Association for Information Systems AIS Electronic Library (AISeL)

AMCIS 2007 Proceedings

Americas Conference on Information Systems (AMCIS)

December 2007

Protection Motivation Theory in Information System Adoption: A Case of Anti-Plagiarism System

Younghwa Lee University of Kansas

Jeong-Yeon Lee *University of Kansas*

Yucong Liu
University of Kansas

Follow this and additional works at: http://aisel.aisnet.org/amcis2007

Recommended Citation

Lee, Younghwa; Lee, Jeong-Yeon; and Liu, Yucong, "Protection Motivation Theory in Information System Adoption: A Case of Anti-Plagiarism System" (2007). *AMCIS 2007 Proceedings*. 62. http://aisel.aisnet.org/amcis2007/62

This material is brought to you by the Americas Conference on Information Systems (AMCIS) at AIS Electronic Library (AISeL). It has been accepted for inclusion in AMCIS 2007 Proceedings by an authorized administrator of AIS Electronic Library (AISeL). For more information, please contact elibrary@aisnet.org.

PROTECTION MOTIVATION THEORY IN INFORMATION SYSTEM ADOPTION: A CASE OF ANTI-PLAGIARISM SYSTEM

Younghwa Lee University of Kansas gabelee@ku.edu Jeong-Yeon Lee University of Kansas jaylee@ku.edu

Yucong Liu University of Kansas yucong@ku.edu

Abstract

A sharp increase of internet plagiarism has become a major concern for educators. Despite the fact that an anti-plagiarism system has been reported as an effective and efficient tool for detection, deterrence, and education, its adoption rate has been found to be relatively low. The objective of this study is to investigate the facilitators and inhibitors affecting the adoption of an anti-plagiarism system by faculty. Based on an extended protection motivation theory, this study first examines the persuasion effect of information vividness on threat and coping appraisal. In addition, the influence of threat appraisal (i.e., perceived severity and vulnerability, and rewards) and coping appraisal (i.e. response efficacy, self-efficacy, and response cost) on the system adoption is investigated. A quasi-experimental field survey is employed to predict adoption. The potential theoretical and practical implications are discussed.

Keywords

Anti-plagiarism System, Internet Plagiarism, Protection Motivation Theory, Technology Acceptance

Introduction

The emergence and proliferation of Internet plagiarism has recognized as the latest form of academic misconduct, resulting in educators' serious concerns. Internet plagiarism, referring to "deliberately using someone else's language, ideas, or other original material available in cyberspace without acknowledging its source" (Jocoy and DiBiase 2006, p.2), is a growing threat menacing the current standards of academic integrity which undermines the student values toward honesty, trustworthiness, moral leadership, personal ethics, and civility (McCabe and Pavela 2006). It erodes the rich legacy of scholarship in that plagiarizers not only consider the intellectual contribution of others as a trifling effort, but also violate an original author's intellectual property rights and infringe copyright laws (Park 2003).

Most students are aware that Internet plagiarism is an inappropriate behavior. However, the use of the Internet as a tool for research and writing appears to offer students easy access to information, thereby increasing the temptation to plagiarize. For example, a recent survey reported that almost 40% of college students admitted to Internet plagiarism in 2005, which grew from 10% in 1999 (CAI Research 2005). The problem is expected to be more rampant since a new generation of students who perceive the information in cyberspace as public goods. What is worse, the egregiously dishonest behavior becomes far more prevalent in online distance education.

To cope with the epidemic of Internet plagiarism, colleges and universities have taken a proactive stance by developing honor codes, education program, enforcement policies, and installing anti-plagiarism systems. Out of these countermeasures, systematic detection using an anti-plagiarism system has been known as an effective means to combating plagiarism (Jacoy and DiBiase 2006). For instance, Jocoy and DiBiase (2006) indicated that an anti-plagiarism system detected about 13 % of

the plagiarism found in assignments for an online geography course, while manual methods only detected 3 % among the same assignments. Weinstein and Dobkin (2002) also found that 17.5% of the students who were warned that their papers would be checked using the system were found to have plagiarized content in their papers compared to the 28% of those who were not alerted. Further, by exemplifying plagiarized words, sentence, or section during the writing process, the system has been noted as an excellent educational tool for finding the correct uses and the citation of sources. Several anti-plagiarism systems including Turnitin.com, Glatt Plagiarism Services, WCopyFind, IntegriGuard, and EVE2 have been developed and adopted.

