An analysis of multiple factors of cyberbullying among junior high school students in Taiwan

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ABSTRACT

Cyberbullying, as a serious kind of repeated, intentional, and harmful aggressive behavior, cannot be ignored. In light of the limited studies and inconsistent findings on the matter, this study explores cyberbullying's frequency and other factors (gender, academic achievement, types of technologies used, and anonymity) relevant to both the issue itself and the East Asian context. The interrelationship of different roles (bullies, victims, and bystanders) in cyberbullying is also examined. A survey was conducted with 545 Taiwan junior high school students. The results indicate that male students were more likely to bully others in cyberspace and that cyberbullying was not affected by one's level of academic achievement. Regarding the various technologies and various country-specific cyberbullying forms pertinent to technology users, instant messenger (IM) users experienced significantly more cyberbullying than users of other technologies. The survey results also indicate that the anonymity of cyberbullying was not a pertinent factor. The study found that the dominant attitude toward cyberbullying was indifference, raising alarms about the lack of cyberbullying prevention. Peers, who were the people most teenagers would likely turn to when experiencing cyberbullying, usually took no action because of their tendency to avoid conflicts and to maintain group harmony. In its interpretation of the findings, this study emphasizes Taiwan's context, including Confucian philosophy.

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1. Introduction

Bullying, as a serious kind of school violence, has long been recognized as a common aggressive behavior among peers and has negative effects on mental development and learning (Flanagan, Erath, & Bierman, 2008). The problem of bullying in middle school is serious and cross-cultural, and it has attracted considerable attention in Europe, North America, and Japan (e.g., Akiba, 2004; Olweus, 2003; Pepler, Jiang, Craig, & Connolly, 2008). Regardless of whether the participants are victims, bullies, or witnesses, experiencing bullying can increase the possibility of other victimization, including child maltreatment, conventional crime, and psychological problems (Holt, Finkelhor, & Kantor, 2007a, 2007b). Bullying behavior is now happening in cyberspace and in an even more powerful way than has been the case in conventional contexts, because cyberspace is quicker, more comprehensive, and almost unstoppable and unavoidable. The physical scars of a beating can heal, and it is often possible for the would-be victim of such a beating to run away; stalked by someone online,

even the strongest mind can break and there is no place to hide.

Young people are socially connected with others through the Internet and other communication technologies, and these tools have become the new medium of bullying behaviors. Cyberbullying hurts teenagers emotionally, rather than result directly in physical damage, and operates by means of cell-phone text messages, photos posted online, mean words on personal blogs, and rumors that spread faster than ever through e-mail, instant messengers (IMs), or any other such communication devices. With the growing popularity of social-networking sites, instant messengers, and mobile technology among adolescents, the risk and extent of cyberbullying cannot be underestimated (Juvonen & Gross, 2008).

Owing to the limited number of cyberbullying studies in Taiwan (e.g., Hokoda, Lu, & Angeles, 2006; Wei, Jonson-Reid, & Tsao, 2007), to the studies' omission of pertinent issues, and to the studies' inconsistent results, this study explores the cyberbullying problems among Taiwanese teenagers and examines the frequency, types of tools, gender differences, and other factors relevant to both the issue itself and the East Asian context. It is hoped that the results illustrate how the new form of bullying happens in the context of Taiwan. In addition to examining the prevalence of cyberbullying, the current study emphasizes the cultural differences between Taiwan and Western countries.

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2. Literature review

2.1. Definition of cyberbullying

As a prominent researcher in bullying studies, Olweus (1993) explained that bullying occurs when children (1) say mean things about or make fun of another person, (2) ignore or exclude him or her from their group, (3) hit, kick, push, or physically restrain him or her, or (4) tell lies or spread false rumors or send mean notes and try to make other students dislike him or her.

Later, Olweus and Limber (1999) summarized notable features of bullying: "it is aggressive behavior or intentional 'harm-doing', which is carried out repeatedly and over time in an interpersonal relationship characterized by an imbalance of power" (p. 31). The definition covers four features of bullying behaviors: they are intentional, harmful, repeated, and imbalanced in a power relationship. The definition helps to distinguish accidental and just-one-time events from bullying, a willful aggressive behavior.

Cyberbullying, the bullying behavior in cyberspace, is a new kind of bullying happening through Internet applications, cell phones, or any other information technology. According to *Bullying Beyond the Schoolyard* (Hinduja & Patchin, 2008), cyberbullying is "the intentional and repeated harm of others through the use of computers, cell phones, and other electronic devices" (p. 5). The aforementioned text points out that the difference between traditional bullying and cyberbullying concerns basically the tools and methods used; the intentional, repeated, and harmful nature remains the same.

