

THE CAUSE OF COLLEGE STUDENTS' CYBERBULLYING IN KOREA: EFFECT OF
PRIOR VICTIMIZATION

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ABSTRACT

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It is essential to minimize the dysfunctions of internet use such as cyberbullying and make proper cyberculture. Recently in Korea, since both cyberbullying and cyberbullied groups have expanded beyond adolescents to college students, the severity of cyberbullying has reached a level that can no longer be overlooked. However, due to the lack of countermeasures against cyberbullying, it is necessary to spread the consciousness of the problem and to take countermeasures through identifying causes of cyberbullying. In this study, we investigated the cyberbullying incidents among college students by conducting empirical analysis and identified how prior victimization affects their perpetration.

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CHAPTER 1. INTRODUCTION

New technology always creates new phenomena and while new phenomena can have a positive effect on our society, there are always negative aspects. The cyberspace created by the emergence and diffusion of the Internet has positively influenced our society, such as the increase of communication, free expression of opinion, and the spread of participatory democracy (Lee, 2011). The Internet not only supplements real-life socializing but also it plays a supplementary role in social capital flow (Wellman, Haase, Witte, & Hampton, 2001). The Internet also provides a rich array of other services, from information retrieval to electronic commerce and entertainment. Perhaps more importantly, the Internet has become a critical medium for interpersonal communication (Stafford, Kline, & Dimmick, 1999). Additionally, personal electronic devices such as smartphones, which have been developed in this regard, are very useful for modern people, regardless of men and women of all ages.

One of the side effects of this prevalence and easy access to technology is its use as an instrument of bullying in cyberspace, commonly referred to as cyber-bullying (Lee, 2011). In South Korea, the Internet use rate for people in their 20s is 100 percent and smartphone use rate is 99.7 percent of which nearly a quarter experience cyberbullying (Ministry of Science, ICT, and Future Planning, 2017). Cyberbullying, a term which is currently used synonymously with cyber harassment and cyber violence, refers to the behavior of individuals or groups that repeatedly transmits offensive content using electronic or digital media with the purpose of harming or discomforting others (Tokunaga, 2010). According to one study (Kowalski, Limber, Limber, & Agatston, 2012), college students, not just in Korea, but throughout the world have reported experiencing cyberbullying frequently after entering the university. In this sense, in recent years, the age groups of both cyberbullying perpetrators and victim groups have moved from adolescents to young adults comprising college students

and ordinary workers. Consequently, the prevalence and severity of cyberbullying have reached levels that can no longer be overlooked.

Cyberbullying is defined as 'the act of posting or sharing texts, videos, and pictures using the Internet, mobile phones, or other electronic devices for the purpose of harassing or annoying others (National Crime Prevention Council, 2017). Since cyberbullying can occur at any time and anywhere without restrictions on time and space, it has a more negative impact on victims than traditional bullying (Lee, Kang, & Lee, 2015; Lowry, Zhang, Wang and Siphonen, 2016). Additionally, cyberbullying causes as much psychological distress to an individual as offline bullying, that is, bullying in physical space. Victims of cyberbullying experience anger, helplessness, fear and sadness (Hoff & Mitchell, 2009), low self-esteem, and depression (Ybarra, Mitchell, Wolf, 2006; Bauman, Toomey & Walker, 2013; Mishna, Khoury, Gadalla, & Daciuk, 2012). In addition, compared to those who did not experience any forms of cyberbullying, both victims and perpetrators of cyberbullying are more likely to have suicidal thoughts and attempts (Hinduja & Patchin, 2010).

In South Korea, the cyberbullying rate among those in their 20s is similar to or higher than that of middle and high school students (Korea Communication Commission, 2016). According to the Korea Communications Commission (2016), 25.5 percent of those in their 20s had suffered from cyberbullying during the past year, whereas 18.5 percent of middle school students and 22.0 percent of high school students experienced cyberbullying. This shows that the proportion of victims was relatively higher among people in their 20s. Regarding perpetration of cyberbullying, 22.9 percent of people in their 20s, 20.5 percent of middle school students and 22.0 percent of high school students engaged in cyberbullying. This finding shows that, among perpetrators, there was not much difference between middle and high school students and those in their 20s. Further, according to a survey by the National

Youth Policy Institute (2012), when asked, "Have you ever been bullied on social media in the past year?", college students reported twice as much victimization as high school students. Nevertheless, most of the cyberbullying research in South Korea is limited to elementary school students and teenagers. This research expands the scope of research on factors that examine the extent, nature, and the antecedents of cyberbullying among young adults, with an emphasis on college students.

Similar to the focus of current study, a number of previous studies concentrated on analyzing the causes of cyberbullying (Hinduja & Patchin, 2008; Li, 2007; Lee and Jun, 2015; Lee & Lee, 2016). These prior studies which identify various factors that affect cyberbullying are the same causes that are common to traditional bullying perpetration (Jang, Song, & Kim, 2014). Examples include prior cyberbullying victimization experience (Jun & Kim, 2015; Choi, 2015), gender (Li, 2006), strain factors (Shin, 2016), weak social support (Kim & Kang, 2016), and lack of self-control (Li, Holt, Bossler, & May, 2015) are among the factors that are also closely related to cyberbullying perpetration. Others argued that anonymity, a unique feature of cyberspace, can cause cyberbullying (Lee et al., 2015; Lowry et al., 2016). However, some of these prior studies on cyberbullying have a few limitations in the analyses of the subjects and causes, which will be addressed in this study.

First, most of the existing cyberbullying studies were conducted on teenagers. Since most of the aforementioned studies regarded bullying as a deviant or delinquent behavior caused by teenagers in school, cyberbullying also appears to have been limited to cyberspace harassment by teenagers. However, according to a 2016 cyberbullying survey conducted by Korea Communications Commission, engagement in cyberbullying among adults was 17.9 percent, and cyberbullying victimization experience was 22.3 percent, which was higher than that of teenagers (cyberbullying perpetration, 17.5% and victimization experience, 17.2%).

Based on age-specific cyberbullying engagement experiences, people in their 20s (22.9%) showed the highest rate, followed by 40s (19.3%), 30s (18.4%), and 50s (11.0%). In the case of victimization experience of cyberbullying, the rates were higher in the order of people in their 20s (25.5%), 30s (25.05), 40s (21.1%), and 50s (17.6%). Even among adults, people in their 20s had the highest level of both perpetration and victimization experience.

According to the Korea Communication Commission, it could be observed that the victimization rate of cyberbullying among people in their 20s steadily decreased from the year 2013 to 2015 (39.2% to 25.5%). However, the victimization rate started to rise again from 25.5% in 2015 to 49.2% in 2018, which marked the highest point. This tells us that, in recent years, more and more people in their 20s have begun to experience more cyberbullying victimization. What is more serious in this case is that the perpetration rate of cyberbullying among people in their 20s is steadily increasing from the year 2013 to 2018 (20.8% to 34.9%). Although only one out of five people in their 20s participated in cyberbullying activities in 2013, over one-third of these people had perpetration experience in 2018. In this sense, it is essential to discover what influences these people to participate in cyberbullying perpetration as an increase in perpetration leads to an increase of victimization experience among people of all ages – especially people in their 20s. Exploring the factors that will have a significant influence on the perpetration of cyberbullying will be helpful in preventing future engagement among this age group and considering the policy implications of setting regulations.

Table 1. Rate of Cyberbullying Experience among People in their 20s in South Korea

Year	Victimization (%)	Perpetration (%)
2013	39.2	20.8
2014	34.8	21.5
2015	25.5	22.9
2016	NA	NA
2017	29.9	23.8
2018	49.2	34.9

Source: Korea Communication Commission

Another study identifies differences in the causes of cyberbullying between adults and adolescents (Jun & Kim, 2015). In terms of media use, college students have been recognized as heavy users (Vincent & Basil, 1997). With the expectation of their desires being met through media consumption, college students maintain strong desires for self-image management, exploration of role models, the formation of human relationships, and access to information (Vincent & Basil, 1997). In addition, college students represent emerging adulthood that gradually deviates from the roles associated with adolescence to acquire the norms and responsibilities of early adulthood (Arnett & Tanner, 2006). In this sense, since college students are regarded as one of the essential groups of emerging adulthood, research based on this demographic group is important.

Second, social learning theory has been extensively utilized to understand the causes of deviance and criminal behavior. It is one of the most tested theories in criminology and has been strongly supported by previous studies (Hwang & Akers, 2003; Akers & Jensen, 2006). However, recent studies on cyberbullying shows that there are relatively few cases where social learning theory has been applied (Lowry et al., 2016; Lee, 2014). The variables such as differential association, definition, differential reinforcement, and imitation which are the factors of social learning theory, were separated based on individual factors and used for analysis (Lee & Jeong, 2014). Social learning theory is a general theory that logically explains the learning process and learning mechanisms of deviant and criminal behavior.

Thus, it may be beneficial to use social learning theory to effectively explore the causes of cyberbullying as well as present practical countermeasures.

In this sense, the goal of this thesis is to address the previously identified limitations by using social learning theory to examine the factors that could influence cyberbullying engagement behavior in college student populations. In more depth, this study will focus on how the prior victimization experiences such as domestic violence (both direct and indirect – witnessing parental conflict), school violence, and cyberbullying could have an influence on college students' cyberbullying engagement behavior.

CHAPTER 2. NATURE AND EXTENT OF CYBERBULLYING

Cyberbullying is a new phenomenon caused by the development of the Internet and mobile phones (Li, 2006). Cyberbullying is a combination of two words: 'Cyber' and 'Bullying'. Roland (1989) states that bullying is “longstanding violence, physical or psychological, conducted by an individual or a group directed against an individual who is not able to defend himself in the actual situation” (p. 21). A similar behavior that occurs in cyberspaces is referred to as cyberbullying (Jang et al., 2014). Hinduja & Patchin (2008) defined cyberbullying as actions that cause repetitive damages with the aid of deliberate use of computers and cell phones. These damages involve behaviors such as sending harassing or threatening messages (via text message or e-mail), posting derogatory comments about someone on a Web site or social networking site (such as Facebook or MySpace), or physically threatening or intimidating someone in a variety of online settings (Hinduja & Patchin, 2007; Lenhart, 2007). This definition, however, was simple yet useful, including the elements such as 'willful', 'repeated', 'harm' and 'electronic equipment' (Hinduja & Patchin, 2010). Slonje, Smith, and Frisén (2013) defined cyberbullying as an aggressive act by a group or individual against victims who cannot defend themselves using electronic means. This definition includes aggressive behavior associated with cyberbullying, yet it does not necessarily need to be carried out collectively.

So, what should a definition of cyberbullying include? Also, how much of the 'aggressive actions that can cause damage' should be included? There have been a prior study for an operational definition of cyberbullying. Hinduja and Patchin (2010) operationalized cyberbullying as the act of posting information and photos on the Internet and SNS or e-mailing the victims with the aim of upsetting or to make fun of them. A subsequent study also included acts of threats on the Internet or sharing text messages for the purpose of hurting

others as cyberbullying (Hinduja and Patchin, 2012). Jang and his colleagues (2014) used questions regarding cyberbullying such as deliberately posting false information on the internet bulletin boards and posting insulting or abusive words on online chatrooms. Others have measured cyberbullying with acts of taunting and insulting others by posting photos or writing on Internet bulletin boards, chat windows, or e-mails (Didden, Scholte, Korzilius, Moor, Vermeulen, O'reilly, Lang and Lancioni, 2009; Jose, Kljakovic, Scheib and Notter, 2012; Smith, Mahdavi, Carvalho, Fisher, Russell, Tippet, 2008; Li, et al., 2016; Lowry et al., 2016). In addition, Akbulut and Eristi (2011) measured cyberbullying with 20 question items. Among the questions, the scope of cyberbullying was further defined by including exclusion from chat rooms (bullying), stealing accounts by changing passwords, and using other people's personal information without consent. Based off the previous study, cyberbullying includes all the behaviors of using electronic devices to intentionally and repeatedly harm others, which usually involves posting or transmitting pictures and messages with the purpose of harassment, insult, and intimidation.