Contrary to our expectation, however, a relatively low-level of adoption of an anti-plagiarism system has been reported (Foster 2002; The Wired Campus 2006). It is of great interest that there is such a large gap between administrators or system providers, who believe anti-plagiarism systems are effective in reducing the number of incidence of Internet plagiarism, and faculty, who have actually chosen to use it. A great deal of speculation has arisen as to why faculty have been reluctant to adopt the system. Expected students' resistance, potential relationship deterioration with students, and limited time and passion on teaching of tenure-track faculty are frequently reported inhibitors of the system adoption. Although these reasons are supported by logical reasoning, no rigorous research has been conducted to systematically investigate factors affecting faculty decision to adopt the system and their nomological networks.

Assuming faculty perceive Internet plagiarism as the major threat (danger or concern) of academic integrity, this study adopts the protection motivation theory (Rogers 1983) from health psychology and investigates factors affecting the decision to adopt an anti-plagiarism system. The theory postulates that individuals decide whether they would conduct a recommended adaptive action (i.e., adopting an anti-plagiarism system) by processing and evaluating two cognitive appraisals: threat and coping. Threat appraisal is a cognitive process evaluating the factors associated with the behavior that potentially creates threat (or danger), while coping appraisal refers to a cognitive process evaluating one's ability to cope with and avert the threatened danger (Rogers 1983). By combining these cognitive appraisals, individuals develop their protection motivation, which triggers defensive actions. This study posits that faculty are more inclined to adopt an anti-plagiarism system when they perceive Internet plagiarism as a serious threat for upholding the standards of academic integrity, are convinced of the effectiveness of the system to detect and deter incidences of internet plagiarism, and believe them capable of adopting the system.

In addition, this study attempts to extend the original PMT in several ways. First, we investigate the influence of sources of information on threat and cognitive appraisal, particularly focused on the effect of information vividness. The importance of effective communication of threat and coping on invoking the appraisals has been emphasized, but few PMT studies have explored it. Second, we examine the direct relationship between coping appraisals and actual system adoption theoretically supported by the theory of planned behavior (Ajzen 1991), but not tested in previous PMT studies. Finally, we explore the effect of organizational tenure, percentage of essay-style assignments, class size/ number of teaching assistants, and gender on system adoption.

We select PMT as a theoretical model of this study because although faculty's perceived threats associated with anti-plagiarism in their classes have been reported as a critical factor affecting their anti-plagiarism system, there were no previous IS adoption models which considered threats as a determinant of IS adoption decision making. Compared to those IS adoption models which mainly focused coping appraisals, PMT investigates both threat and coping appraisals. Therefore, PMT is expected to provide a richer and broader understanding of faculty anti-plagiarism systems adoption decision.

Research Background

Protection Motivation Theory

Protection Motivation Theory (Rogers 1975; 1983) has been a viable theoretical framework in health and social psychology, providing an important social cognitive account of diverse protective behavior. The basic postulate of this theory states that protection motivation arises from the cognitive appraisal of a threatening event as serious and likely to occur, together with the belief that a recommended coping response can effectively prevent the event from occurrence (Milne et al. 2000).

Threat appraisal is associated with the maladaptive response which is affected by perceptions regarding to the severity of and vulnerability to the expected threat. The likelihood of an adaptive response is increased when perceptions of severity and vulnerability are high, while it is reduced when any rewards associated with continuing the maladaptive response are expected. The rewards consist of intrinsic rewards (e.g., physical and psychological pleasure) and extrinsic rewards (e.g. social approval). For example, if a person perceives that smoking is effective in reducing mental stress (intrinsic rewards) or is accepted by referents (extrinsic rewards), he/she does not have strong motivation to quit. The latter, coping appraisal is associated with proposed recommendations. The coping appraisal process evaluates one's ability to cope with and avert the threatening behavior. It is related to the individual's assessment of the effectiveness of the recommended behavior to avert