Indeed, the different tools and methods have been changing the face of bullying; the communication gadgets make cyberbullying generally indirect. Without physical presence, cyberbullying happens in chiefly verbal and relational ways. Relevant behaviors include harassment, denigration, impersonation, outing, exclusion, and cyber-stalking, which are all classified as cyberbullying (Willard, 2006). These new forms of bullying facilitate attacks on teenagers not only during school time, but also after school and at home, outside the awareness of parents. We should never underestimate the harmful effects of cyberbullying, especially on children and teenagers.

The tools that could be used in cyberbullying, meaning all the communication technologies available, bring bullying to a new space and transform bullying into a new form. The tools include cell phones and Internet tools (instant messengers, social-networking sites, chat rooms, e-mails) and result in the two unique characteristics of cyberbullying, which are rapid dissemination and anonymity; the latter feature remains an issue for further discussion.

2.2. The cyberbullying characteristics of rapid dissemination and anonymity

Owing to the features of information technology, cruel words can spread very quickly through simple copy-and-paste or forward actions in e-mails and instant messages, and the harmful content could be text, photos, drawings, videos, audio, and any combination of these multi-media forms. Once the materials are posted online, school teachers or parents can take notice and ask the authors to delete the original file, but the numerous copies elsewhere in cyberspace remain; and the victim's fear or embarrassment persists. The maelstrom of cyberbullying can spread quickly and is almost unstoppable. This first unique characteristic of cyberbullying, rapid dissemination, has been confirmed by the vast majority of studies so far (Kowalski, Limber, & Agatston, 2008; Li, 2005).

The second characteristic, anonymity, remains relatively inconsistent. Different from face-to-face traditional bullies, cyberbullies usually can easily remain anonymous in cyberspace (Li, 2007b, 2005). The bullies theoretically can hide behind computer screens and keep themselves safe from being recognized and punished. Teenagers have access to free e-mail accounts and other web-based applications and thus have the power to threaten, tease, and spread rumors, without implicating themselves. Physically stronger teenagers, usually male students, no longer hold advantages in this form of bullying. Traditional victims of bullying, who probably are weak and shy, can fight back, or even take revenge in cyberspace. The anonymous nature of cyberbullying may reverse the bully-victim relationship, or reinforce the role-turning cycle.

Yet, the results of an anonymous Internet-based survey of 1454 teenagers (Juvonen & Gross, 2008) are inconsistent with the common assumption that cyberbullies are usually anonymous, suggesting that teenagers are aware of cyberbullying behavior and know exactly who did what. Anonymity is one good cover in cyberspace, but it cannot be inferred that every cyberbully would use it at all or would use it successfully. It is also possible that teenagers simply transfer the bullying field from the school bathroom or the school storage room to blogs and IMs and that teenagers do not tend to hide their identity, just as they typically do not wear masks when beating up a peer in a face-to-face confrontation. While cyberbullying accompanies traditional bullying, the victims might be able to guess the cyberbully's identity. Interestingly, online materials quite obviously are more open to the public than are the bathrooms or the storage rooms in schools; but teen cyberbullies might not be aware of this fact. They do not expect that teachers, parents, or other adults would read their blog online or check their IM records, and most adults are indeed neither aware of such goings-on nor able to do anything about the matter if they are.

While it is assumed that the bullies would make the best use of a given technology's features to remain anonymous (e.g. Li, 2005), there are other findings suggesting that cyberbullies are no different from the traditional face-to-face bullies who would not try to hide their identities (e.g. Juvonen & Gross, 2008). Owing to the inconsistent findings of the existing literature, the present study aims to explore whether anonymity is a unique feature of bullying in cyberspace.

2.3. Factors influencing cyberbullying

Previous research on school bullying has identified several factors that likely contribute to cyberbullying. Among them are the significant factors of gender, academic achievement, and culture. In addition, research on cyberbullying has reported that computer-use frequency is a key factor (Li, 2005).

Gender has long been a significant factor influencing aggressive behavior, and it may result in different types of bullying among teenagers. Nabuzoka (2003) found that males usually were involved in physical and direct bullying (i.e., hitting someone) and that females were more involved in psychological bullying (e.g., rumor-spreading and relational aggression). Another study conducted in Taiwan found that boys and girls were equally likely to be victimized by indirect bullying (Hokoda, Lu, & Angeles, 2006). In cyberspace, where bullying has no physical form and no face-to-face contact, the gender difference might be changed. Li (2006) reported that there is no significant difference between genders, although males were still slightly more likely to cyberbully than females in the Canadian case. There has been debate on which gender is more likely to engage in or to experience cyberbullying, and the findings so far are inconsistent.

Academic achievement is another key factor involved in bullying. Especially in East Asian countries (Lai, Ye, & Chang, 2008), which tend to be highly test-oriented comparatively, teenagers generally have suffered under intense academic pressure from par-