact with strangers. The unique characteristics of the internet - anonymity, asynchrony, lack of social clues, wide distribution, the distance created by the network, which reduces inhibitions and emotions of empathy, ease of operation and use, availability, absence of time and space limitations, infringement of home privacy and lack of supervision and control mechanisms (Vakkenburg & Peter, 2011), all these may contribute to an increase in risk behaviors on the internet, to the expansion of the circle of children and adolescents participating in them, and to the exacerbation of behavioral outcomes. Anonymity can stimulate impulsive behavior that can lead to the removal of inhibitions, aggressiveness, sending abusive messages, harassment and cyber bullying towards members of the peer group (Valkenburg & Peter, 2011). The asynchrony of online communication enables users to read, think, and change the messages they write before they are sent (Walther, 2007). This feature of communication technology can be used improperly by formulating messages so carefully that they become particularly painful to the recipient (Valkenburg & Peter, 2011). The high availability of the internet allows young people to communicate easily with others with malicious intentions and become a target for online sexual solicitation. Valcke *et al.* (2011) proposed a synopsis of the internet dangers to adolescents according to which the internet dangers are divided into three domains: content hazards, communication hazards, and commercial hazards. Content hazards refer to children's exposure to potentially harmful content (pornography, violence, racism, false information). Commercial hazards refer to the involvement of children in consumer activity, sometimes unconsciously, through games that include hidden offers for the sale of "brand communities" products aimed to young people in the internet and advertising of food and drink products.

Digital games

Violent contents have become common in digital games and the popularity of

violent digital games increases when it contain many violent effects. Digital games can be played in a competitive or collaborative manner. In a competitive game strategy, players try to keep others from winning or getting a game resource. In contrast, in a cooperative game strategy, players help each other achieve a common goal, and the success of one player is the success of all. The influence game strategy on current player aggression after the game, findings show (Schmierbach, 2010) low level of aggression among players who have cooperated with others against the computer as a rival (cooperative mode) compared to those who played alone against the computer as a rival (solomode) and those who played alone against a human rival (competitive mode), suggesting the possibility of reducing the level of aggression by adopting a cooperative strategy during a violent digital game. As for the effect of interaction between basic aggression and game strategy (competitive / cooperative), among low aggressors, the current level of aggression remains unchanged before and after the game, both cooperative and competitive, while among those with high level of aggression there was a decrease in the level of aggression in a cooperative violent game, compared to an increase in non-violent competitive game (Dubi, 2012).

Compulsive use of the internet is the pattern of internet use in general or in specific applications that cause disturbances in person's life, but does not imply illness or addictive behavior (Morahan-Martin, 2008). Examples of the characteristics of compulsive use of the internet are use which harms sleep, relationships with significant people, proper functioning in work or learning, and unceasing thinking about the next opportunity to connect to the network (Young, 1998). Unlike compulsiveness of using digital applications that have an off-line version, like gambling, compulsiveness the using games is unique to the digital medium (Charlton & Danforth, 2007).

Aggression of players in violent digital games

The research literature relates to aggression of two different types: aggression baseline that is the trait of participants, while current aggression is violent behavior of the participant in a given moment. Aggression baseline is a multi-dimensional trait that includes four factors (Buss & Perry, 1992): physical aggressiveness, verbal aggression, anger and hostility.

Concerning the consequences of violent games on aggressive behavior outside the game, in the study of digital games, different theoretical approaches with contradictory predictions can be found (Bosche, 2009). General Aggression Model (GAM) (Anderson & Bushman, 2002) claims that exposure to violence in a digital media will necessarily lead to increase of the current level of aggression. According to the model, consumption of violent digital games increases violent behavior outside the game and reduces empathy, both in the short and long term (Anderson & Dill, 2000). Players who persist in violent games are characterized by high basic aggression (Bartholow, Bushman, & Sestir, 2006) and more forgiving attitudes towards violent behavior (Weber, Ritterfeld, & Mathiak, 2006) compared to non-persistent players.

Other researchers point also the positive side of violent digital games (Bosche, 2010). Some claim that violence in a digital game allows catharsis to release

aggression harmlessly in the game environment and thus reduce violent behavior outside the game (Ferguson *et al.*, 2010).