the threat (i.e. response efficacy) and the perceived ability to conduct the advocated behavior (i.e. self-efficacy). The likelihood of enacting the adaptive behavior is increased when high levels of the efficacy variables are predicted. Meanwhile, the likelihood is decreased when high response costs associated with performing the adaptive behavior are perceived. Examples of perceived costs are inconvenience, expensiveness, unpleasantness, difficulty, complexity, side effects, disruption of daily life, and overcoming habit strength. In sum, the combination of the threat appraisal and the coping appraisal processes activates a person's protective motivation, resulting in the applicable adaptive responses. Protection motivation theory has been validated in a diverse array of topics including various health threats, preventive behaviors, environmental hazards, protection of others, and adherence to medical treatment regimens (Floyd et al. 2000).

Information Vividness

After introducing the original PMT in 1975, Rogers (1983) and his colleagues have continued testing and extending the theory. One dimension of the extensions is called the sources of information. Contrary to the original PMT which directly examined the relationship between cognitive mediating processes and protection motivation assuming people have static and existing beliefs toward threat and coping appraisal, the extended PMT has proposed to include the sources of information emphasizing that attitude and behavioral changes can be produced by persuasive communications. Several sources of information initiating the cognitive mediating processes were identified as shown in Figure 1, but their effects remain largely unexplored in PMT studies.

Meanwhile, the significant effect of sources of information on attitude and behavior change has been tested and validated in the persuasion research area (Pornpitakpan 2004). In particular, the effect of information vividness, when "information may be described as vivid, that is, as likely to attract and hold our attention and to excite the imagination to the extent that it is (a) emotionally interesting, (b) concrete and imagery-provoking, and (c) proximate in a sensory, temporal, or spatial way" (Nisbett and Ross 1980, p.45) on persuasive communications has received remarkable attention in the past decades (Smith and Shaffer 2000). Researchers have insisted that vivid information attracts people's attention, increases the motivation to process a message, and enhances inferences and persuasion.

There have been a few attempts to adopt information vividness in previous PMT studies (Sherer and Rogers 1984). However, the literature has room for further investigation. For example, contrary to our expectation, previous studies have found mixed results associated with information vividness. Sherer and Rogers (1984) found the significant effect of information vividness, while Tayler and Thompson (1982) failed to find it. Although the effect was determined to be contingent upon context (Smith and Shaffer 2000) or manipulation conditions(Sherer and Rogers 1984), there were no subsequent studies that investigated it in other protection motivation contexts and settings. In addition, previous studies only examined the direct effect of information vividness on protection motivation, although the theory assumes that sources of information indirectly affect protection motivation through cognitive mediating process variables. Therefore, the nomological networks between sources of information and protection motivation have been partially investigated.

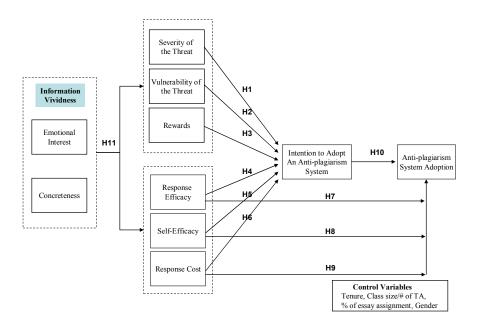


Figure 1. Research Model

Research Hypotheses

Assuming the decision making of faculty to adopt an anti-plagiarism system is strongly influenced by both threat and coping appraisal, this study proposes a theoretical model by adopting protection motivation theory and develops hypotheses (see Figure 1). Detailed discussions of the constructs and hypotheses associated with this model are presented below.

Severity of the Threat

Severity refers to "the degree of physical harm, psychological harm, social threats, economic harm, dangers to others rather than oneself, and even threats to other species" (Rogers and Prentice-Dunn 1997, p. 115). It is expected that the more serious a person perceives the magnitude of the consequences resulting from continuing maladaptive actions, the more he/she adopts recommended adaptive actions. The severity of the threat has exerted a significant effect on the intentions to accept the recommended behaviors (Woon et al. 2005).

