Adolescents' risky online behaviours: The influence of gender, religion, and parenting style

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ABSTRACT

This study explored the influence of gender, religion, and parenting style on risky online behaviours in a sample of 825 Secondary 2 students in Hong Kong. Three risky online behaviours, namely, unauthorised acts (UNAC), internet stickiness (INST), and plagiarism (PLAG) were examined. It was found that males tended to be involved in more risky online behaviours than did females. Christians were no different from non-Christians in terms of risky online behaviours. Parenting style did not seem to be effective in reducing risky online behaviours. There was some evidence that gender moderated the relationship between risky online behaviours and parenting style. Taken together, gender, religion, and parenting style predicted risky online behaviours significantly. Implications of the findings are discussed.

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1. Introduction

Technological development has rapidly transformed our society into a knowledge-based society. People from all walks of life are digitally engaged in various forms of technology. Moor (2005) described the nature of a technological revolution when technology has a tremendous social impact. However, he argued that the growth of technology does not go hand in hand with the increasing concerns for ethics, and there is a call for better ethics. He proposed Moor's Law as follows: "As technological revolutions increase their social impact, ethical problems increase" (p. 117). In the internet world, we observe that as internet technologies increase their social impact, risky online behaviours increase. Broadly speaking, any behaviours with potentially undesirable outcomes can be defined as risky (Boyer, 2006) and therefore, many online behaviours can be considered as risky according to the definition. A study that aimed to understand the online victimisation and offending experiences of K-12 students (McQuade & Sampat, 2008) found that teenagers preyed on and were preyed on by their peers regularly, and academic dishonesty, cyber bullying, using unauthorised passwords and pirated software, committing fraud using credit card account information, and posting and sending indecent photos were common offenses among them.

Adolescents' risky online behaviours are particular concerns of the community because adolescence is a critical transition period between childhood and adulthood, where there is a rapid growth

in physical, psychological, and social domains. Adolescents are bombarded with massive information received through different social media and Web 2.0 applications and thus, they are more prone to various forms of online risks. Although the internet offers numerous online opportunities for learning and social networking, it also provides an ideal environment for risk-taking, and some are tempted to engage in risky behaviours. In short, extensive access and use of the internet by adolescents and its potential consequences for adolescents' development compels us to investigate further the potential online risks and opportunities.

In the literature, two competing approaches are proposed as possible frameworks to explain adolescents' online risk-taking: the Rich Get Richer Approach and the Social Compensation Approach (Stamoulis & Farley, 2010). The former approach posits that the internet primarily favours extraverted people since they possess strong social skills for online communication, and the internet is simply another channel for them to interact with their companions (Sheldon, 2008). The latter approach hypothesises that the internet mainly favours introverted people since they need to communicate online to compensate for their dissatisfaction with their personal relationships in offline contexts (Sheldon, 2008). The internet establishes a more secure environment to fulfil their needs because it helps to maintain psychological distance between users. Stamoulis and Farley (2010) found empirical evidence to support the postulates of social compensation in which a lack of involvement in extracurricular activities and infrequent time spent on socialising with friends offline were significant predictors of online risk-taking for boys and girls respectively. However, the two approaches focus on the personality traits of individuals. More research is needed to examine the influence of demographic variables on risky online behaviours during adolescence. As Valkenburg and Peter (2011)

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recommended, "only if we understand individual differences in the use and effects of online communication will we be able to design interventions that target different (subgroups of) adolescents" (p. 126).

In particular, it is argued that the influence of gender, religion, and parenting style warrants further investigation. Most studies on the gender effect have indicated that males appear to engage in more risky online behaviours such as cyber bullying (Li, 2006) and sexual self-disclosure (Chiou & Wan, 2006) than do females. However, only a few studies focused on adolescent behaviours such as academic dishonesty and copyright infringement. The effect of religion has been researched for many decades, and the results concerning the relationship between religion and ethical behaviours have been mixed. Hood, Spilka, Hunsberger, and Gorsuch (1996) described the research on the relationship between religion and ethics as "something of a roller coaster ride" (p. 341), and it is hard to draw definitive conclusions about the relationship. In a similar vein, despite the numerous studies on parenting style, the effect of parenting style on children's risky online behaviours is still unclear (Kerr & Stattin, 2000; Livingstone & Helsper, 2008).

As such, this study aimed to explore the influence of gender, religion, and parenting style on adolescents' risky online behaviours. Three risky online behaviours, namely, unauthorised acts (UNAC), internet stickiness (INST), and plagiarism (PLAG) were examined. The findings presented in this study were derived from a territory-wide government-funded research project that sought to understand issues of educational inequality and ICT use in schools with a view to identifying appropriate ways to address such issues.

