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# FACTORS AFFECTING TEENAGER CYBER DELINQUENCY

Young Ju Joo, Kyu Yon Lim, Sun Yoo Cho, Bo Kyung Jung and Se Bin Choi
*Ewha Womans University*
*Ewhayeodae-gil 52, Seodaemun-gu, Seoul 120-750 Korea*

**ABSTRACT**

The study aims to investigate structural relationships among teenagers' peer attachment, self-control, academic stress, internet usage time, and cyber delinquency. The data source was the Korea Youth Panel Survey, and the responses from 920 teenagers in the 12th grade provided the study data. Structural equation modeling was used for the analysis. The results indicated that teenager self-control significantly affected the internet usage time. Also, peer attachment, self-control, academic stress, and internet usage significantly affected teenager cyber delinquency. The research results imply that the development of peer attachment and self-control is important to reduce cyber delinquency.

**KEYWORDS**

Internet usage; cyber delinquency; academic stress; self-control

## 1. INTRODUCTION

Internet has become a critical part of our daily lives. Recent research reported that 99.9% of the Korean teenagers are using the internet (Korea Internet & Security Agency, 2011). The issue here is that some of the teenagers may use the internet in an inappropriate manner, which results in cyber delinquency, for example, distributing false or misleading information, sharing software illegally, and being aggressive ignoring netiquettes. This study tried to understand the phenomenon of teenager cyber delinquency by investigating predicting variables for online misbehaviors. From the theoretical perspective, Hirschi (1969) proposed 'social bonding theory', focusing on attachment, commitment, involvement, and belief as critical factors for reducing teenager delinquency. Bowlby (1982) also claimed that attachment, especially with peers, plays an important role for teenagers to shape their behavior. On the other hand, Gottfredson and Hirschi (1990) suggested 'general theory' to explain self-control as a predicting factor for delinquency, and the significant effect of self-control on delinquency has been echoed by previous studies such as Pratt and Cullen (2000), and Higgins (2004). 'General strain theory' by Agnew (1992) and 'opportunity theory' by Osgood, Wilson, O'Malley, Bachman, and Johnston (1996) proposed, respectively, that stress level and the exposure to the opportunity would affect the degree of delinquency.

Based on the extensive literature review, researchers suggested peer attachment, self-control, academic stress, internet usage time as tentative predictors for cyber delinquency. Prior research in the context of teenager cyber delinquency indicated that peer attachment and self-control negatively predicted the internet usage time and cyber delinquency (e.g. Higgins, 2004; Mesch, 2002). Leung (2007) claimed that teenagers are likely to reduce their stress level by surfing the internet and interacting with peers online, which is closely related to the hours spent online. Lastly, Ybarra (2004) reported that the internet usage time significantly predicted cyber delinquency.

Hence, the researchers investigated the causal relationships among the suggested variables. Research questions are as follows: (1) Do teenagers' peer attachment, self-control, and academic stress level predict the internet usage time? (2) Do teenagers' peer attachment, self-control, academic stress level and the internet usage time predict cyber delinquency?

## 2. METHODOLOGY

The data source was the Korea Youth Panel Survey, and the responses from 920 teenagers in the 12th grade provided the study data. Survey participants were sampled by stratified random sampling in terms of the province. Demographically, 58% of the respondents were male and 42% female.

Survey questionnaire for the variables, peer attachment, self-control, academic stress, internet usage time, and cyber delinquency was developed by Korea National Youth Policy Institute, and develop and reviewed by academic and field experts. Regarding peer attachment, self-control, and academic stress, Cronbach's α from the study data ranged from .73 to .81, and used 5 point Likert scale. Internet usage time was measured by hours spent for the internet per day, while cyber delinquency was measured by the frequency of behaviors relevant to the indicators of cyber delinquency during the recent 12 months.

Structural equation modeling was used for the analysis, and SPSS and AMOS were used.

## 3. RESULTS

Descriptive analysis indicated there were significant correlations among all the variables at the significance level of .05, and the assumption of normal distribution was met. As factor analysis confirmed that each variable is unidimensional, item parceling was adopted to minimize measurement errors in structural equation modeling.

As a result of maximum likelihood estimation and structural model testing, the relationships between peer attachment and internet usage, and between academic stress and internet usage were insignificant. Therefore the modified model was tested again, and it provided a good fit to the data (e.g., TLI= .990; CFI= .995; RMSEA= .019 (.000~.040)). Figure 1 presents the modified model with significant path coefficients.

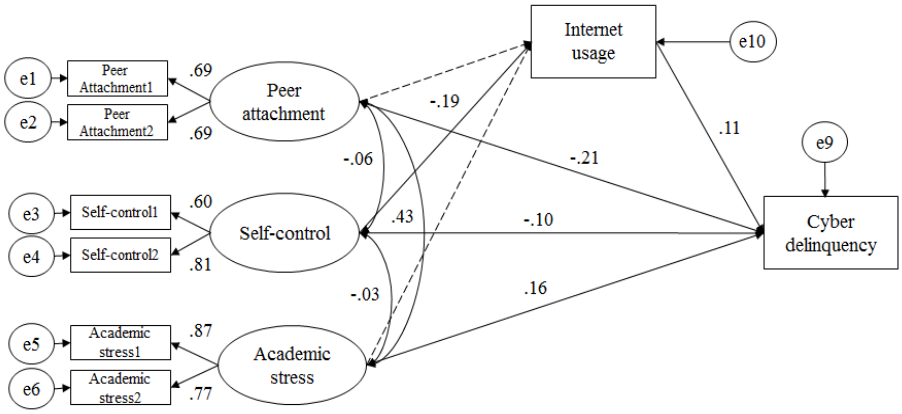


Figure 1. Modified model with standardized path coefficients

## 4. CONCLUSION

The researchers tried to provide more elaborated understanding on teenager cyber delinquency. Unlike the results from prior studies, peer attachment and academic stress did not affected internet usage time. It is likely that peer attachment these days is maintained or even increased through online social network services. Academic stress is another variable reflecting research context. As Korean teenagers, especially 12$^{th}$ graders, are highly focused on college entrance exam, they may try to reduce the hours spent online regardless of their stress level.

Overall, the results provide implications on which aspects we should focus on in order to intervene teenager cyber delinquency. Also, the results indicate that we should explore peer attachment from a new perspective, since a variety of social network services are influencing the perceived level of attachment with peers online and offline as well. Further studies are required to investigate more elaborated model with social and environmental variables as predictors.

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