In this context, we expect that faculty can perceive Internet plagiarism as a severe threat in that (1) it deteriorates the standards of academic integrity, undermining how students value honesty, trustworthiness, moral leadership, personal ethics, and civility; (2) it also instigates the imitative plagiarism of peer students who observe Internet plagiarism committed by classmates; (3) by mistake, they can provide a good grade to the students who submit copied work without detecting it. Faculty are deeply concerned about their limited capability to detect plagiarism, causing the grading mistake; (4) it could gravely damage their image when the plagiarism committed is publicized, evoking the perception of indolent and nonchalant faculty; and (5) the defamation of academic institutions is expected when high incidence rates of plagiarism are open to the public. Given these threats, we predict that faculty will have a strong desire to adopt an anti-plagiarism system when they perceive a high severity of threat.

H1: Perceived Severity positively influences faculty intentions to adopt an anti-plagiarism system.

Vulnerability of the Threat

Vulnerability refers to "the conditional probability that the threatening event will occur provided that no adaptive behavior is performed or there is no modification of an existing behavioral disposition" (Rogers and Prentice-Dunn 1997, P.115). The perceptions of vulnerability are associated with an individual's assessment of his/her probability of being exposed to the unfavorable threat (Woon et al. 2005). Previous studies have found its significant effect on the intentions to adopt the recommended actions (McClendon and Prentice-Dunn 2001). Therefore, the likelihood of adopting advocated adaptive behavior is increased when a person perceives high vulnerability (McMath and Prentice-Dunn 2005). Along the same vein, this study posits that faculty will seriously consider the adoption of an anti-plagiarism system when they perceive that their classes are highly likely to be threatened by the considerable amount of Internet plagiarism committed by students.

H2: Perceived Vulnerability positively influences faculty intentions to adopt an anti-plagiarism system.

Rewards

The rewards of not adopting the recommended coping responses is the variable newly added into the revised protection motivation theory (Rogers 1983) as part of the threat-appraisal process. The theory insists that rewards increase the probability of a maladaptive response. That is, the higher the rewards of not adopting the recommended action, the less likely the individual is to adopt it (Milne et al. 2000). The rewards are of two types: intrinsic and extrinsic. Intrinsic rewards are associated with physical and psychological pleasure ('pleasure, relaxing, and helpful') and extrinsic rewards are associated with peer approval and support. For example, smokers will continue smoking if they perceive relaxation while smoking and their referents also smoke or express no opinion on their smoking. This study focuses on extrinsic rewards¹, particularly about the approval (i.e. silence) and support of referents (i.e. colleagues, senior faculty, area director, dean, provost, students) for not adopting an anti-plagiarism system. It has been known that people have the tendency to rationalize their behavior by believing that others are doing it, ascribing responsibility to oneself or diffusing it to other people, and making it socially acceptable (Ho 1998). Along the same line, we expect that faculty is less likely motivated to adopt an anti-plagiarism system if they find that important referents did not adopt the system and their non-adoptive behavior is socially acceptable.

H3: Rewards of non-adopting an anti-plagiarism system negatively influence faculty intentions to adopt it.

4

¹ We did not consider intrinsic reward since it was not specifically identified during our literature review and interviews with faculty who have adopted an anti-plagiarism system.

Response Efficacy

Response efficacy refers to the belief that the adaptive response will work, that taking the recommended protective action is effective in averting an undesirable threat (Floyd et al. 2000; Rogers and Prentice-Dunn 1997). Given the information of the counteractive measure for coping with the threats, a person assesses the effectiveness of the advocated adaptive behavior. The higher the individual perceives a response efficacy, the greater likelihood of enacting the adaptive behavior is predicted. For example, a person will enroll in a smoking cessation class if he/she perceives the class is an effective way to stop smoking. Response efficacy has been found to have significant effect on intentions to protect oneself and on intentions to protect others. An anti-plagiarism system has been reported as an effective and efficient tool to detect and deter the incidence of Internet plagiarism and educate Internet plagiarism (Jocoy and DiBiase 2006). If faculty believe that an anti-plagiarism system is an effective solution to resolve their concerns associated with Internet plagiarism, they have greater intention to adopt the system.

H4: Response Efficacy positively influences faculty intentions to adopt an anti-plagiarism system.