2. Gender and risky online behaviours

The relationship between gender and risky online behaviours has been investigated extensively. The majority of studies have indicated that males tend to engage in more risky online behaviours than do females. Li (2006) reported that males in junior high schools were more likely than females to bully and cyber bully. Chiou and Wan (2006) found that in both real life and cyberspace, male adolescents exhibited greater breadth and depth of sexual self-disclosure than female adolescents. Recently, Leung and Lee (2012a) found that there were more male adolescents who were internet addicts compared with females.

Regarding the behaviours related to the present study, Kim and Kim (2012) showed that the odds of male teens using unauthorised software increased by 151.3% compared with their female counterparts. In the case of hacking, there was also a noticeable gender difference with males tending to engage more in this behaviour. Jensen, Arnett, Feldman, and Cauffman (2002) indicated that males were more involved in academic cheating than females at both high school and college levels. When asked the question "How many times have you copied an Internet document for a classroom assignment in the past year?", 39.7% of males at high schools admitted that they had committed such an act at least once a month, while the corresponding percentage for females was only 26.0% (The Josephson Institute., 2006). However, Lai and Weeks (2009) found no gender differences in the frequency of online plagiarism.

3. Religion and risky online behaviours

The conceptual link between religion and ethics has been a topic of research for many years. However, no definite conclusion about their relationship has yet been reached. In some studies, no relationship between religion and unethical behaviours (e.g.

Hood et al., 1996) was found, while in other studies, a negative association was observed between individual religiousness and justification of ethically suspect behaviours (e.g. Khavari & Harmon, 1982; Parboteeah, Hoegl, & Cullen, 2008). Parboteeah et al. (2008) argued that the mixed results were due to the conceptual and methodological flaws of the studies.

As far as risky online behaviours are concerned, Gerlich, Lewer, and Lucas (2010) found that there were no differences between the ethical attitudes of Christian students and those of students with other religious affiliations, but students' frequency of worship attendance positively predicted moral judgment. However, students still practiced the illegal copying of CDs and downloading of music and movies regardless of their religion. Swart (2009) also reported that while Christian faith influences moral beliefs, values, and attitudes, it has hardly any effect on unethical and risky behaviours when students are confronted with moral dilemma.

Other studies used religiosity and spirituality as proxies for religion to examine their influence on a number of behaviours. Notwithstanding the debate over the distinction between religiosity and spirituality, some scholars are inclined to focus on the commonality of the two constructs and contend that "spirituality is conceptualised as the engagement with the sacred, whereas believers are united with the sacred and to each other through religiosity" (Barry, Nelson, Davarya, & Urry, 2010, p. 311). Grimes and Rezek (2005) found that religiosity manifested as regular attendance at religious services was positively correlated with cheating, but negatively correlated with assisting others to cheat. Some researchers further distinguished between intrinsic and extrinsic religiosity. For instance, Abar, Carter, and Winsler's (2009) found that intrinsic religiosity rather than extrinsic religiosity was negatively associated with risky behaviours. These mixed results point to the need for further work to revisit the nuanced relationship between religion and risky online behaviours.

4. Parenting style and risky online behaviours

In the traditional child-rearing literature concerning moral development, Hoffman (1970) identified three major approaches: love withdrawal (withholding attention, affection, or approval after misbehaviours to create anxiety), power assertion (exercising superior power to modify a child's behaviour), and induction (illustrating why a behaviour is wrong and should be changed by stressing its consequences). Research suggests that love withdrawal and power assertion are ineffective in promoting moral maturity, but that induction appears to foster moral maturity.

Baumrind (1971) introduced one of the influential approaches to parenting style in which three parenting styles were identified: authoritative, authoritarian, and permissive. Neglectful parenting was added as the fourth parenting style by Maccoby and Martin (1983). The four parenting styles involve two parenting strategies: parental responsiveness and demandingness. Parental warmth and control have been used interchangeably with parental responsiveness and demandingness by recent researchers. Parental warmth is characterised by parents giving support to and communicating with their children. Parental control is reflected in the level of guidance, monitoring internet related behaviours, and establishing rules (Valcke, Bontea, De Wevera, & Rotsa, 2010).

Parenting style appears to play an important role in affecting risky online behaviours. Leung and Lee (2012b) showed that parents exercising stricter rules, more involvement, and more mediation would result in adolescents being less likely to be exposed to pornographic or violent content. In studying children's use of MySpace, Rosen, Cheever, and Carrier (2008) reported that the authoritative parenting style was associated with the lowest levels of risky online behaviours, such as low rates of disclosure of