In South Korea, cyberbullying is defined as actions involved with using social networking services such as Kakaotalk and mobile phone messengers in cyberspace to outcast or persistently harass specific people (Oh & Kwak, 2013). It also includes intimidation, violence, harassment, abuse, and distribution of unwanted photos or videos (Oh & Kwak, 2013). Studies have also been conducted that demonstrate the factors of cyberbullying, which includes: verbal abuses, bullying, harassment (Kim, 2013; Jeong, 2012), and verbal violence (Lee, 2011; Seo, 2012). Cyberbullying experience may predict future cyberbullying behavior, whether conducted individually or in groups (Lim, 2011; Cho, 2013). Compared with studies around the world (Akbulut and Eristi, 2011), South Korean research explains cyberbullying in a variety of terms, which not only includes cyber-sexual

assault but also cyberbullying carried out among juveniles and as a group. The items used to measure cyberbullying in Korea's previous research is similar to that of other countries. To explain cyberbullying, following measures such as negative comments on the Internet bulletin board, abusive language on the messenger, and disseminating insulting pictures or false information, were included. The concept of cyber harassment, which is similar to cyberbullying, is used in laws enacted in Korea. Article 2 section 2 of the *School Violence Prevention and Countermeasures Act* provides that cyber harassment is the act of "any student using information and communication devices such as the Internet and mobile phones to continuously and repeatedly attack certain students or disseminate personal information or false information related to a particular student, causing the other party to feel pain." These regulations appear to be similar in the scope and definition of an action to that of prior studies around the world. However, it is difficult to include general acts such as intimidation, coercion, and violence that are carried out online by verbal harassment (Lee & An, 2013; Oh & Kwak, 2013; Han & Jung, 2014).

Meanwhile, cyber violence is often used in Korea as a broader concept than cyberbullying (Cho, 2013). Kim (2006) broadly defined cyber violence as an act that infringes other people's honor or rights by using codes, words, sounds, and images through information networks. Nam and Chang (2011) defined cyber violence as all forms of violent expression and behavior that use information-communication networks to insult others or infringe on honor and rights. Furthermore, a number of studies have shown that cyber violence is measured through items such as cyberstalking, cyber sexual violence, cyber defamation, cyber pornography, and cyber prostitution, explaining a wider range of activities including cyberbullying (Seo, 2006; Sung, Kim, Lee, & Lim, 2006). Cyber delinquency is also a keyword that can be found in many previous studies in Korea, and Jung (2009; 2010)

included various deviant and delinquent behaviors in cyberspace. Also, in the following studies (Park & Bae, 2014; Lee, 2004), cyber delinquency was defined as deviant behavior that happened in cyber-space. The measure mainly consisted of items such as downloading illegal software from the Internet, deceiving age or sex, stealing other people's account or social security number, using chat windows or SNS to use profanity or abuse others, etc. which measured through adolescents' problematic behavior in cyberspace (Lee, 2007; 2009; Lee, Kang, & Choi, 2015). In other words, cyber delinquency can enact those trouble-making activities that adolescents commit in cyberspace, including cyberbullying.

Cyber violence is a broader concept that includes cyberbullying and other activities such as cyber sexual harassment and cyber defamation. Cyber delinquency is considered to include cyberbullying and other problematic behaviors (such as the theft of social security number, illegal software download, etc.) that are restricted to youth. Looking at the concept of cyberbullying and the concept of terms (cyber harassment, cyber violence, and cyber delinquency) used mixed in Korea, there are some differences in scope, but overall cyberbullying can be seen as the use of electronic devices to post pictures, negative comments, etc. on cyberspace to insult others.

The definition of cyberbullying used in this study shares similar concepts set forth by the National Crime Prevention Council and from the research center at Kennesaw State University, where they defined it as the act of posting or sharing texts, photos, or pictures using the Internet, mobile phones, or other electronic equipment for the purpose of harassing or disturbing others. In the case of cyber delinquency, since the subject is assumed to be a youth, the target is narrowly limited compared to cyberbullying, which includes people of all ages. Therefore, cyber delinquency contains a narrower concept compared to cyberbullying used in this study. Next, cyber violence includes swearing and taunting through SNS and

posting unwanted photos or pictures, as well as cyber prostitution and sexual harassment. Therefore, in this study, we will define cyberbullying as repeatedly posting and sharing personal information, pictures, videos, derogatory comments, etc. using the Internet, mobile phones, or other electronic devices with the intention of deliberately harassing and/or sexually harassing others on the cyberspace to cause harm. Also, regardless of age, both adolescents and adults can be the main agents of the action. In this study, the concept of sexual harassment used in cyber violence is included in the overall definition of cyberbullying definition created and supplemented by Hinduja and Patchin (2009; 2010; 2012) and Oh and Kwak (2013).

CHAPTER 3. THEORY AND LITERATURE REVIEW

History and Theoretical Background of Social Learning Theory

Over the last century, behavioral researchers have noted the significance of learning as an important facet in understanding motives for certain acts. One of the earliest theories, called operant conditioning, from behavioral psychology, refers to learning as a method of increasing or decreasing the probability of a response by selectively compensating for a response. Operant conditioning refers to a method of learning that occurs through rewards and punishments for behavior (Skinner, 1953). Operant conditioning also refers to instrumental conditioning. Skinner (1953) demonstrated the effect of operant conditioning by teaching animals to behave in certain ways in return for systematic compensation when those animals behaved in the ways he wanted. The basic concept of operant conditioning is that if the results of an action are good, it will be done again. At this point, the good result is called a reward and the increase in the frequency of action through reward is called reinforcement.

The social learning theory proposed by Bandura and his colleagues (1961), demonstrated the effect of observation learning and presents three effects that come from observation learning. First, a child can learn a whole new pattern of behavior. Second, the behavior of a child brings about disinhibition if the subject of observation is rewarded and inhibition if punished. The context of disinhibition in this context is vicarious reinforcement, which is what makes a child behave in a certain way even though when he/she knows that such actions are not socially acceptable. Last of all, socially desirable behavior is reinforced by observing the subject of observation while participating in prosocial behavior.

Perhaps, the most popular theory of social learning in criminology was offered by Sutherland, called differential association theory (1947), which suggests that the occurrence of juvenile delinquency is the result of learning through interaction and communication with

others. Sutherland describes the principle of differential association in nine propositions. Criminal activity is learned through communication with others in intimate personal groups, and differential association is varied in frequency, persistence, strength, and priority. Individuals will learn not only criminal behavior but also the definition of violating the law through discriminatory association. In this case, an individual's delinquency may or may not occur depending on whether the learned definition is favorable or unfavorable to the violation of the law. For example, if young people have a frequent association with people who are in favor of a violation of the law, they will learn values and attitudes that are favorable to the violation of the law and conduct delinquency according to the learned values and attitudes. In other words, the frequent association with a delinquent friend will lead to positive attitudes toward violation of the law and the more likely it is that the adolescents will learn the criminal behavior from their friends and commit delinquency accordingly.

Sutherland claimed that criminal behavior is not the result of personal or socio-economic characteristics but is due to the learning processes that affect individuals in a certain cultural setting (Siegel & McCormick, 2010). In other words, juvenile delinquent behavior is learned through discriminatory association with peers who often commit a crime, and crime occurs when they support a favorable definition of a legal violation. A number of empirical studies examining differential association theory have shown that adolescents are more likely to engage in delinquency if they have a differential association with deviant peers and definitions favorable to violation of the law (Hartjen & Priyadarsini, 2003; Hochstetler, Copes, & DeLisi, 2002). According to a study by Hochstetler and his colleagues (2002), association with delinquent friends has been shown to maintain such behavior in favor of crime in both collective and personal level. What is more important in their study, is that the

influence of deviant peers is consistent regardless of age or gender and is the strongest factor of juvenile delinquency.

Since Sutherland's differential association theory has emerged, the influence of friends and peers has attracted attention from many scholars as a major factor to explain juvenile delinquency. However, differential association theory received criticisms from various scholars because it could not explain the cases of delinquencies happening in the absence of contact with delinquent friends and did not show the process of learning the delinquency. In addition to the criticism of differential association theory, research on the effects of interactions with fellow friends on juvenile delinquency has been continued, and new theories have emerged that complement and develop the limitations of differential association theory. To overcome these limitations, in addition to including learning theory by Bandura (1977), social learning theory was developed maintaining Sutherland's (1947) differential association principle (Burgess and Akers, 1966; Lowry et al., 2016). Furthermore, social learning theory has taken the learning principle of operant conditioning developed by behavioral psychologists (Skinner, 1953; Staats, 1975).

The social learning theory proposed by Burgess and Akers (1966) is also called differential association-reinforcement theory, and it describes crime from a positivist point of view. From this perspective, crime is determined not by human choice but by an irresistible force, regardless of free will. That is why positivism focuses on analyzing the cause using scientific methods of explaining 'why do people commit crimes?'. For example, one of the earlier theories of social learning, the differential association theory by Sutherland (1947), explains that learning about the favorable definition of crime through interaction causes crime. On the other hand, from a classicalist perspective, crime is caused by human nature will. The reason for this is that every human being has the tendency to pursue pleasure and to

avoid suffering, and so they reasonably calculate the consequences of their actions. Therefore, 'Why don't most people commit crimes?' explains that there is something controlling the motive for the crime. For example, the self-control theory of Gottfredson and Hirschi (1990) explains that self-control plays a role in controlling the crime motive of all people. Social learning theory started with the 8th proposition: The course of learning about crime by association with criminal or anti-criminal types includes all other learning mechanisms among the 9 propositions of differential association theory by Sutherland (1947).

Four Factors of Social Learning Theory

Social learning theory is explained through four concepts: 'differential association', 'definitions', 'differential reinforcement' and 'imitation' (Hwang & Akers, 2003). Differential association is the process by which an individual is exposed to a definition that is favorable or unfavorable to criminal behavior or compliance and it occurs through direct contact and interaction with intimate others who have different attitudes, values, and norms about deviant behavior (Akers, 2011). This process is also achieved through indirect interaction with relatively remote reference groups (such as neighbors), including direct interaction with close reference groups such as family and friends (Akers & Jensen, 2006). Naturally, direct interaction with the nearest primary group, such as family and friends, is most important in the differential association process, but it is possible to learn norms, values, and attitudes from the groups that are interacted in various media, the Internet, and computer games, which are called the virtual peer groups (Warr, 2002). Criminal activity is learned through communication with others in intimate personal groups, and the significance of differential association varies with frequency, persistence, strength, and priority (Akers & Sellers, 2004; Akers & Jensen, 2006).