Self-Efficacy

Self-efficacy, referring to the belief that one is or is not capable of performing a coping behavior (Rogers and Prentice-Dunn 1997), has found to have a robust effect on the intentions of protective actions. If people have high confidence in their ability to conduct a recommended action, they feel the action is not difficult, and thus they are more likely to adopt the action (Bandura 1977). A significant effect of self-efficacy on the intentions of protective actions has been found in various behavioral contexts (e.g., McClendon and Prentice-Dunn 2001). In an anti-plagiarism context, researchers have reported a higher level of confidence of academic staff on embracing an anti-plagiarism system as a key determinant of its adoption (McClendon and Prentice-Dunn 2001). Therefore, we posit when faculty are more convinced about their capability to learn and use an anti-plagiarism system and the IT support group and system providers are easily accessible to provide technical support, they will have greater intention to adopt an anti-plagiarism system.

H5: Self-Efficacy positively influences faculty intentions to adopt an anti-plagiarism system.

Response Cost

Response cost refers to any costs associated with taking the adaptive coping response (Rogers 1983; Rogers and Prentice-Dunn 1997). An individual will hesitate to adopt the recommended response if he/she has to put a considerable amount of time, effort, and money, feels awkward to conduct it, or encounters resistance from important others to perform it (Milne et al. 2000). Previous studies have found the significant negative impact of response cost on adaptive behaviors (Woon et al. 2005). An anti-plagiarism system adoption is not an exception as it may be associated with various costs. First, faculty have to spend an additional amount of time to use the system. For example, reviews of the reports provided by the system require a considerable amount of time. Faculty are also required to either attend training sessions or read manuals by themselves in order to register or use the system respectively. Further, faculty need to spend time adjusting syllabus to include the definition of Internet plagiarism and anti-plagiarism system use as well as redesign the structure of assignments to align with the system. Second, the potential of relationship deterioration between faculty and students from one of trust to one of distrust and surveillance is another cost, making faculty reluctant to adopt an anti-plagiarism system. The stronger faculty perceive that response cost is high, the less likely they will adopt an anti-plagiarism system.

H6: Response Cost negatively influences faculty intentions to adopt an anti-plagiarism system.

Coping Appraisal to Actual Adoption

Considering response cost, self-efficacy, and response efficacy as perceived behavioral control factors of an anti-plagiarism system adoption, this study predicts their direct relationship with the actual adoption of an anti-plagiarism system. The significant direct effect of perceived behavioral control, referring to the perceived ease or difficulty of performing the behavior, on actual behavior has been consistently reported in previous studies (Ajzen 1991). Perceived behavioral control is determined by the individual's beliefs about the presence of factors that may facilitate or impede performance of the behavior. Specifically, it has been found that the perceived cost related to the behavior is a strong impediment, and the belief of one's ability to complete the behavior successfully and expected outcomes are strong facilitators (Bandura 1977). In this study, we posit that even though faculty have a strong intention for adopting an anti-plagiarism system, they cannot adopt it because of the concerns over huge potential response cost. Meanwhile, faculty can decide to adopt the system when they are confident in their capability to learn and use the system. Further, faculty will adopt the system when they believed that the adoption will effectively and efficiently detect and deter the incidence of Internet plagiarism and educate students about its legitimate boundary.

H7~9: Faculty' assessments of response-efficacy (H7), self-efficacy (H8), and response cost (H9) significantly influence the adoption of an anti-plagiarism system.

Adoption Intention

Just as previous studies have determined that adoption intention predicts actual adoption (Sheppard et al. 1988), this study predicts that the intention to adopt an anti-plagiarism system positively influences the actual adoption. Therefore, we hypothesize that:

H10: Faculty adoption intention of an anti-plagiarism system positively influences their actual adoption.

Information Vividness to Threat and Coping Appraisal

The role of persuasion cues has received considerable attention in persuasion research (Chaiken and Stangor 1987). In particular, those who support the heuristic-systematic model (HSM) have investigated and validated the significant impact of the vivid persuasion cues on communication persuasion (Coyle and Thorson 2001). Vivid information is that which we find attractive, it holds our attention, and is something we have empathy with. Vivid information has been known to increase the salience of advertisement or communication message, which more likely affects the recipients' judgments and persuades them. This study selects emotional interest and concreteness as dimensions of vividness based on the conceptualization of Nisbett and Ross (1980)².