Cyberbullying

Cyberbullying is defined as "behavior carried out through electronic or digital media by individuals or groups that repeatedly transmit hostile or aggressive messages with the intent to cause harm or inconvenience to others" (Tokunaga, 2010, p.278) it can be done in various ways, including sending an offensive text or images, prevention or exclusion from activities, threats, use of derogatory names and insults (Jovonen & Gross, 2008), and more. It is customary to divide the children involved in cyberbullying into three groups - network victims, cyberbullies, and witnesses (Treblus et al, 2011). There is a growing number of researches that speak of another group - victims / cyberbullies that grows rapidly. Moshna *et al.* (2012) report that 26% of the participants in the research belonged to the group of victims / cyberbullies. Li (2007) claims that the chance of being a victim of cyberbullying on one hand and cyberbully on the other is big and stems from belonging to an active social group whose members tend to harass each other in the group. This implies that cyberbullying behavior becomes part of the accepted behavior in the peer group.

The literature shows correlation between traditional bullying and cyberbullying, i.e. bullies in physical life tend to be cyberbullies, victims in physical life are also tend to suffer of cyberbullying (Talmud, 2013). Yabarra *et al.* (2007) performed a research among 10-15-year-old who reported that 36% of children experienced traditional bullying and cyberbullying, 13% of them of the same attacker. Another research found that 54% of the students were victims of traditional bullying, and a quarter of them were also harassed via the internet (Li, 2007). These findings indicate a continuum between bullying behavior in the real world and in the virtual world. The internet has become an additional arena of activity, but due to its unique characteristics (anonymity, distance that reduces inhibitions and empathy, independence of time and space, ease operation and widespread distribution), the number of participants - both attackers and witnesses - has increased since the digital environment allows children who have refrained from traditional bullying to engage in cyberbullying (Tokunaga, 2010).

Digital space allows attackers to more easily evade the consequences of their actions because children and adolescents avoid involving adults in their experiences for a variety of reasons. Adults are perceived as strangers in virtual culture and therefore the children fear that they will not understand them. The children also believe that bullying cannot be proven or that the attacker cannot be found, or they fear that adults, in order to protect them, will deny them access to the network and this is perceived by them as punishment (Mishna *et al.*, 2012). Therefore, action to reduce the phenomenon should be carried out in the educational preventative level, which requires an understanding of the risk factors of cyberbullying.

Method

Procedure and participants

The questionnaire was distributed among 400 pupils from the schools nationwide. 294 questionnaires were returned, 73.5% of return. 45% of the respondents were boy, and 55% were girls. The average age is of 16.5 years old, the frequent age was 17 years old, and the lowest age was 13 years old. Accordingly, most of the sample was children from 11^{th} – 12^{th} Grades. Only 15% of the respondents testified that they have a computer, 250 pupils testified about personal computer use, among them 214 pupils have laptop. About computer consulate, 54% testified that they have a computer consulate.

Results

H1. There are negative relations between personal and general risk perceptions and involvement in risk behaviors and intentions to be involved in risk behaviors. This hypothesis has been completely confirmed (*Table 1*). It was found that the personal and general risk perceptions are related negatively to involvement in risk behaviors and intentions to be involved in risk behavior *($r = -.57$, $p < .05$; $r = -.61$, $p < .05$; $r = -.63$,$p < .05$; $r = -.71$, $p < .05$)*.

Table 1: Correlations between variables

	Personal Risk Perception	General Risk Perception
Involvement in Risk	-0.570 ***	-0.633 ***
Intention to be Involved in Risk	-0.605 ***	-0.711 ***

H2. There are positive relations between attitudes toward risk behaviors and involvement in risk behaviors and intentions to be involved in risk behaviors.

Table 2: Correlations between variables

	Attitudes towards Risk Behavior
Involvement in Risk	0.617 ***
Intention to be Involved in Risk	0.764 ***

*p > 0.05 *** P = 0.05 ****

This hypothesis has been completely confirmed. According to the results (Table 2), the hypothesis is confirmed ($r = .62$, $p < .05$; $r = .76$, $p < .05$). It was found that attitudes toward behavior at risk are positively related to risk involvement and intentions to be involved in risk behaviors.

H3. There are positive relations between past involvement (in the past year) in risk behaviors and intentions to be involved in risk behaviors in the future. Based on the Pelling & White model (2009), past behavior is significant in explaining intentions to be involved in future risk behaviors: (1) With the growth of the age, the involvement in risk behaviors increases and intentions to be involved in risk behaviors increases; (2) As Internet usage time increases and the use of Chats, Blogs, Forums, and Instant Messaging become increasingly used, so increases the involvement in risk behaviors and intentions to be involved in risk behaviors.