Definition is the meaning and attitude that individuals assign to a given action (Akers & Jensen, 2006). It is a moral and evaluative attitude, such as to act right or wrong, good or bad, desirable or undesirable, just or unjust (Akers & Sellers, 2004). That is, the definition in social learning theory determines whether or not one should carry out certain behaviors in society (Hwang and Akers, 2003). These definitions are divided into general belief and special definition. General belief advocates conformist behavior (Akers and Sellers, 2008) and is learned from religious, moral, and other customary values that do not allow deviation or criminal behavior (Akers & Jensen, 2006). Special definition is attitudes of specific behaviors of individuals (Akers & Sellers, 2004). For example, although a teenager may think it is bad to steal things and would obey the laws related to theft, at the same time, the teenager may approve drinking and smoking and may think it's okay to reject the rules or conventional values of schools that ban alcohol and cigarettes.

Akers (2011) distinguishes three ways in which an individual accepts definition. Negative definition is an attitude that refuses deviant behavior, and in this case, it is unlikely that the people will engage in criminal activities. On the other hand, positive and neutralizing definitions are an attitude that accepts deviation or criminal behavior favorably and so people with these definitions are more likely to engage in deviant behavior. Specifically, positive definition is attitude and belief that regards criminal behavior can be morally desirable or wholly acceptable. Neutralizing definition is a favorable attitude toward deviant behavior, through justifying or excusing the behavior (Akers & Sellers, 2004). So, the social learning theory explains that crime occurs when positive definition towards deviance is strong. However, in most cases, positive definition does not directly lead to crime, but due to the weakness of conventional beliefs and positive or neutralizing definitions that encourages law violation (Akers & Jensen, 2006; Akers & Sellers, 2004).

Differential reinforcement is a balance between a reward for an action or a desired outcome and a negative or unwanted outcome (Hwang and Akers, 2003). In other words, if the outcome of an action is positive (compensation), then it will be continued and if the result is negative then the action will no longer happen. Also, the scope of the outcome determining the continuity of the act includes not only the current result but also the past and expected future outcome. Also, Akers (2011) classified four categories of rewards and punishments as a result of strengthening or weakening actions: 1) positive reinforcement (provision of rewards; active reinforcement), 2) negative reinforcement (removal of punishment; passive reinforcement), 3) positive punishment (provision of punishment; active punishment), and 4) negative punishment (removal of compensation; passive punishment). For example, the likelihood that an action will be committed and repeated is (positive reinforcement) when there are rewards such as approval, money, food, pleasant emotions and negative reinforcement happens when the act avoids pain and unpleasant events (Akers & Sellers, 2004). On the other hand, when an action causes painful and unpleasant consequences (positive punishment), and compensation or pleasant results are eliminated (negative punishment), the possibility of action being committed and repeated will be reduced (Akers & Sellers, 2004). In conclusion, the differential reinforcement of social learning theory seems to be very similar to rational choice theories in that the outcome of action affects the individual's behavior depending on whether it is positive or negative (Lowry, et al., 2016).

Imitation means to behave similarly to others after observing their behavior (Akers & Jensen, 2006), and whether or not to imitate the behavior of others is affected by the nature of the imitating target, the observed behavior, and the consequences (Akers & Sellers, 2004; Bandura, 1977). In addition, imitation can explain not only deviant behavior but also continuance and cease of the behavior (Akers, 2011).

As a result, according to the social learning theory, deviance and criminal behavior occur when the favorable attitude toward criminal activity is higher than the unfavorable attitude. Also, the higher the amount of association (differential association) with groups that are favorable to deviations and criminal behavior, the more likely people are to commit crimes. By expanding the learning mechanism through the behavioral and imitation theory of psychology, the more favorable definition is given to a crime or the more positive or neutralizing definition is taken for a deviant behavior (definition); when the reward for the consequences of the act is expected to be greater than or actually greater than the punishment (differential reinforcement); when people behave in a similar way after observing the behavior of others (imitation), people would get involved in deviations and criminal activities. Therefore, the social learning theory can be regarded as a description of crime from the viewpoint of social learning using the concept of differential association and the learning theory element of psychology (Siegel & McCormick, 2010).

Empirical Support for Social Learning Theory

Social learning theory is one of the main theories explaining deviance and criminal behavior and is one of the most verified and strongly supported theories (Cochran, Maskaly, Shayne, & Sellers, 2017). The study of social learning theory was mainly conducted by exploring the relationship between the factors of social learning theory, delinquency and criminal behavior (Akers, 1998; Sellers & Winfree, 1990; Winfree, Sellers, & Clason, 1993) or comparing it with other criminological theory (Akers & Cochran, 1985; Hwang & Akers, 2003; Rebellon, 2002). The study by Hwang and Akers (2003) used the social learning theory, self-control theory, and social bond theory to verify the influence of each theory on the use of drugs (drinking and smoking) by Korean teenagers. In the integrated model, differential association

was the most relevant to drug use compared to other factors, and the influence of association with friends who frequently used drugs was the most influential. The results of this study show that the factors of social learning theory have the greatest effect on the integrated model by combining social learning variables and other theoretical variables (Rebellon, 2002). Although there are few studies that deny the relationship, Akers and Sellers (2004) also claim that the relationship between the social learning variables found in empirical studies that have verified the relationship between social learning theory and delinquency, crime, and deviant behavior is somewhat strong.

Many studies have been conducted to explain cyberbullying behavior employing social learning theory, which has established that social learning theory effectively explains cyberbullying (Higgins, Fell, & Wilson, 2007; Hinduja & Ingram, 2008; Ingram & Hinduja, 2008; Marcum, Higgins, & Ricketts, 2014). Lowry et al. (2016) described cyberbullying through social structure-social learning theory, a developmental form of social learning theory. This study implies the factors that may increase the probability of people engaging in cyberbullying are: the high frequency of differential association, the less amount one will lose from committing a crime, the high neutralizing definition, and the low negative attitude. In another study, social learning variables measured in differential association, neutralizing definition, and positive attitudes have had a significant impact on privacy violation behavior on cyberspace (Morris & Higgins, 2010).

Victimization Experience and Social Learning Theory

Bandura (1973) asserts through the concept of observational learning that aggression is learned by observing the behavior of others who are meaningful to them. In other words, by observing and learning the aggressive behavior of an intimate person, people acquire a propensity for violence through imitating the behaviors they are exposed to. Witnessing

parental violence and childhood abuse and imitating such behaviors is an example of social learning theory. These acts of violence can be learned not only by observing the behavior of others but also by the experience of being abused. Moreover, people who grow up experiencing domestic violence, either directly or by witnessing parental violence, tend to exhibit violent tendencies in adulthood (Jaffe, Wolfe, & Wilson, 1990).

Based on social learning theory, Riggs and O'Leary et al. (1989) proposed that intergenerational transmission of violence is a representative hypothesis explaining the negative effects of victimization experiences during childhood. Those young adults that had been victims of domestic violence and school violence, are beginning to inflict violence on other people. According to social learning theory, observing parents achieving their goals by using violence at home, children recognize that violence is the best way to solve problems. Although the punishment that parents administer to their children causes anger and negative feelings, it temporarily brings behavioral modification and appears to solve the problem. In other words, people who experience violent situations in their childhood recognize that they can use violence on other people in order to punish bad behavior or change the behavior of others (Simons, Lin & Gordon, 1998). In this sense, exposure to violence or violent environments during childhood has a significant impact on cyberbullying behavior.

It has been established that people who experienced physical abuse in their childhood are more aggressive toward others than those who did not (Dodge, Bates, & Pettit, 1990). Witnessing parental violence can be a significant factor, even if the violence is not direct. According to Hart (1987), witnessing parental violence during childhood can be described as emotional abuse that makes victims live in an unstable environment and trauma may be experienced as a result of violence between the parents. Dodge et al. (1990) asserted that domestic violence experience could prevent children from growing up healthy, which could

lead them to become severe perpetrators or victims of violence. Also, it has been found that school violence victimization is highly related to cyberbullying engagement and victims of school violence are likely to engage in cyberbullying as a measure of retaliation (Hinduja & Patchin, 2007).

Furthermore, based on the concept of imitation explained in social learning theory by Akers and Jensen (2006), people might behave similarly to others after observing their behavior. In other words, those people who had victimization experience of cyberbullying are more likely to imitate cyberbullying behaviors carried out by the perpetrators after actually experiencing and observing those behaviors. On top of this, whether or not to imitate the behavior of others is affected by the nature of the imitating target, the observed behavior, and the consequences (Akers & Sellers, 2004; Bandura, 1977). In addition, imitation can explain not only deviant behavior but also continuance and cease of the behavior (Akers, 2011). Moreover, the correlation between victimization and offending is one of the most documented empirical findings in delinquency research (Posick & Zimmerman, 2015). In this sense, the victims of cyberbullying have a higher chance of engaging in cyberbullying.

School Violence, Domestic Violence, and Cyberbullying

According to social learning theory, home and school are representative social environments where differential association, definition, differential reinforcement, and imitation can be achieved (Akers, 2011; Akers & Jensen, 2006; Akers & Sellers, 2004). Children and adolescents are continually affected by the process of learning values, attitudes, and behaviors at home, school, and in the media until they become adults (Bandura, 1977; Bandura et al., 1961). These authors also claim that violent situations that happen during people's childhood, especially those that occur in the household, increase a child's chances of

learning violent behaviors. Adolescents who suffer from poor parent-child relationships experienced a higher frequency of cyberbullying compared to their counterparts (Accordino, Ded, & Crc, 2011). Furthermore, the causes of engagement in cyberbullying have been suggested such as a feud with a friend or family member, events that cause daily strain such as dissatisfaction with school life, the number of delinquent friends, and moral guilt (Nam & Kwon, 2013).

School violence can also be part of the experience of exposure to violent environments. Hinduja and Patchin (2007) found that victimization experience of school violence is highly related to cyberbullying perpetration and victims of school violence are likely to engage in cyberbullying as a measure of retaliation. Furthermore, a positive relationship was found between victimization/perpetration experience of school violence and cyberbullying victimization/perpetration (Hinduja & Patchin, 2008). In a Korean Institute of Criminology study, 56~57% of middle and high school students have victimization experience because of school violence. In addition, a study by Kim & Kim (2000) showed that 37.6% of the elementary, middle, and high school students in the Korean capital region, experienced school violence. Therefore, many current college students have a high probability of having experienced school violence during their elementary, middle, and high school years.

The experience of violence from parents increases the risk of frequent violence perpetration by imitating it or regarding violent behavior as a legitimate means of resolving disputes (Smith & Thornberry, 1995). According to a case study of victimization experience of violence in South Korea (Kim, 2006), the higher the level of awareness that 'the bad person should be treated with violence,' the more prone they tend to resort to violence and rationalize their violent behavior. The results of this study suggest that violence is more likely

to occur among people who experienced more verbal and physical violence in their teenage period. Given that the victimization experience of violence during people's adolescence is a critical factor in the development of people's behavior, it can also be predicted that it will affect cyberbullying engagement intentions.

Victimization Experience & Perpetration of Cyberbullying

According to previous studies of damage caused by cyberbullying, cyberbullying victims suffer psychological pain similar to or greater than that of traditional bullying (Lee et al., 2015; Lowry et al., 2016). Victims of cyberbullying experience emotional distress such as low self-esteem, depression, anger, and suicidal impulse, and experience of cyberbullying have been shown to affect the internalization problem (Smith, 2012).