Emotional interest of information eoncompasses "the nature of one's acquaintance with the participants of the event" (Nisbett and Ross 1980, p.45). Concreteness of information refers to "the degree of detail and specificity with which the information describes an event and the participants in the event" (Sherer and Rogers 1984, p.324). When people read a message containing information about persons who are known, or who are seen as similar to oneself (e.g., the same occupation, age, position, gender), they perceive more emotional interest than a message containing information about persons unlike oneself. Additionally, when people see a message including characters closely located, actions performed just a month ago instead of a year ago, and obtained information from firsthand sources instead of a secondhand or thirdhand source, they perceive more information vividness. Further, people can perceive more vividness when they receive information with greater details and specificity about actors, behaviors, and situational context than information with less specificity or details(Tormala et al. 2006). The more people perceive the vividness from information received, the more likely they are motivated to accept the message the sender intends to deliver.

Along the same vein, we predict the more vivid information related to threats of Internet plagiarism and effectiveness and efficiency of an anti-plagiarism system faculty receive, they perceive more threat and coping appraisal.

H11: Faculty receiving a message more emotionally interesting and concrete perceive more threat (severity, vulnerability) and coping appraisal (response efficacy, self-efficacy, and response cost).

Finally, we include organizational tenure, class size/number of teaching assistants, percentage of essay assignments, and gender as control variables in this study.

Research Methodology

Subjects and System

To investigate factors affecting faculty adoption of an anti-plagiarism system, this study conducts a quasi-experimental field survey. The study's target subjects are 600 faculty members from two large Western public universities who have not adopted an anti-plagiarism system. Both institutions have suffered a considerable number of student Internet plagiarism and implemented an anti-plagiarism system called Turninit.com beginning in the year 2001. The adoption of the system by faculty is voluntary. An experiment (2 x 2 between-subjects factorial design) will be conducted by manipulating two information vividness components: (a) high versus low emotional interest and (b) high versus low concreteness. The subjects will be randomly assigned into one of the cells. We selected Turnitin.com as our target anti-plagiarism system. It is known as one of the most popular commercial anti-plagiarism system and adopted by more than 400 U.S. academic institutions. Its capability to successfully detect and deter Internet plagiarism has been reported.

Procedure

Four different e-mail messages will be created, which describe the threat of Internet plagiarism and an anti-plagiarism system as an effective way to counteract it, but will be manipulated to provide different emotional interest and concreteness. Then, using a campus-e-mail system, each faculty member will receive and read one of the manipulated persuasive communication

6

² Proximity dimension was not included in this study because it has been found to be significantly overlapped with emotional interest.

messages as determined by random assignment. An online questionnaire survey with an invitation letter will be sent out to the faculty two weeks' after e-mail are sent. Participants will be guaranteed anonymity and voluntary participation. By using system log files, the data for actual adoption and usage will be gathered.

Stimulus Materials

The four different written messages will be created to manipulate two different components of information vividness. In the high emotional interest condition, faculty members, who are working in the same institution and having recently experienced an incidence of Internet plagiarism in their classes, are explained how the adoption of an anti-plagiarism system efficiently and effectively reduce the incidence of the plagiarism. In the low emotional condition, high school teachers working in schools located in far away will be selected instead of faculty members and introduced in the message.

In the high concreteness condition, the information is presented as a form of a case study on two faculty members who have experienced an incidence of Internet plagiarism. The two individuals, "Sarah and Eugene," as well as the causes and statistics associated with Internet plagiarism and the consequences of anti-plagiarism system adoption will be described in detail. In the low concrete condition, the same information will be provided as with the high concrete condition but omitting the case studies. Researchers will carefully develop the message to include constant information contents across all conditions. A manipulation check will be conducted to examine whether emotional interest and concreteness are successfully manipulated to conduct a field survey.