Table 3: Correlations between variables

	Involvement in Risk	Intention to be involved in Risk
Age	0.451 ***	0.548 ***
Increased Usage of Internet	0.161 ***	0.163 ***
Usage of Games	0.231 ***	0.251 ***
Usage of Games with Others	0.233 ***	0.261 ***

These hypotheses have also been completely confirmed (see Table 3). It was found that as the age grows, so increases the involvement in risk behaviors. And as pupils more tend to use the Internet, play games alone, or play with others, so the involvement in risk behavior and the intentions to be involved in risk behavior increase *($r = .45$, $p < .05$, $r = .16$, $p < .05$, $r = .23$, $p < .05$, $r = .23$, $p < .05$, $r = .55$, $p < .05$, $r = .16$, $p < .05$, $r = .25$, $p < .05$, $r = .26$, $p < .05$*).

Discussion

Developmental psychological theories suggest that as children mature, changes in their needs, life experiences, and abilities are increased (Pender & Stein, 2002; Solberg, 2003). This period is characterized by experiencing different behaviors and formulating positions in order to develop a unique personal style and identity. This process is accompanied by an increase in the prestige and influence of the peer group and a decrease in dependency on parents (Pender & Stein, 2002). At the same time, there is an increasing involvement in the risk behaviors which are adopted by adolescents. Boys are perceived to tend more to risk and violence behaviors, when girls more likely to behave in accordance with social norms (Lamish *et al.*, 2009). In the context of involvement in online risk behaviors, there are evidences that frequency of use and types of activities, particularly Chats and Blogs, increase exposure to strangers and network risks (Sasson & Mesch, 2004).

The compulsiveness of using the game was influenced by the social context of

the game only in models with verbal aggression and hostility. Surprisingly, in these cases cooperative games have been found to be associated with higher compulsive use than competitive games. A possible explanation for this is that the cooperation between the players requires a lot of actions that may develop their relationship, such as mutual assistance and planning of tactics together, thus meeting the needs of the players and increasing the compulsiveness of use. According to literature (Xu *et al.*, 2011), the need for a relationship is one of the motives that pushes people to participate in online games and that the need of people to develop relationships is a clear predictor of compulsive participation in games.

Conclusion

Therefore, it can be concluded that the collective - group game has an advantage over the competitive - interpersonal game in terms of increasing the sense of belonging to the game community. It is therefore possible to recommend players with a low level of aggression who cannot sense a strong sense of belonging to the game group in competitive strategy and in interpersonal games to play group games in a cooperative strategy so they could feel more belonging to the game group and to win more friends. In addition, the findings show that there is no fear that low-aggressive individuals will become compulsive players. On the other hand, players with high baseline aggressiveness should avoid or limit the use of violent digital games that may lead to compulsive use, although this can sometimes increase the circle of their friends, even if it is collective games or group games.

As for the implications of violent digital games on the behavior of the players in the game environment, we have seen that these games enable the release of negative emotions in the game environment according to the catharsis theory that claim that alleged violence in a digital game enables violence release in the game environment and thus reduces violent behavior outside it (Ferguson *et al.*, 2010). According to the quantitative and the qualitative analysis it seems that the player's character has a decisive influence on the negative projection of violent digital games - players with a predisposition to aggression will play the game more obsessively than less aggressive players, mostly regardless to the type and strategy of the game.

Comparing the criteria of the questionnaire of compulsive use of internet (Young, 1996) with the interviewees' claims, shows there is a great similarity between the two cases in the symptoms of compulsive use of the game, especially according to a new meta-analysis, the level of compulsive use of internet in the Middle East is the highest in the world, when Israel is one of the four Middle Eastern countries that entered the analysis (Cheng & Li, 2014).

References

Anderson, C. A., & Bushman, B. J. (2002). Human aggression. *Annual Review of Psychology*, *53*(1), 27-51.

Bartholow, B.D., Bushman, B.J., & Sestir, M.A. (2006). Chronic violent video game exposure and desensitization to violence: Behavioral and event-related brain potential data. *Journal of Experimental Social Psychology*, *42* 532-539.

