

Original article

The Associations Between Aggressive Behaviors and Internet Addiction and Online Activities in Adolescents

Chih-Hung Ko, M.D.^{a,b,c,d}, Ju-Yu Yen, M.D.^{a,b,c,e}, Shu-Chun Liu^a, Chi-Fen Huang^a,
and Cheng-Fang Yen, M.D., Ph.D.^{a,b,*}

^aDepartment of Psychiatry, Faculty of Medicine, College of Medicine, Kaohsiung Medical University, Kaohsiung City 807, Taiwan, Republic of China

^bDepartment of Psychiatry, Kaohsiung Medical University Hospital, Kaohsiung City 807, Taiwan, Republic of China

^cGraduate Institute of Medicine, College of Medicine, Kaohsiung Medical University, Kaohsiung City 807, Taiwan, Republic of China

^dCenter of Excellence for Environmental Medicine, Kaohsiung Medical University, Kaohsiung, Taiwan 807, Republic of China

^eDepartment of Psychiatry, Kaohsiung Municipal Hsiao-Kang Hospital, Kaohsiung Medical University, Kaohsiung City 812, Taiwan, Republic of China

Manuscript received March 19, 2008; manuscript accepted November 12, 2008

Abstract

Purpose: To evaluate (a) the association between Internet addiction and aggressive behaviors, as well as the moderating effects of gender, school, and depression on this association; and (b) to evaluate the association between Internet activities and aggressive behaviors.

Methods: A total of 9405 adolescents were recruited into this study and completed the questionnaires. Their aggressive behaviors, with or without Internet addiction, Internet activities, demographic data, with or without depression, self-esteem, family function, and the watching of violent TV were assessed.

Results: The results demonstrated that after controlling for the effects of shared associated factors and watching violent TV programs, adolescents with Internet addiction were more likely to have aggressive behaviors during the previous year. The association was more significant among adolescents in junior high schools than in senior high/vocational schools. Online chatting, adult sex Web viewing, online gaming, online gambling, and Bulletin Board System were all associated with aggressive behaviors.

Conclusions: The results suggest that preventive programs for aggressive behaviors should pay attention to Internet addiction among adolescents. Also, intervention to prevent the effects of Internet addiction on aggressive behaviors should be conducted as early as possible. © 2009 Society for Adolescent Medicine. All rights reserved.

Keywords: Aggressive behavior; Internet addiction; Online chatting; Adult sex Web; Online gaming

Interpersonal violence is an important issue of mental health among adolescents. For the past half a century, violence among adolescents has resulted in frequent cases of injury, disability, and death [1]. In addition, aggressive behavior in childhood and adolescence is a risk factor for violent behavior in adults [2]. Thus, it is important to develop preventive strategies for aggressive behavior in adolescents. Understanding the risk factors for developing aggressive

behavior is one of the important steps to developing primary prevention strategies for adolescent violence.

The influence of mass media has been addressed as one of the most important factors for adolescent violence [3]. For example, media violence viewing has been repeatedly reported to be associated with aggressive behavior [4]. Social learning theory, the cognitive neo-association model, and social cognitions have all been utilized to explain this association [3]. These theories have mostly focused on how adolescents changed after they watched violent content in the media. Now, however, the development of modern technologies has made media not only able to be passively viewed by the users, but allow the users to actively participate in the activities, as in video games, for example.

*Address correspondence to: Cheng-Fang Yen, M.D., Ph.D., Department of Psychiatry, Kaohsiung Medical University Hospital, No. 100, Tzyou 1st Road, Kaohsiung 807, Taiwan, R.O.C.

E-mail address: chfaye@cc.kmu.edu.tw

Violent video games have also been reported to negatively impact social and emotional functioning in adolescents [5]. The general aggression model has been posited to explain both the development of aggression across adolescence and individual differences in susceptibility to the influence of violent video games [6]. Based on this theory, both personal characteristics and situational variables contribute to the individuals' internal state. Cognitions, affects, and arousals interact with each other in the internal state to allow an individual to interpret an aggressive act and make decisions about it [6]. Repeated violent game playing provides learning, rehearsal, and reinforcement of aggression-related knowledge structures, which then increase the aggressiveness of the personality [6]. This demonstrates that the development of media technology has continually enhanced its influence on adolescents, and the theory focusing on it should accordingly be reviewed and renewed over time.