Measurement Development and Data Analysis

Instruments are under development using scientific instrument development processes suggested by Straub (1989). The instrument items were first developed through an extensive literature review on protection motivation theory and subsequently operationalized to fit into the context of an anti-plagiarism system adoption (see Table 1). The instrument items will be pre-tested and pilot-tested with faculty members at a large Western university who have used an anti-plagiarism system. Through this process, the wording, order of items, content, and format of the questionnaire will be revised.

The general linear model (GLM) will be used to estimate main and interaction effects of the manipulation. Using Baron and Kenny's (1986) four-step procedure, the mediating effects of threat and coping appraisals separately as a group on the relationship between information vividness and intention to adopt anti-plagiarism systems will be tested.

Expected Contribution

This study is expected to provide several theoretical and practical implications for researchers as well as practitioners. From a theoretical perspective, this study is expected to demonstrate that protection motivation theory successfully explains the adoption of an anti-plagiarism system adoption by faculty. In addition, this study investigates whether the extended model has a higher explanatory power than the original protection motivation theory model. For practitioners, this study can provide useful insights for university administration to develop a strategic guideline on how to motivate faculty to adopt an anti-plagiarism system. This study also provides anti-plagiarism system providers with valuable suggestions for designing systems and developing promotion plans.

Table 1. Instrument

Construct	Items	Reference
Perceived Vulnerability	 My class could be subjected to Internet plagiarism. My class could be vulnerable to Internet plagiarism. Students in my class are likely to commit Internet plagiarism. 	(Cox et al. 2004)
Perceived Severity	 Internet plagiarism may seriously undermine the standards of academic integrity. Internet plagiarism committed by the classmates highly instigates 	(Woon et al. 2005)
	 honest students to imitate their behavior. There is high chance for me to provide good grades to plagiarizers without detecting their plagiarism. My image will be seriously damaged if the plagiarism committed in my class is publicized. 	(Milne et al. 2002)
Response Efficacy	 Adopting an anti-plagiarism system will deter my students from committing internet plagiarism. Implementing an anti-plagiarism system in my class is an effective way of detecting internet plagiarism. Enabling the anti-plagiarism system in my class is effect to educate the boundary of Internet plagiarism. 	(Woon et al. 2005)
Self efficacy	 It would be easy for me to use the anti-plagiarism system by myself. I could adopt the system even though there is no one around to tell me what to do as I go. I could adopt the anti-plagiarism system if I could contact someone if I got stuck. 	(Compeau and Higgins 1995)
Response Cost	 There are too many overheads associated with adopting the antiplagiarism system in my class. It takes considerable amount of time and effort to be familiar with and use an anti-plagiarism system The use of the anti-plagiarism systems may cause distrustful relationship between me and students 	(Tanner et al. 1991)
Rewards	 Most people whose opinions I value do not adopt an anti-plagiarism system. Most people who are important to me do not value much the adoption of the anti-plagiarism system. 	(Pechmann et al. 2003)
Adoption Intention	I intend to use the anti-plagiarism system I predict I would use the system in the near future. I plan to use the system in the near future.	(Venkatesh et al. 2003)
Actual Adoption	Adoption (y/n) Frequency of Use in the past 2 months	

References

Ajzen, I. "The Theory of Planned Behavior," Organizational Behavior and Human Decision Processes (50) 1991, pp 179-211.

Bandura, A. "Self Efficacy: Toward a Unifying Theory of Behavioral Change," Psychological Review (84) 1977, pp 191-215.

Baron, R.M., and Kenny, D.A. "The Moderator-Mediator Variable Distinction in Social Psychological Research: Conceptual, Strategic, and Statistical Considerations," Journal of Personality and Social Psychology (51) 1986, pp 1173-1182.

CAI Research "Center for Academic Integrity," September 6, 2005, http://www.academicintegrity.org/cai research.asp.

Chaiken, S., and Stangor, C. "Attitudes and Attitude Change," Annual Review of Psychology (38) 1987, pp 575-630.

Coyle, J.R., and Thorson, E. "The Effects of Progressive Levels of Interactivity and Vividness in Web Marketing Sites," Journal of Advertising (XXX:3) 2001, pp 65-77.

Floyd, D.L., Prentice-Dunn, S., and Rogers, R.W. "A Meta-Analysis of Research on Protection Motivation Theory," Journal of Applied Social Psychology (30) 2000, pp 407-429.