In the aspect of cyberbullying, researches are being actively pursued to investigate the cause of cyberbullying behavior. People may be involved in cyberbullying not only to enjoy satisfaction and privilege or as a form of retaliation but also just for fun or for no reason (Kowalski et al., 2012).

According to previous studies (Ybarra & Mitchell, 2004; Ševčíková, & Šmahel, 2009; Kowalski, Giumetti, Schroeder, & Lattanner, 2014; Jun & Kim, 2015; Choi, 2015), which looked at the relationship between cyberbullying victimization experience and perpetration behavior, the results consistently showed that cyberbullying victimization experience is the variable that has the highest significance in explaining the perpetration and that victimization experience is likely to precede the perpetration. The relationship between these two variables can be explained by social learning theory. Through the social learning theory, Burgess and Akers (1966) claim that delinquency and deviant behavior were the results of learning through the surrounding environment. The learning process of criminal

activities consisted of four concepts: differential association, differential reinforcement, definition, and imitation. Adolescents not only learn favorable definitions of delinquency and deviant behavior but also the process of acquiring rewards and benefits from engaging in these activities through association (differential association) with peers with a favorable and permissive attitude to a violation of the law. Later, adolescents actually get involved in deviant behavior by imitating their peers and by comparing punishments and costs for participating in those activities. In this sense, cyberbullying victimization experience can also be seen as a form of differential association. So, as the frequency of victimization experience increases (differential association), people start to justify their perpetrating behavior. Then, there is a decrease in the sense of guilt associated with the perpetration, which, in fact, will lead to increasing the chance of engaging in the cyberbullying.

Looking at the previous study on the relationship between cyberbullying victimization experience and perpetration behavior, according to the meta-analytic study of cyberbullying by Kowalski et al. (2014), the victimization experience was the most significant factor predicting cyberbullying engagement. Several studies on the relevance of various factors regarding cyberbullying perpetration that was carried out in South Korea also found high explanatory power of cyberbullying victimization experience (Sung et al., 2006; Kim, 2013; Jun & Kim, 2015).

CHPATER 4. PRESENT STUDY

Context

In terms of media use, college students have been recognized as heavy users (Vincent & Basil, 1997). Also, according to the Korea Communications Commission (2016), 25.5 percent of those in their 20s had suffered from cyberbullying during the past year, 18.5 percent for middle school students and 22.0 percent for high school students, which shows that the proportion of victims was relatively higher in the 20s. Regarding the perpetration of cyberbullying, 22.9 percent of people in their 20s, 20.5 percent of middle school students and 22.0 percent of high school students engaged in cyberbullying. This shows that people in their 20s are more likely to experience cyberbullying than middle and high school students. However, although people in their 20s have been found out to be the group of people that experience most of the cyberbullying, there is not enough study that explored the factors that influence their behaviors. Also, college students represent emerging adulthood that gradually deviates from the roles of adolescents and is in the process of trying to acquire the norms and responsibilities of early adulthood (Arnett & Tanner, 2006). In this sense, college students are regarded as one of the essential groups of emerging adulthood.

Compared to many other theoretical frameworks employed to study cyberbullying, there is a relatively limited number of studies applying social learning theories for exploring causes for cyberbullying. Also, recent studies on cyberbullying shows that there are relatively few cases where social learning theory has been applied (Lowry et al., 2016; Lee, 2014). The variables such as differential association, definition, differential reinforcement, and imitation; which are the factors of social learning theory, were separated based on individual factors and used for analysis (Lee & Jeong, 2014). Social learning theory is a general theory that logically explains the learning process and learning mechanism of deviant and criminal

behavior, and it is easy to effectively explore the causes of cyberbullying as well as present practical countermeasures. In this sense, this study will focus on exploring the factors that could influence the cyberbullying behavior of college students applying social learning theory as the theoretical framework. In more depth, this study will focus on how the victimization experience of domestic violence (both direct and indirect – witnessing parental conflict), school violence, and cyberbullying could affect college students' cyberbullying engagement behavior.

Method

Data for the present study comes from a survey conducted in South Korea (Nalla, 2018). The original data came from 1,600 university students studying in various cities in South Korea. The survey was administered to a stratified sample drawn from a panel of 121,785 residents selected from the Korean population. This panel represents the demographic distribution of the Korean population by gender, age groups, income, employment, marital status, and occupation. In the panel, there were 28,538 college students. An online survey was sent out based on random distribution and 2,586 people participated in the survey. Out of 2,586 people who participated in the survey, 986 people were excluded because they did not have any kind of dating experience, they were not college students at the time when the survey was carried out, or they did not fully respond to the survey. After the exclusion, 1600 students were selected for this data.

The survey was constructed in English from prior research to assess victimization and perpetration of cyberbullying, school violence victimization experience, and domestic violence (indirect and direct) victimization experience with questions eliciting information on Likert scales. The scales were created by Hinduja and Patchin (2014), Olweus (1991; 1993),

Straus (1979), and Straus, Hamby, Finkelhor, Moore, and Runyan (1998) and they were translated, supplemented, and used by Kim (2012), Ahn (2001), Choi (2005), and Lee (2016).

Measurement of Variables

Dependent Variables: In this study, the dependent variable is perpetration experience of cyberbullying. The scale used to measure both the victimization and perpetration experience of cyberbullying was created by Hinduja and Patchin (2014) and was translated and modified by Kim (2012). Overall, cyberbullying consists of 14 items (7 items respectively for victimization and perpetration), with each item having five response options: 1 = never, 2 = rarely, 3 = sometimes, 4 = often, 5 = very often. The higher the total score, the more severe the cyberbullying.

Independent variables: In this study, independent variables were victimization experiences of school violence, cyberbullying, domestic violence, and witnessing domestic violence. The measure of school violence used the Bully / Victim Questionnaire of Olweus (1993) as modified and supplemented by Ahn (2001) and the Junior Questionnaire of Olweus (1991). Overall, school violence consisted of 6 items and each item answer consisted of 1 = never, 2 = once or twice a year, 3 = once or twice a month, 4 = more than once a week, and 5 = almost every day. The total sum of the answers indicated the severity of school violence.

The scale used to measure the direct experience of domestic violence was the Conflict Tactic Scale (CTS) of Straus (1979) and the Parent-Child Conflict Tactics Scale (PCCTS) of Straus et al. (1998) as modified by Choi (2005) and Lee (2016). On the PCCTS, Choi (2005) excluded questions from emotional abuse and physical abuse that do not fit Korean culture. Total of 12 items was used to ask about overall domestic violence and 6 items were used each time to consist of direct and indirect domestic violence scale. Domestic

violence experience was measured by a Likert scale from 1 = never, 2 = once or twice a year, 3 = once or twice a month, 4 = more than once a week, 5 = almost every day'. In this study, to elicit a candid answer, the questions began with emotional violence experiences followed by questions on the level of violence and finally leading up to physical violence experiences.

From the questionnaire, 4 sections have been used for this study. The first section solicited responses about both the cyberbullying victimization and perpetration experiences. In this study, based on Patchin and Hinduja's (2012) definition of cyberbullying, 7 questions (1. Someone has said mean things about me on instant messengers or in chat rooms which made me angry., 2. Someone has posted pictures or videos of me online including SNS <Facebook, Twitter, etc.> without my permission to damage my reputation., 3. I have been isolated or ridiculed in a chat room by other people., 4. Someone has spread or posted things online that I did not want to reveal to others., 5. People have spread rumors about me using text message on the mobile phone to damage my reputation., 6. People have made sexual jokes via chat room or instant messenger which made me uncomfortable., and 7. I have been sent sexually explicit things <sexual pictures or videos> from someone via chat room or instant messenger.) regarding the victimization experience of cyberbullying were asked to the participants. The second part of this section asked about respondents' victimization experience using 7 items (1. I have posted hurtful messages or pictures on websites <including Facebook, Twitter, etc.> to damage his/her reputation., 2. I have ridiculed or isolated someone online., 3. I have said mean things about someone on instant messenger or in chat rooms with intent to upset the person., 4. I have exaggerated someone's weakness via chat rooms to damage his/her reputation., 5. I have spread rumors about someone using text message on the mobile phone to damage his/her reputation., 6. I have made sexual comments or jokes via chat room or instant messenger., and 7. I have sent sexually explicit things

<sexual pictures or videos> via chat room or instant messenger.)

The second section that was used for this study dealt with the victimization experience of school violence. In this study, school violence was defined as ‘physical violence, mental harassment, bullying, extortion, threats or intimidation, profanity, and abuse by individuals or a group that occur between students in or near the school.’ This scale consists of 6 questions (1. Other students beat me., 2. Other students threatened or beat me to take my money or belongings., 3. Other students threatened or intimidated me., 4. Other students spoke insulting or abusing language to me., 5. Other students harassed me by forcing to do things, teasing in a hurtful way, damaging my belongings, etc., and 6. Other students left me out of things on purpose, excluded me from their group of friends, or completely ignored me.) regarding physical violence, harassment, bullying, threat or intimidation, profanity, and abuse.

The third section used for this study solicited responses about domestic violence experiences. Domestic violence was measured by direct experience of violence and by witnessing parental conflict. Seven items (1. Insulted you, 2. Screamed or yelled at you, 3. Said that you would be kicked out of the house, 4. Threatened to hit you, 5. Hit your palms, calves, buttocks, etc. with a ruler or cane, 6. Pushed, grabbed, or shoved you, and 7. Slapped your cheek with the palm of a hand) were used to ask about the direct experience. Also, witnessing parental violence was measured by using a modified version of the CTS formulated by Lee (2016), which consisted of 7 items (1. Insulted, screamed, or yelled at the other, 2. Sulked or refused to talk about an issue, 3. Stomped out of the room or house, 4. Broke or kicked objects, 5. Pushed, grabbed, or shoved the other, 6. Slapped the cheek of the other with the palm of a hand, and 7. Kicked, bit, or punched the other).

In order to control extraneous variables that could take away the relationship between

the independent and dependent variables, the last section requested demographic information such as participants' gender, age, religion, and year in college.

CHAPTER 5. FINDINGS

Descriptive Statistics

Participants in this study were 1600 university students who filled out a questionnaire on a voluntary, anonymous, and confidential basis. The descriptive statistics for variables are presented in Table 2.

Demographic characteristics of all respondents in this study are presented in Table 1. The data set consists of 728 females (45.5%) and 872 males (54.5%). Among all the participants, 915 respondents (57.2%) answered that they are not religious, and 685 respondents had belief in a certain type of religion. The distribution of year in college among the sample is fairly even. About 27.3% of the respondents (436 students) were a freshman; 18.8% (301 students) were sophomore, 33.9% (543 students) were junior, and the remaining were senior (320 students, 20.0%). Distribution of location of college shows a similar breakdown. Approximately 55% of the respondents' (883 students) college or university were located in provinces and nearly 45% of respondents' (717 students) college or university were located in the capital region. To provide a context for the breakdown of time spent on smartphone, less than 10% of the respondents (122 students) spent less than an hour, nearly one fourth of the respondents (398 students) spent one to two hour, little bit over 25% of the respondents (416 students) spent two to three hours, less than 18% of the respondents (287 students) spent three to four hours, and approximately one fourth of the respondents (377 students) spent over four hours on using smartphone.

In terms of contextual characteristics, seven items were combined to create the scale cyberbullying perpetration ($\alpha=.912$) and seven items were merged to make the scale victimization experience of cyberbullying ($\alpha=.873$). Seven item additives index ($\alpha=.911$) was used to examine witnessing parental conflict (indirect domestic violence) and seven item

additive index ($\alpha=.916$) was used to measure the direct experience of domestic violence. In order to measure school violence victimization experience, six items were combined to create an additive index ($\alpha=.922$).