The Internet is one of the most widely accessible media in the world with characteristics different from previous media. First, Internet users not only watch the content online, but also participate in Internet activities. Second, different from video games, Internet users usually interact with an object represented by other people in the chat room or online gaming, but not by the machine. Third, the Internet interaction was more interpersonal. It also provides the chance for adolescents to make contact with strangers all over the world without the limitation of age. Fourth, adolescents can search for the information with very few limitations. Fifth, it is difficult for Internet use to be monitored by parents. In addition, youths have become a valuable target of the commercial market [7]. More and more Internet technologies and activities are designed to attract adolescents.

Thus, understanding how the Internet influences aggressive behavior of adolescents is important to revise preventive strategies of adolescent violence today.

Heavy use of the Internet among adolescents might result in maladaptive internet behavior termed "Internet addiction" [8]. This has been defined to have six or more symptoms of nine criteria; those include preoccupation, uncontrolled impulse, usage more than intended, tolerance, withdrawal, impairment of control, excessive time and effort spent on the Internet, and impairment of decision-making ability, and impaired function based on a diagnostic interview [9]. Recent studies have found that 19.8% of adolescents have Internet addiction [10], and furthermore, it is associated with hostility [11]. Yet, there is no report focusing on the association between Internet addiction and aggressive behavior among adolescents. Thus, it is necessary to evaluate the effect of the Internet on aggressive behavior. This could shed light on the mechanism of influence on aggressive behavior from this newly developed media. However, adolescents with Internet addiction might also have exposure to other factors that might also predispose adolescents to aggressive behavior.

Being male, being depressed, having lower self-esteem, and poor family function have all been reported to be

associated with both Internet addiction [12–14] and aggression [6,15–17]. Thus, these factors should be controlled for, in any analysis to prevent their confounding factors. Also, because violent TV watching was one of the most frequently reported media factors for aggression, by controlling the influence of watching violent TV programs, the unique impact of the Internet could further be demonstrated. Moreover, it is necessary to evaluate the moderating effects of gender, depression, and school type on the association between Internet addiction and aggressive behavior; this could further reveal which characteristics can make adolescents vulnerable to the effect of the Internet on aggressive behavior.

Further, Internet activities are composed of varied types of activities. Because varied activities might provide different situational effects on adolescence, they might result in different effects on violence. It is also necessary to evaluate what activities are associated with aggressive behavior. Thus, the aims of the study were to: (a) evaluate the association between Internet addiction and aggressive behavior by controlling for the effects of age, gender, the type of school (junior vs. senior high school), depression, self-esteem, family function, and watching violent TV programs, as well as the moderating effects of gender, school, and depression on this association; and (b) evaluate the association between Internet activities and aggressive behavior by controlling for the effects of age, gender, the type of school, depression, self-esteem, family function, watching violent TV programs, and Internet addiction.

Methods

Sample

The current investigation is based on data from the Project for the Health of Adolescents in Southern Taiwan, which was composed of data collected from three metropolitan cities and four counties. This project aimed to investigate many risk behaviors that include violence, and associated variables for adolescents. Its design, with massive sampling, was utilized to provide adequate variance to more completely explore the association between these behaviors controlled by many factors that have been previously mentioned. In 2004, there were 257,873 adolescent students in 209 junior high schools and 202,456 adolescent students in 140 senior high/vocational schools in this area. According to the definitions of urban and rural districts in the Taiwan Demographic Fact Book [18] and school and grade characteristics, a stratified random sampling strategy was utilized to ensure that there was proportional representation of districts, schools, and grades. We recruited 12 junior high and 19 senior high/vocational schools from urban districts; likewise, 11 junior high and 10 senior high/vocational schools from rural districts. The classes of these schools were further stratified into three levels based on grades in both junior high and senior high/vocational schools. Then, 12,210 adolescent students (3% of population) in 207 classes were randomly selected based on the ratio of students in each grade.

Download English Version:

<https://daneshyari.com/en/article/1080243>

Download Persian Version:

<https://daneshyari.com/article/1080243>

[Daneshyari.com](https://daneshyari.com)