Foster, A.L. "Plagiarism-Detection Tool Creates Legal Quandary: When Professors Send Students' Papers to a Database, Are Copyrights Violated?," Chronicle of Higher Education (48:36) 2002, pp A37-A42.

Ho, R. "The Intention to Give up Smoking: Disease Versus Social Dimensions," Journal of Social Psychology (138) 1998, pp 368-380.

Jocoy, C., and DiBiase, D. "Plagiarism by Adult Learners Online: A Case Study in Detection and Remediation," International Review of Research in Open and Distance Learning (7:1) 2006, pp 1-21.

McCabe, D., and Pavela, G. "Ten Principles of Academic Integrity," April 24, 2006, http://www.collegepubs.com/ref/10PrinAcaInteg.shtml.

McClendon, B.T., and Prentice-Dunn, S. "Reducing Skin Cancer Risk: An Intervention Based on Protection Motivation Theory," Journal of Health Psychology (6) 2001, pp 321-328.

McMath, B.F., and Prentice-Dunn, S. "Protection Motivation Theory and Skin Cancer Risk: The Role of Individual Differences in Responses to Persuasive Appeals," Journal of Applied Social Psychology (35) 2005, pp 621-635.

Milne, S., Sheeran, P., and Orbell, S. "Prediction and Intervention in Health-Related Behavior: A Meta-Analytic of Protection Motivation Theory," Journal of Applied Social Psychology (30:1) 2000, pp 106-143.

Nisbett, R.E., and Ross, L. Human Inference: Strategies and Short-Comings of Social Judgment Prentice-Hall, Englewood Cliffs, NJ, 1980.

Park, C. "In Other (People's) Words: Plagiarism by University Students--Literature and Lessons," Assessment & Evaluation in Higher Education (28:5) 2003, pp 471-488.

Pornpitakpan, C. "The Persuasiveness of Source Credibility: A Critical Review of Five Decades' Evidence," Journal of Applied Social Psychology (34:2) 2004, pp 243-281.

Rogers, R. "A Protection Motivation Theory of Fear Appeals and Attitude Change," Journal of Psychology (91) 1975, pp 93-114

Rogers, R. "Cognitive and Physiological Processes in Fear-Based Attitude Change: A Revised Theory of Protection Motivation," in: Social Psychophysiology: A Sourcebook, J. Cacioppo and R. Petty (eds.), Guilford Press, New York, 1983, pp. 153-176.

Rogers, R.W., and Prentice-Dunn, S. "Protection Motivation Theory," in: Handbook of Health Behavior Research, D.S. Gochman (ed.), Plenum, New York, 1997, pp. 113-132.

Sherer, M., and Rogers, R.W. "The Role of Vivid Information in Fear Appeals and Attitude Change," Journal of Research in Personality (18) 1984, pp 321-334.

Smith, S.M., and Shaffer, D.R. "Vividness Can Undermine or Enhance Message Processing: The Moderating Role of Vividness Congruency," Society for Personality and Social Psychology (26:7) 2000, pp 769-779.

Straub, D.W. "Validating Instruments in MIS Research," MIS Quarterly (13:2) 1989, pp 147-169.

Taylor, S.E., and Thompson, S.C. "Stalking the Elusive "Vividness" Effect," Psychological Review (89:2) 1982, pp 155-181.

The Wired Campus "Turnitin Comes Back to Kansas," in: The Chronicle of Higher Education, 2006.

Tormala, Z.L., Brinol, P., and Petty, R.E. "When Credibility Attacks: The Reverse Impact of Source Credibility on Persuasion," Journal of Experimental Social Psychology (42) 2006, pp 684-691.

Weinstein, J., and Dobkin, C. "Plagiarism in U.S. Higher Education: Estimating Internet Plagiarism Rates and Testing a Means of Deterrence," April 24, 2004, http://webdisk,berkeley.edu/~weinstein/weinstein-Jobmarketpaer.pdf

Woon, I.M.Y., Tan, G.W., and Low, R.T. "A Protection Motivation Theory Approach to Home Wireless Security," The Twenty-Sixth International Conference on Information Systems, Las Vegas, NV, 2005, pp. 367-380.