Table 2. Descriptive Statistics for Variables (N=1600)

Variable	Description	N	%	Mean	S.D.	Min.	Max.
Demographic Characteristics							
Gender				0.55	0.50	0	1
	0=Female	728	45.5				
	1=Male	872	54.5				
Religion				0.43	0.49	0	1
	0=No	915	57.2				
	1=Yes	685	42.8				
Year in College				2.47	1.09	1	4
	1=Freshman	436	27.3				
	2=Sophomore	301	18.8				
	3=Junior	543	33.9				
	4=Senior	320	20.0				
Location of College				0.45	0.50	0	1
	0=Provinces	883	55.2				
	1=Capital Region	717	44.8				
Time Spent on Smartphone (Hr.)				4.24	1.28	1	6
	1=<1	122	7.6				
	2=1-2	398	24.9				
	3=2-3	416	26.0				
	4=3-4	287	17.9				
	5=4-<	377	23.6				
Contextual Variable							
Cyberbullying Perpetration	7 item additive index, $\alpha=.912$			9.40	4.03	7	33
Cyberbullying Victimization	7 item additive index, $\alpha=.873$			10.57	4.37	7	32
Witnessing Parental Conflict	7 item additive index, $\alpha=.911$			10.95	4.76	7	35
Domestic Violence	7 item additive index, $\alpha=.916$			10.52	4.60	7	35
School Violence	6 item additive index, $\alpha=.922$			8.09	3.68	6	30

*May not add up to 100% due to missing cases.

Table 3 shows the frequency and rate of victimization experience of domestic violence. Nearly 80% of the respondents (1,272 students) answered that they have experienced any kind of domestic violence (either indirect or direct). Over 70% of the respondents (1,161 students) witnessed parental conflict (indirect domestic violence) and 69.2% of the respondents (1,108

students) experienced direct domestic violence.

Table 3. Victimization Experience of Domestic Violence (N=1600)

Variable	Frequency	Rate (%)
Either Indirect or Direct	1,272	79.5
Witnessed Parental Conflict (Indirect)	1,161	72.6
Victimization Experience of Domestic Violence (Direct)	1,108	69.2

According to Table 4, regarding the 7 items for witnessing parental conflict, 907 respondents (56.7%) answered once or twice a year or more often to item “Insulted, screamed, or yelled at the other”, 975 respondents (60.9%) to item “Sulked or refused to talk about an issue”, 821 respondents (51.3%) to item “Stomped out of the room or house”, 508 respondents (31.8%) to item “Broke or kicked objects”, 380 respondents (23.8%) to item “Pushed, grabbed, or shoved the other”, 232 respondents (14.5%) to item “Slapped the cheek of the other with the palm of a hand”, and 228 respondents (14.3%) to item “Kicked, bit, or punched the other”.

Table 4. Witnessed Parental Conflict (Indirect) (N=1600)

Variable	Never (N/%)	Once or twice a year (N/%)	Once or twice a month (N/%)	More than once a week (N/%)	Almost every day (N/%)
1. Insulted, screamed, or yelled at the other	693/43.3	545/34.1	226/14.1	112/7.0	24/1.5
2. Sulked or refused to talk about an issue	625/39.1	582/36.4	256/16.0	102/6.4	35/2.2
3. Stomped out of the room or house	779/48.7	515/32.2	193/12.1	96/6.0	17/1.1
4. Broke or kicked objects	1092/68.3	326/20.4	110/6.9	55/3.4	17/1.1
5. Pushed, grabbed, or shoved the other	1220/76.3	234/14.6	95/5.9	40/2.5	11/0.7
6. Slapped the cheek of the other with the palm of a hand	1368/85.5	138/8.6	65/4.1	24/1.5	5/0.3
7. Kicked, bit, or punched the other	1372/85.8	128/8.0	70/4.4	24/1.5	6/0.4

For the 8 items used to measure victimization experience of domestic violence, 752 students (47%) answered once or twice a year or more often to item “Insulted you”, 937 students (58.6%) to item “Screamed or yelled at you”, 415 students (25.9%) to item “Said that you would be kicked out of the house”, 470 students (29.4%) to item “Threatened to hit you”, 663 students (41.4%) to item “Hit your palms, calves, buttocks, etc. with a ruler or cane”, 323 students (20.2%) to item “Pushed, grabbed, or shoved you”, and 219 students (13.7%) to item “Slapped your cheek with the palm of a hand”.

Table 5. Victimization Experience of Domestic Violence (Direct) (N=1600)

Variable	Never (N/%)	Once or twice a year (N/%)	Once or twice a month (N/%)	More than once a week (N/%)	Almost every day (N/%)
1. Insulted you	848/53.0	499/31.2	173/10.8	68/4.3	12/0.8
2. Screamed or yelled at you	663/41.4	612/38.3	237/14.8	67/4.2	21/1.3
3. Said that you would be kicked out of the house	1185/74.1	264/16.5	88/5.5	50/3.1	13/0.8
4. Threatened to hit you	1130/70.6	286/17.9	119/7.4	45/2.8	20/1.3
5. Hit your palms, calves, buttocks, etc. with a ruler or cane	937/58.6	458/28.6	148/9.3	42/2.6	15/0.9
6. Pushed, grabbed, or shoved you	1277/79.8	195/12.2	84/5.3	32/2.0	12/0.8
7. Slapped your cheek with the palm of a hand	1381/86.3	140/8.8	53/3.3	21/1.3	5/0.3

Among all the college students that participated in the survey, 755 respondents (47.2%) answered that they have been victims of school violence (Table 6). According to Table 7, of all the 6 items used to measure victimization experience of school violence, 352 respondents (22%) answered once or twice a year or more often to item “Other students beat me”, 378 respondents (23.6%) to item “Other students threatened or beat me”, 466 respondents (26.1%) to item

“Other students threatened or intimidated me”, 427 respondents (26.7%) to item “Other students spoke insulting or abusing language to me”, 367 respondents (22.9%) to item “Other students harassed me by forcing to do things, teasing in a hurtful way, damaging my belongings, etc.’, and 356 respondents (22.2%) to item “Other students left me out of things on purpose, excluded me from their group of friends, or completely ignored me”.

Table 6. Victimization Experience of School Violence (N=1600)

Variable	Frequency	Rate (%)
Victimization Experience of School Violence	755	47.2

Table 7. Victimization Experience of School Violence (N=1600)

Variable	Never (N/%)	Once or twice a year (N/%)	Once or twice a month (N/%)	More than once a week (N/%)	Almost every day (N/%)
1. Other students beat me	1248/78.0	265/16.6	56/3.5	22/3.5	9/0.6
2. Other students threatened or beat me to take my money or belongings	1222/76.4	302/18.9	53/3.3	16/1.0	7/0.4
3. Other students threatened or intimidated me	1134/70.9	367/22.9	65/4.1	20/1.3	14/0.9
4. Other students spoke insulting or abusing language to me	1173/73.3	311/19.4	75/4.7	22/1.4	19/1.2
5. Other students harassed me by forcing to do things, teasing in a hurtful way, damaging my belongings, etc.	1233/77.1	230/14.4	74/4.6	43/2.7	20/1.3
6. Other students left me out of things on purpose, excluded me from their group of friends, or completely ignored me	1244/77.8	228/14.2	65/4.1	40/2.5	23/1.4

Table 8 presents the frequency and rate of cyberbullying experience. Among all the college students who answered the survey, 1,032 students (64.5%) have victimization experience of cyberbullying and 763 students (47.7%) have experience of engaging in

cyberbullying.

Table 8. Experience of Cyberbullying (N=1600)

Variable	Frequency	Rate (%)
Victimization Experience of Cyberbullying	1,032	64.5
Perpetration of Cyberbullying	763	47.7

According to Table 9, regarding 7 items used to measure victimization experience of cyberbullying, 805 respondents (50.3%) answered rarely or more often to item “Someone has said mean things about me on instant messengers or in chat rooms which made me angry.”, 513 respondents (32.1%) to item “Someone has posted pictures or videos of me online including SNS (Facebook, Twitter, etc.) without my permission to damage my reputation.”, 386 respondents (24.1%) to item “I have been isolated or ridiculed in a chat room by other people.”, 327 respondents (20.4%) to item “Someone has spread or posted things online that I did not want to reveal to others.”, 333 respondents (20.8%) to item “People have spread rumors about me using text message on the mobile phone to damage my reputation.”, 653 respondents (40.8%) to item “People have made sexual jokes via chat room or instant messenger which made me uncomfortable.”, and 620 respondents (38.8%) to item “I have been sent sexually explicit things (sexual pictures or videos) from someone via chat room or instant messenger.”

Table 9. Victimization Experience of Cyberbullying (N=1600)

Variable	Never (N/%)	Rarely (N/%)	Sometimes (N/%)	Often (N/%)	Very Often (N/%)
1. Someone has said mean things about me on instant messengers or in chat rooms which made me angry.	795/49.7	393/24.6	326/20.4	73/4.6	13/0.8
2. Someone has posted pictures or videos of me online including SNS (Facebook, Twitter, etc.) without my permission to damage my reputation.	1087/67.9	303/18.9	159/9.9	38/2.4	13/0.8
3. I have been isolated or ridiculed in a chat room by other people.	1214/75.9	254/15.9	87/5.4	38/2.4	7/0.4
4. Someone has spread or posted things online that I did not want to reveal to others.	1273/79.6	207/12.9	83/5.2	30/1.9	7/0.4
5. People have spread rumors about me using text message on the mobile phone to damage my reputation.	1267/79.2	206/12.9	85/5.3	34/2.1	8/0.5
6. People have made sexual jokes via chat room or instant messenger which made me uncomfortable.	947/59.2	356/22.3	236/14.8	44/2.8	17/1.1
7. I have been sent sexually explicit things (sexual pictures or videos) from someone via chat room or instant messenger.	980/61.3	300/18.8	253/15.8	54/3.4	12/0.8

In Table 10, it shows the frequency of each seven items used to examine cyberbullying perpetration. 323 students (20.2%) answered rarely or more often to item “I have posted hurtful messages or pictures on websites (including Facebook, Twitter, etc.) to damage his/her reputation.”, 259 students (16.2%) to item “I have ridiculed or isolated someone online.”, 382 students (23.9%) to item “I have said mean things about someone on instant messenger or in chat rooms with intent to upset the person.”, 568 students (35.5%) to item “I have exaggerated someone’s weakness via chat rooms to damage his/her reputation.”, 308 students (19.3%) to item “I have spread rumors about someone using text message on the mobile phone to damage his/her reputation.”, 427 students (26.7%) to item “I have made sexual comments or jokes via chat room or instant messenger.”, and 318 students (19.9%) to item “I have sent sexually

explicit things (sexual pictures or videos) via chat room or instant messenger.”