Bosche, W. (2009). Violent content enhances video game performance. *Journal of Media Psychology: Theories, Methods, and Applications*, *21*(4), 145.

Burton K.A., Florell D., & Wygant D.B. (2013). The role of peer attachment and normative beliefs about aggression on traditional bullying and cyberbullying. *Psychology in the Schools*, *50*(2), 103-114.

Chapin, J. (2014). *Adolescents and Cyber Bullying: The Precaution Adoption Process Model. Education and Information Technologies*, pp. 1-10.

Charlton, J.P., & Danforth, D.W. (2007). Distinguishing addiction and high engagement in the context of online game playing. *Computers in Human Behavior*, *23*, 1531-1548.

Dubi, T., & Eden, S.. (2010). The impact of violent digital games and strategies play on the level of aggression in children. In: Eshet-Elkalai Y., Kaspi, A., Eden, S., Geri, N., Yair, Y. and Kalman Y. (editors), *The Seventh Conference of Chais Research and Innovation in Technology: Learning in the Technological Era*, Ra'anana: The Open University, pp. 70-79

Eglite, A., Vintila, M., Grinfelde, A., & Kantike, I. (2012). Healthy Lifestyle in the Elderly's View in Romania and Latvia. *Economic Science for Rural Development*, *19*, 98-102;

Goian, C., Vintila, M., & Bucur, V. M. (2012). Analysis of terminology usage for Roma people among Social Work professionals in Romania. *Social Research Reports*, *22*, 5-27.

Greenberg, B.S., Sherry J., Lachlan, K., Lucas, K. & Holmstrom, A. (2010). Orientations to video games among gender and age groups. Simulation Gaming, *41*(2), 238-259.

Greene, K., Krcmar, M., Walters, L.H., Rubin, D.L., & Hale, L. (2000). Targeting adolescent risk- taking behaviors: the contributions of egocentrism and sensation seeking. *Journal of Adolescence*. *23*, 439-461.

Juvonen, J., & Gross, E.F.(2008). Extending the school grounds? Bullying experiences in cyberspace. *Journal of School Health Association*, *78*(9), 496-505.

Livingstone, S., Haddon, L., Grzig A., & Olafsson, K. (2011). *Risk and Safety on the Internet*. LSE London School of Economics and Political Science.

Swami, V. Tudorel, O. I., Goian, C., Barron, D., & Vintila, M. (2017). Factor structure and psychometric properties of a Romanian translation of the Body Appreciation Scale-2. *Body Image, 23*, 61-68.

Tokunaga, R.S. (2010). Following you home from school: A critical review and synthesis of research on cyberbullying victimization. *Computers in Human Behavior*, *26*, 277-287.

Trebelus, T.,Heiman, T., & Olenick-Shemesh, D. (2011). *Internet violence versus face-to-face violence among youth*. Chais Conference on Learning Technologies Research, conference book.

Tudorel, O.I., Macsinga, I., Virga, D. (2013). Actualizarea de sine: de la starea de bine la viziunea asupra lumii. *Romanian Journal of Applied Psychology*, *15*(1), 20-26.

Tudorel, O.I., Vintila, M. (2018). The role of Social Support on Internet Addiction. *Revista de Asistenta Sociala*, 1.

Valcke M., De Wever B., Van Keer H., & Schellens T. (2011). Long-term study of safe internet use of young children. *Computers & Education*, *57*, 1292-1305.

Valkenburg, P.M., & Peter, J. (2011). Online communication among adolescents: An integrated model of its attraction, opportunities and risks. *Journal of Adolescent Health*, *48*, 121-127.

Vintila, M., & Tudorel, O.I. (2018). *Determining Psychometric Properties of and Validating the Romanian Version of the Internet Addiction Test*. SAGE Research Methods Cases. London: Sage Publication

Walther, J.B. (2011). Theories of Computer Mediated Communication and Interpersonal Relations. In Knapp M.L., Daly J.A. (eds.). *Interpersonal Communication*, London: Sage Publications.

Weber, R., Ritterfeld, U., & Mathiak, K. (2006). Does playing violent video games induce aggression? Empirical evidence of a functional magnetic resonance imaging study. *Media Psychology*, *8*, 39-60.

Young, K.S. (1998). Internet addiction: The emergence of a new clinical disorder. *CyberPsychology & Behavior, 1*, 237-244.