Table 10. Cyberbullying Perpetration (N=1600)

Variable	Never (N/%)	Rarely (N/%)	Sometimes (N/%)	Often (N/%)	Very Often (N/%)
1. I have posted hurtful messages or pictures on websites (including Facebook, Twitter, etc.) to damage his/her reputation.	1277/79.8	210/13.1	77/4.8	33/2.1	3/0.2
2. I have ridiculed or isolated someone online.	1341/83.8	172/10.8	58/3.6	21/1.3	8/0.5
3. I have said mean things about someone on instant messenger or in chat rooms with intent to upset the person.	1218/76.1	228/14.2	117/7.3	26/1.6	11/0.7
4. I have exaggerated someone's weakness via chat rooms to damage his/her reputation.	1032/64.5	371/23.2	158/9.9	35/2.2	4/0.3
5. I have spread rumors about someone using text message on the mobile phone to damage his/her reputation.	1292/80.8	216/13.5	63/3.9	22/1.4	7/0.4
6. I have made sexual comments or jokes via chat room or instant messenger.	1173/73.3	234/14.6	139/8.7	46/2.9	8/0.5
7. I have sent sexually explicit things (sexual pictures or videos) via chat room or instant messenger.	1282/80.1	196/12.3	93/5.8	21/1.3	8/0.5

Multivariate Analysis

Ordinary Least Squares (OLS) regression analysis has been employed to assess the relationship between various predictor variables explaining the perpetration of cyberbullying. Possible multicollinearity problems were checked by examining the matrix of two-variable correlations among all independent variables. The highest correlation between two variables was .80, which was acceptable (Sun & Wu, 2015). Variance inflation factors (VIFs) were examined in order to confirm the small magnitude of the correlations. All of the VIFs were well below 10 (in this study, all of the values were in-between 1 and 2.86), which is a generally

acceptable limit (Neter, Kutner, Nachtsheim, & Wasserman, 1996).

The findings are presented in the following tables. The findings of Model 1 in Table 11 displays the results of the analysis with the perpetration of cyberbullying regressed on the demographic variables. The model explains 3% variance on the dependent variable. The influence of demographic variables on respondents' engagement in cyberbullying in the model reveals that year in college and location of college do not predict their cyberbullying engagement behavior. Gender ($\beta = 0.15$, $p < .001$), religion ($\beta = 0.08$, $p < .01$), and time spent on smartphone ($\beta = 0.10$, $p < .001$), however, are the strong predictor of cyberbullying perpetration, that is, compare to female college students and students who are not religious and spent less time on smartphone, male college students and those students who are religious and spent more time on smartphone are more likely to engage in cyberbullying.

When adding measures of victimization experience of witnessed parental conflict, domestic violence, and school violence into the Model 1, the significant relationship between gender ($\beta = 0.11$, $p < .001$), religion ($\beta = 0.06$, $p < .01$), and cyberbullying perpetration stayed unchanged while the significant connection between time spent on smartphone and cyberbullying perpetration became weaker compared to the previous model ($\beta = 0.10 \rightarrow 0.04$, $p < .001 \rightarrow .05$) when physical victimization experiences were introduced. While domestic violence was not significant, witnessed parental conflict ($\beta = 0.19$, $p < .001$) and school violence ($\beta = 0.40$, $p < .001$) exerted a significant and strong impact on cyberbullying perpetration. That is, college students who witnessed parental conflict and experienced victimization experience of school violence are more likely to become the perpetrators of cyberbullying. The model explains 32% variance on the dependent variable.

In Model 3 in Table 11, the victimization experience of cyberbullying was added to the Model 1. The inclusion of cyberbullying victimization variable increased the model

explanation of variance on the dependent variable from 3% to 64%. While the significant connection between gender and cyberbullying perpetration became weaker ($\beta = 0.15 \rightarrow 0.04$, $p < .001 \rightarrow .05$), religion and time spent on smartphone lost their significance when victimization experience of cyberbullying was introduced. A positive relationship was found between victimization experience and perpetrating behavior of cyberbullying ($\beta = 0.79$, $p < .001$). This tells us that male college students and those who have been victims of cyberbullying are more likely to engage in cyberbullying perpetration.

The Model 4 in Table 11 includes all of the victimization experiences (witnessed parental conflict, domestic violence, school violence, and cyberbullying) on top of the demographic variables. The model explains 65% variance on the dependent variable. The influence of demographic variables on college students' cyberbullying perpetration in the model reveals that all of the demographic variables do not predict their cyberbullying engagement behavior except the gender ($\beta = 0.04$, $p < .01$). It could be observed that all of the victimization experiences, witnessed parental conflict ($\beta = 0.10$, $p < .001$), school violence ($\beta = 0.08$, $p < .001$), and cyberbullying ($\beta = 0.72$, $p < .001$) except domestic violence have significant relationships with cyberbullying perpetration. These results suggest that, compared to female college students, male students are more likely to engage in cyberbullying behaviors and those who had victimization experience of witnessing parental conflict, school violence, and cyberbullying have a higher chance of participating in cyberbullying.

Table 11. Ordinary Least Square Analysis of Factors Predicting Cyberbullying Perpetration (N=1600)

Variable	Model 1		Model 2		Model 3		Model 4	
	β	t	β	t	β	t	β	t
<i>Demographic Variable</i>								
Gender (1=Male)	0.15	6.15***	0.11	5.04***	0.04	2.44*	0.04	2.67**
Religion (1=Yes)	0.08	3.05**	0.06	2.71**	0.03	1.87	0.03	1.92
Year in College	0.00	-0.01	-0.02	-0.72	0.00	0.24	0.00	-0.07
Location of College (1=Capital Region)	0.01	0.56	0.01	0.72	-0.02	-1.02	-0.01	-0.69
Time Spent on Smartphone	0.10	3.96***	0.04	2.05*	0.01	0.71	0.01	0.42
<i>Victimization Experience of...</i>								
Witnessed Parental Conflict (Indirect)			0.19	5.79***			0.10	4.11***
Direct Domestic Violence			0.05	1.40			-0.02	-0.97
School Violence			0.40	15.88***			0.08	3.88***
Cyberbullying					0.79	52.02***	0.72	38.70***
Adj R ²	.03		.32		.64		.65	
F	11.33***		96.76***		476.39***		333.42***	

Note: **p<.01 ***p<.001

Chapter 6. Discussion and Conclusion

It has been observed that the victimization rate of cyberbullying among people in their 20s steadily increased every year. In South Korea, the Internet use rate for people in their 20s is 100 percent and smartphone use rate is 99.7 percent of which nearly a quarter experience cyberbullying. Also, in terms of media use, college students have been recognized as heavy users. However, since most of the existing cyberbullying studies were conducted on teenagers, various factors that will have a significant impact on cyberbullying perpetration among college students have been examined by applying social learning theory as the theoretical framework. In more depth, this study focused on how the victimization experience of domestic violence (both direct and indirect – witnessing parental conflict), school violence, and cyberbullying could affect college students' cyberbullying engagement behavior.

First, findings from this study show a rather high incidence of young adults who experienced direct or indirect (witnessing) domestic violence. 79.5% of respondents (1,272 students) claimed that they have been victims of either indirect or direct domestic violence. In detail, 72.6% of respondents (1,161 students) experienced indirect domestic violence (witnessed parental conflict) and 69.2% of respondents (1,108 students) have victimization experience of direct domestic violence. Regarding that people who experienced physical abuse and witnessed parental conflict in their childhood are more aggressive toward others than those who did not (Dodge, Bates, & Pettit, 1990), these victimization figures could not be overlooked

Second, the frequency of school violence victimization is high: 755 students (47.2%) said they have been the victims of school violence. This means that nearly half of the college students experienced school violence in their adolescence. The result is similar to that of a study carried out by the Korean Institute of Criminology where they found that 56~57% of

middle and high school students have victimization experience because of school violence. Since victimization experience of school violence is highly related to cyberbullying perpetration and victims of school violence are likely to engage in cyberbullying as a measure of retaliation (Hinduja and Patchin, 2007), we must not ignore the prevalence of school violence.

Third, in terms of cyberbullying, 64.5% of respondents (1,032 students) have been victims of cyberbullying and 47.7% of respondents (763 students) engaged in cyberbullying. These results show us that approximately half of the college students have cyberbullying perpetration experience and nearly two-thirds of these students have victimization experience of cyberbullying. Since the correlation between victimization and offending is one of the most documented empirical findings in delinquency research (Posick & Zimmerman, 2015), these victimization and perpetration rates and their relationship should be examined in more detail.

In this study, the effects of the independent variables (being a victim of school violence and experiencing or witnessing domestic violence) on the dependent variable (the perpetration of cyberbullying) were measured by multiple regression analysis while controlling demographic variables.

Examining the relationship between the demographic variables and dependent variable shows that gender, religion, and time spent on smartphone have a direct impact on the occurrence of cyberbullying. This reveals that male college students and those who are religious and spent more time spent on smartphone are more likely to engage in cyberbullying than female college students and respondents who are not religious and do not spend much time on smartphone.

Demographic variables that were significant in the previous model still stayed

significant, when the relationship between victimization experience of domestic violence (indirect and direct), school violence, and cyberbullying perpetration was measured. On top of these demographic variables, while victimization experience of direct domestic violence did not show a significant relationship, indirect (witnessing) domestic violence and school violence experiences are positively related to cyberbullying perpetration. College students who witnessed parental conflict and those that were victims of school violence are more likely to engage in cyberbullying those who did not have victimization experience. These results are in line with the findings revealed in the previous studies (Smith & Thornberry, 1995; Hinduja and Patchin, 2007).

In the model where the relationship between victimization and perpetration of cyberbullying was measured, our findings also show that victimization experience of cyberbullying exerted a significant and strong impact on cyberbullying perpetration. With the inclusion of cyberbullying victimization experience, only gender showed a significant relationship among all other demographic variables. This relationship is in line with the result of a meta-analytic study of cyberbullying by Kowalski and his colleagues (2014), which shows that the victimization experience was the most significant factor in predicting cyberbullying engagement.

The last model of this study examined the effects of all the independent variables (being a victim of school violence, experiencing or witnessing domestic violence, and cyberbullying) on the dependent variable (the perpetration of cyberbullying) by using multiple regression analysis while controlling demographic variables. The results demonstrate that college students who had been the victims of school violence, indirect domestic violence, and cyberbullying are more likely to engage in cyberbullying compared to those who did not have these victimization experiences. It can be inferred that the violent

behavior is the result of learning that they can abuse or attack others online in order to modify their behavior or resolve conflict situations.

The relationships between the key variables that we find throughout this study can be explained by the social learning theory proposed by Bandura (1973) and Akers and Jensen (2006). Those who experienced domestic violence and school violence imitate violent behavior toward others and use violence as a way to alleviate their anger in conflict situations. Also, based on the concept of imitation, Akers and Jensen (2006) claims that people might behave similarly to others after observing their behavior. In this sense, those people who had victimization experience of cyberbullying are more likely to imitate cyberbullying behaviors carried out by the perpetrators after actually experiencing and observing those behaviors. The findings from this study have important policy implications for addressing one form of prevalent violence.

Implications of Findings

Concerning the consequences of victimization experience of school violence and domestic violence affecting cyberbullying perpetration, efforts should be made to raise social awareness of the broad and long-term effects of these victimization experiences. However, according to Ryu (2014), since domestic violence and school violence are regarded as private matters, it made difficult for outsiders to intervene and protect victims. These crimes have the characteristic that the crime is carried out continuously and repeatedly and since the victims are in close relationship with the perpetrators, victims may be exposed to the secondary crime of violence. If external agencies consistently fail to respond to victims request for protection from perpetrators, they will be discouraged and comply with the continuous violent situations.

Furthermore, the social perception towards the severity of cyberbullying among college student is low (Jun & Kim, 2016). Therefore, to prevent cyberbullying, it is urgent to bring social awareness. As the law for the protection of victims of cyberbullying and punishment of perpetrators is insufficient, there also is a need to supplement laws and systems related to cyberbullying (Lee, 2014; Lee et al., 2015; Jun & Kim, 2016).

At a preventive level of school violence, domestic violence, and cyberbullying, education and enlightenment programs are urgently needed. Therefore, it is necessary to regularly implement the school violence and cyberbullying prevention education, which is currently carried out on the discretion of the school and make it mandatory. Also, violence prevention education and methods of parenting for premarital couples and newly married couples should be provided by all social organizations and public institutions. Moreover, it is necessary to develop and implement effective educational programs to prevent cyberbullying.

The program should include sensitivity to violence, clear consciousness and attitude toward violence, understanding of oneself and emotional expression, and interpersonal conflict management skills. By developing and implementing such programs, it is possible to control various aggressions derived from experiences such as school violence, domestic violence, and cyberbullying, which will help understanding and controlling anger and frustration. In addition, through the program, learning specific skills to understand the importance of compromise, concessions, and conversations in conflict situations will help them to prevent engaging in future violent behaviors.

Also, social media can play a significant role in communicating this message. The use of social media in implementing such a program provides students with the ability to get more useful information, obtain help when necessary, and find a more effective way to deal with problematic situations. Institutions can share supportive and positive posts that reach all

the people and students that are connected to the networks and pages. Such a program could encourage schools and other institutions to initiate hashtags on social media to engage students and online discussions that are helpful. It is advisable for these organizations to be selective about which social platforms to use for the best practice.

Limitations

In future research, in order to clarify the causal relationships found in this study, it is necessary to examine whether psychological, behavioral factors and health conditions could mediate or even moderate these relationships. Although it is evident from the findings in this research that different types of prior victimization experiences have significant influence on the cyberbullying engagement behavior among the college students, it is essential to examine if additional factors could have a significant impact in explaining this relationship. The discovery of other factors and conditions that could mediate and moderate the relationship could not only help clarify the relationship but also will offer more effective and efficient measures to prevent future cyberbullying engagement behaviors.

There is an additional limitation. The findings of this study is based on the sample collected from the college students in Korea. Although college students are representative population of people in their 20s, there still are large proportions of population who are not attending the college or are not college students anymore who were not included in this study. Although, the findings from this study are relevant to the Korean college students, they may not be generalizable to all people in their 20s. Thus, future studies should consider sampling both of the groups who attend the college and who do not in order to enable the generalizability of the findings for people in their 20s.

REFERENCES

REFERENCES

- Accordino, D. B., & Accordino, M. P. (2011). An exploratory study of face-to-face and cyberbullying in sixth grade students. *American Secondary Education*, 14-30.
- Ahn, J. M. (2001). A Study on the Influences of Parenting Attitude and Abused Adolescents on Coping Strategies against School Violence [master's thesis]. *Seoul: Yonsei University*.
- Akbulut, Y., & Eristi, B. (2011). Cyberbullying and victimisation among Turkish university students. *Australasian Journal of Educational Technology*, 27(7).
- Akers, R. L. (2011). *Social learning and social structure: A general theory of crime and deviance*. Transaction Publishers.
- Akers, R. L., & Cochran, J. K. (1985). Adolescent marijuana use: A test of three theories of deviant behavior. *Deviant Behavior*, 6(4), 323-346.
- Akers, R. L., & Jensen, G. F. (2006). The empirical status of social learning theory of crime and deviance: The past, present, and future. *Taking stock: The status of criminological theory*, 15, 37-76.
- Akers, R. L., & Sellers, C. S. (2004). Criminological Theories: Introduction. *Evaluation, and Application*. Los Angeles: Roxbury.
- Arnett, J. J., & Tanner, J. L. (2006). Emerging adulthood: The dawning of a new age. *American Psychological Association*, 1-341.
- Bandura, A. (1973). *Aggression: A social learning analysis*. prentice-hall.
- Bandura, A. (1977). Self-efficacy: toward a unifying theory of behavioral change. *Psychological review*, 84(2), 191.
- Bandura, A., Ross, D., & Ross, S. A. (1961). Transmission of aggression through imitation of aggressive models. *The Journal of Abnormal and Social Psychology*, 63(3), 575.
- Bauman, S., Toomey, R. B., & Walker, J. L. (2013). Associations among bullying, cyberbullying, and suicide in high school students. *Journal of adolescence*, 36(2), 341-350.;
- Burgess, R. L., & Akers, R. L. (1966). A differential association-reinforcement theory of criminal behavior. *Social problems*, 14(2), 128-147.
- Cho, Y. O. (2013). A Study on the Factors Associated with Cyber Bullying Victimization. *Korean Association of Public Safety and Criminal Justice Review*, 22, 304-327.
- Choi, J. (2015). Influence of Cyber Bullying Victimization on Cyber Bullying: Mediating Effects of Anxiety and Moderation Effects of Stress Coping Strategy. *Crisisonomy*, 11(5), 195-214.

- Choi, J. H. (2005). The influence of family violence experience of child on dating violence of college students: focused on moderating effects of social problem-solving ability [master's thesis]. *Seoul: Yonsei University*.
- Cochran, J. K., Maskaly, J., Jones, S., & Sellers, C. S. (2017). Using structural equations to model Akers' social learning theory with data on intimate partner violence. *Crime & Delinquency*, 63(1), 39-60.
- Didden, R., Scholte, R. H., Korzilius, H., De Moor, J. M., Vermeulen, A., O'Reilly, M., ... & Lancioni, G. E. (2009). Cyberbullying among students with intellectual and developmental disability in special education settings. *Developmental neurorehabilitation*, 12(3), 146-151.
- Dodge, K. A., Bates, J. E., & Pettit, G. S. (1990). Mechanisms in the cycle of violence. *Science*, 250(4988), 1678-1683.
- Gottfredson, M. R., & Hirschi, T. (1990). *A general theory of crime*. Stanford University Press.
- Han, H. J. & Jung, H. J. (2014). Trends in Research Regarding Cyberbullying in Korea and Suggestions for Future Research in Communication Studies. *Speech & Communication*, (24), 180-217.
- Hart, S. N. (1987). The challenge: To better understand and combat psychological maltreatment of children and youth. *Psychological maltreatment of children and youth*, 3-27.
- Hartjen, C. A., & Priyadarsini, S. (2003). Gender, peers, and delinquency: A study of boys and girls in rural France. *Youth & Society*, 34(4), 387-414.
- Higgins, G. E., Fell, B. D., & Wilson, A. L. (2007). Low self-control and social learning in understanding students' intentions to pirate movies in the United States. *Social Science Computer Review*, 25(3), 339-357.
- Hinduja, S., & Ingram, J. R. (2008). Self-control and ethical beliefs on the social learning of intellectual property theft. *W. Criminology Rev.*, 9, 52.
- Hinduja, S., & Patchin, J. W. (2007). Offline consequences of online victimization: School violence and delinquency. *Journal of school violence*, 6(3), 89-112.
- Hinduja, S., & Patchin, J. W. (2008). Cyberbullying: An exploratory analysis of factors related to offending and victimization. *Deviant behavior*, 29(2), 129-156.
- Hinduja, S., & Patchin, J. W. (2009). *Bullying beyond the schoolyard: Preventing and responding to cyberbullying*. Thousand Oaks, CA: Sage Publications (Corwin Press).
- Hinduja, S., & Patchin, J. W. (2010). Bullying, cyberbullying, and suicide. *Archives of suicide research*, 14(3), 206-221.

- Hinduja, S., & Patchin, J. W. (2012). Cyberbullying: Neither an epidemic nor a rarity. *European Journal of Developmental Psychology*, 9(5), 539-543.
- Hinduja, S., & Patchin, J. W. (2014). *Bullying beyond the schoolyard: Preventing and responding to cyberbullying*. Corwin Press.
- Hochstetler, A., Copes, H., & DeLisi, M. (2002). Differential association in group and solo offending. *Journal of Criminal Justice*, 30(6), 559-566.
- Hoff, D. L., & Mitchell, S. N. (2009). Cyberbullying: Causes, effects, and remedies. *Journal of Educational Administration*, 47(5), 652-665.
- Hwang, S., & Akers, R. L. (2003). Substance use by Korean adolescents: A crosscultural test of social learning, social bonding, and self-control theories. *Social learning theory and the explanation of crime*, 11, 39-64.
- Ingram, J. R., & Hinduja, S. (2008). Neutralizing music piracy: An empirical examination. *Deviant Behavior*, 29(4), 334-366.
- Jaffe, P. G., Wolfe, D. A., & Wilson, S. K. (1990). *Children of battered women*. Sage Publications, Inc.
- Jang, H., Song, J., & Kim, R. (2014). Does the offline bully-victimization influence cyberbullying behavior among youths? Application of general strain theory. *Computers in Human Behavior*, 31, 85-93.
- Jeong, H. (2012). A study on the actual condition and countermeasure of cyber violence in school environment. *Korean Juvenile Protection Review*, 20, 205-239.
- Jose, P. E., Kljakovic, M., Scheib, E., & Notter, O. (2012). The joint development of traditional bullying and victimization with cyber bullying and victimization in adolescence. *Journal of Research on Adolescence*, 22(2), 301-309.
- Jun, D. & Kim, D. (2015). The Effects of Cyberbullying Victimization Experience of High School and University Students on Cyberbullying Engagement Behavior: Moderating Effect of Social Participation. *Chung-ang Public Administration Review*, 29(3), 157-180.
- Jun, D. & Kim, D. (2016). A Study on Adult's Cyberviolence. *Korean Journal of Local Government & Administration Studies*, 30(3), 25-44.
- Jung, H. (2009). A Study of Social Bonding, Self-Control, and Opportunity Theories on The Persistent Cyber Delinquency. *Informatization Policy*, 16(4), 97-112.
- Jung, H. W. (2010). The changes of cyber delinquency and the predictors in adolescence. *Korean Criminological Review*, 21(2), 263-288..
- Kim, D. K. (2006). A Study on Cyber-Violence Victimization. *Korea association of Criminal psychology, Korea Research Criminal Psychology*, 2(2), p155.

- Kim, E. K. (2012). Study on the Predictors of Youth's Cyber Bullying [master's thesis]. *Seoul: Myongji University*.
- Kim, J. H. & Kim, S. A. (2000). A Study on the School Violence in Korea: Its Prevalence and Type. *Korea Institute for Youth Development*, 11(1), 89-110.
- Kim, J. H.; Noh, S. H.; Koh, K. I. & Choi, K. W. (1990). A study of Korean juvenile delinquency: The study pressure approach. *Seoul: Korean Institute for Criminology*, 1990(12), 23-397.
- Kim, K. (2013). Influential risk factors for youth cyber violence: With priority given to the mediating effects of delinquent friends. *Journal of Future Oriented Youth Society*, 10(4), 133-159.
- Kim, S. & Kang, H. (2016). The effects of social support on adolescent cyber-bullying experience: focusing on mediating effects of self-control. *Journal of Youth Welfare*, 18(3), 171-193.
- Korea Communication Commission (2016). 2015 Cyber Violence Survey Report.
- Kowalski, R. M., Giumetti, G. W., Schroeder, A. N., & Lattanner, M. R. (2014). Bullying in the digital age: A critical review and meta-analysis of cyberbullying research among youth. *Psychological Bulletin*, 140(4), 1073-1137.
- Kowalski, R. M., Limber, S. P., Limber, S., & Agatston, P. W. (2012). *Cyberbullying: Bullying in the digital age*. John Wiley & Sons.
- Lee, H. S. (2016). A study on the Moderating Effect of Gender Sensitivity on the Relationship between Family Violence, School Violence and Dating Violence among College Students. *Doctor's Thesis Paper for Graduate School of Silla University*.
- Lee, J. H. & An, S. C. (2013). A Comparative Study on the Legal System of Cyberbullying. *Dispute Resolution Studies Review*, 11(1), 133-157.
- Lee, J. K. (2011). A study on dispositional mobile phone use motives, mobile phone addiction, and mobile phone verbal bullying of adolescents: With a focus on middle and high school students in Seoul and Gyeonggi. *Journal of Communication Science*, 11(2), 365-401.
- Lee, K. (2014). Criminal Measures against Cyberbullying. *Law Review*, 56, 269-286.
- Lee, K. E., & Jeong, S. H. (2014). Predictors of cyberbullying behaviors among adolescents: Application of the theory of planned behavior and social learning theory. *Journal of the Cybercommunication Academic Society*, 31, 129-162.
- Lee, S. & Lee, J. (2016). Impact of Cyberbullying on Adolescents. *Journal of Korean Public Police and Security Studies*, 13(2), 41-66.
- Lee, S. H., Kang, J. H., & Lee, W. S. (2015). Study on the Types and Countermeasures of

- Youth Cyber Violence. *Korean Institute of Criminology*, 1-481.
- Lee, S. S., & Jun, S. H. (2015). An Study on the Causes of University Students' Cyber Bullying: Three Smart Phone Uses of Texting, SNS, and Internet. *Korean Criminological Review*, 26(3), 187-207.
- Lee, S. S. (2004). Strain, negative emotions, and cyber-delinquency. *Korean Association of Public Safety and Criminal Justice*, 18, 273-299.
- Lee, S. S. (2007). Testing a model of cyber-delinquency through motive, opportunity and control factors. *Informatization Policy*, 4(3), 3-15.
- Lee, S. S. (2009). The Effects of Strain, Low Self-Control, and Internet Time Use on Cyber Delinquency: Testing Three Theories of Delinquency. *Korean Criminological Review*, 95-115.
- Lee, S. S. (2011). *Cybercrime Criminology: Causes, Types and Measures*. Seoul: Green.
- Lee, S. S., Kang, E. Y., & Choi, S. H. (2015). The Effect of Smart Phone Addiction on Cyber Delinquency. *Journal of Korean Criminological Association*, 9(2), 69-102.
- Lenhart, A. (2007). *Cyberbullying and Online Teens*. Retrieved June 27, 2007, from <http://www.pewinternet.org/pdfs/PIP%20Cyberbullying%20Memo.pdf>
- Li, C. K., Holt, T. J., Bossler, A. M., & May, D. C. (2016). Examining the mediating effects of social learning on the low self-control—Cyberbullying relationship in a youth sample. *Deviant Behavior*, 37(2), 126-138.
- Li, Q. (2006). Cyberbullying in schools: A research of gender differences. *School psychology international*, 27(2), 157-170.
- Li, Q. (2007). Bullying in the new playground: Research into cyberbullying and cyber victimisation. *Australasian Journal of Educational Technology*, 23(4).
- Lim, S. (2011). How to deal with Cyber-bullying in terms of Moral Education. *Journal of Ethics*, 1(81), 291-316.
- Lowry, P. B., Zhang, J., Wang, C., & Siponen, M. (2016). Why do adults engage in cyberbullying on social media? An integration of online disinhibition and deindividuation effects with the social structure and social learning model. *Information Systems Research*, 27(4), 962-986.
- Marcum, C. D., Higgins, G. E., & Ricketts, M. L. (2014). Juveniles and Cyber Stalking in the United States: An Analysis of Theoretical Predictors of Patterns of Online Perpetration. *International Journal of Cyber Criminology*, 8(1).
- Ministry of Science, ICT, and Future Planning. (2017). 2016 Internet Usage Survey Summary Report.

- Mishna, F., Khoury-Kassabri, M., Gadalla, T., & Daciuk, J. (2012). Risk factors for involvement in cyber bullying: Victims, bullies and bully-victims. *Children and Youth Services Review*, 34(1), 63-70.
- Morris, R. G., & Higgins, G. E. (2010). Criminological theory in the digital age: The case of social learning theory and digital piracy. *Journal of Criminal Justice*, 38(4), 470-480.
- Nam, J. S. & Chang, J. H. (2011). A Study on the cyber-violence victimization of juveniles Focusing on the juvenile delinquency factor and local community factor. *Korea Research Criminal Psychology*, 7, 101-119.
- Nam, S. I., & Kweon, N. H. (2013). A study on the factors that influence adolescent offenders of cyberbullying. *Journal of Future Oriented Youth Society*, 10(3), 23-43.
- National Crime Prevention Center. (2017). What is Cyberbullying? Retrieved from <https://www.ncpc.org/resources/cyberbullying/what-is-cyberbullying/>
- National Youth Policy Institute. (2012). High school and college student social media bullying experience status.
- Oh, S. Y., & Kwak, Y. G. (2013). The study on the actual conditions of school violence and solution caused by cyber bullying. *Journal of Korean Public Police and Security Studies*, 10(3), 65-88.
- Olweus, D. (1991). Bully/victim problems among schoolchildren: Basic facts and effects of a school based intervention program. *The development and treatment of childhood aggression*, 17, 411-448.
- Olweus, Dan Ake (1993). *Bullying at School*. Cambridge, Ma: Blackwell.
- Park, H. & Bae, S. (2014). Comparison of Causes of Adolescent's Real and Cyber Delinquency. *Korea Research Criminal Psychology*, 10, 141-166.
- Posick, C., & Zimmerman, G. M. (2015). Person-in-context: Insights on contextual variation in the victim-offender overlap across schools. *Journal of interpersonal violence*, 30(8), 1432-1455.
- Rebellon, C. J. (2002). Reconsidering the broken homes/delinquency relationship and exploring its mediating mechanism (s). *Criminology*, 40(1), 103-136.
- Riggs, David S. & O'Leary, K. Daniel (1989). A theoretical model of courtship aggression, in M. Pirog-Good & J. E. Stets (Eds.), *Violence in dating relationships* (pp. 53-71). New York: Praeger.
- Roland, E. (1989). Bullying: The Scandinavian research tradition. In D. P. Tattum & D. A. Lane (Eds.), *Bullying in schools* (pp. 21-32). Stoke-on-Trent, UK: Trentham.
- Ryu, Byung Kwan (2014). "The Protection System for the Victims in Dating Violence." *Kyung Sang University Legal Research Center* 22: 91-114.

- Sellers, C. S., & Winfree, L. T. (1990). Differential associations and definitions: A panel study of youthful drinking behavior. *International Journal of the Addictions*, 25(7), 755-771.
- Seo, A. (2012). The Factors Affecting Individuals' Flaming Behavior in Virtual Communities: Theoretical Exploration and Empirical Analysis. *The E-Business Studies*, 13(1), 89-114.
- Seo, K. W. (2006). The Actual Condition and Countermeasure of Cyber Violence. *Law Review*, 9(2), 201-228.
- Ševčíková, A., & Šmahel, D. (2009). Online harassment and cyberbullying in the Czech Republic: Comparison across age groups. *Zeitschrift für Psychologie/Journal of Psychology*, 217(4), 227-229.
- Shin, S. (2016). A study on the relationship of strain and cyberbullying among adolescents. *Social Science Research*, 23(1), 339-366.
- Siegel, L. J., & McCormick, C. R. (2010). *Criminology in Canada: Theories, patterns, and typologies*. Nelson Education.
- Simons, R. L., Lin, K. H., & Gordon, L. C. (1998). Socialization in the family of origin and male dating violence: A prospective study. *Journal of Marriage and the Family*, 467-478.
- Skinner, B. F. (1953). *Science and human behavior*. Simon and Schuster.
- Slonje, R., Smith, P. K., & Frisé, A. (2013). The nature of cyberbullying, and strategies for prevention. *Computers in human behavior*, 29(1), 26-32.
- Smith, C., & Thornberry, T. P. (1995). The relationship between childhood maltreatment and adolescent involvement in delinquency. *Criminology*, 33(4), 451-481.
- Smith, P. K. (2012). Cyberbullying: Challenges and opportunities for a research program—A response to Olweus (2012). *European Journal of Developmental Psychology*, 9(5), 553-558.
- Smith, P. K., Mahdavi, J., Carvalho, M., Fisher, S., Russell, S., & Tippett, N. (2008). Cyberbullying: Its nature and impact in secondary school pupils. *Journal of child psychology and psychiatry*, 49(4), 376-385.
- Staats, A. W. (1975). *Social behaviorism*. Oxford, England: Dorsey.
- Stafford, L., Kline, S. L., & Dimmick, J. (1999). Home e-mail: Relational maintenance and gratification opportunities. *Journal of Broadcasting & Electronic Media*, 43(4), 659-669.
- Straus, M. A. (1979). Measuring Intrafamily Conflict and Violence: The Conflict Tactics (CT) Scales. *Journal of Marriage and the Family*, 41(1), 75-88.

- Straus, M. A., Hamby, S. L., Finkelhor, D., Moore, D. W., & Runyan, D. (1998). Identification of child maltreatment with the Parent-Child Conflict Tactics Scales: Development and psychometric data for a national sample of American parents. *Child abuse & neglect*, 22(4), 249-270.
- Sung, D. K., Kim, D. H., Lee, Y. S., & Lim, S. W. (2006). A study on the cyber-violence induction factors of teenagers: focused on individual inclination, cyber violence damage experience, and moral consciousness. *Korea Journal of Cyber Communication*, 19, 79-129.
- Sutherland, E. H. (1947). *Principles of Criminology. Sociological Theory of Criminal Behavior*. New York: J. B. Lippincott.
- Tokunaga, R. S. (2010). Following you home from school: A critical review and synthesis of research on cyberbullying victimization. *Computers in human behavior*, 26(3), 277-287.
- Vincent, R. C., & Basil, M. D. (1997). College students' news gratifications, media use, and current events knowledge. *Journal of Broadcasting & Electronic Media*, 41(3), 380-392.
- Warr, M. (2002). *Companions in crime: The social aspects of criminal conduct*. Cambridge University Press.
- Wellman, B., Haase, A. Q., Witte, J., & Hampton, K. (2001). Does the Internet increase, decrease, or supplement social capital? Social networks, participation, and community commitment. *American behavioral scientist*, 45(3), 436-455.
- Winfrey, L. T., Sellers, C. S., & Clason, D. L. (1993). Social learning and adolescent deviance abstention: Toward understanding the reasons for initiating, quitting, and avoiding drugs. *Journal of Quantitative Criminology*, 9(1), 101-125.
- Ybarra, M. L., & Mitchell, K. J. (2004). Online aggressor/targets, aggressors, and targets: A comparison of associated youth characteristics. *Journal of child Psychology and Psychiatry*, 45(7), 1308-1316.
- Ybarra, M. L., Mitchell, K. J., Wolak, J., & Finkelhor, D. (2006). Examining characteristics and associated distress related to Internet harassment: findings from the Second Youth Internet Safety Survey. *Pediatrics*, 118(4), e1169-e1177.