

Chapter 13

Software Piracy: Are Robin Hood and Responsibility Denial at Work?

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INTRODUCTION

Despite the existence of laws and much publicity surrounding software piracy, it is widely believed that software piracy is commonplace (Eining & Christensen, 1991; Simpson, Banerjee, & Simpson, 1994). A recent study (i.e., Business Software Alliance, 1999) confirms that software piracy is increasing, with a 2.5 percent increase in piracy in 1998 over 1997, resulting in \$3.2 billion in losses to organizations in the United States and \$11 billion worldwide. Yet reasons why such illegal behavior continues to occur are lacking. While some attempts have been made at AACSB-accredited schools of business to incorporate ethics education into business programs, there is no knowledge of such education's relationship to actual behavior, nor is there knowledge on what exactly should be taught. Because previous educational, software-based safeguards, and attempts at raising awareness have failed to stop software piracy, some researchers (e.g., Simpson et al., 1994) believe that only when contributory factors are isolated can appropriate measures be taken to reduce software piracy. In addition, Watson and Pitt (1993) suggest that software piracy research lacks attention to individual factors, important for further understanding of the phenomenon.

Various accounts (see Figure 1) have cited reasons for computer abuse (i.e., the unethical use of computers) that includes software piracy. Thus this study, guided by existing ethical decision-making models, looks at these reasons for computer abuse behavior and relates these to individual characteristics in an at-

Figure 1: Some reasons for computer abuse given by various sources

Purported Characteristics of Computer Abusers	Citation
Lacking in awareness of consequences	Baum, 1989; Ladd, 1989; Bloombecker, 1990b
Rationalizations for computer abuse	Krauss & MacGahan, 1979; Parker, 1989
Robin Hood Syndrome	U. S. Dept of Justice, 1989a, 1989b; Perrolle, 1987; Forester & Morrison, 1990
Economic gain	President's Council, 1986; Bloombecker, 1990a; Parker, 1983; Eining & Christensen, 1991

tempt to understand the underlying causes of this persistent abuse. Specifically, this study looks at the individual factors of Responsibility Denial and "Robin Hood" syndrome.

ETHICAL DECISION-MAKING MODELS AND SOFTWARE PIRACY

Both generalized ethical decision-making¹ models and specialized software piracy models exist which contain components appropriate to the understanding of software piracy. Rest's (1986) and Jones' (1991) generalized models of ethical decision making form a foundation for the study of both situational and individual factors. Jones' (1991) model reviews the current ethical decision-making models and integrates them into one model, largely founded on Rest's (1986) model. This model suggests that ethical decision making is a four-component process: (1) recognize the ethical² issue, (2) make an ethical judgment or determine what is right or wrong, (3) establish ethical intentions, and (4) engage in ethical behavior. These components likely interact and do not necessarily occur in the order listed. Empirical support has been found for this model when applied to computer-related ethics issues, including software piracy (Eining & Christensen, 1991).

Ethical Judgment and Intent

Nisan (1984) suggests that ethical judgments consist of individuals' standards of behavior (their norms) and general principles regarding right and wrong. These general principles often rely on seriousness of consequences, number of others affected, etc. General ethics theories incorporate these principles and exist to explain the basis of peoples' ethical judgments. The exploration of ethical theories can be used to alter the quality of decisions being made regarding computer

technology and has been readily incorporated into ethics education or training programs (Henry & Pierce, 1994).

However, Simpson et al. (1994) found no effect of individuals' ethical judgment/internalized norms concerning software piracy on the subjects' responses to whether they had ever pirated software. Similarly, Harrington (1995) in a study of IS employees found that, while 17 to 21 percent thought it was "OK to copy software" or not wrong to pirate software, 34 percent said they would copy software, a much higher percentage than said it was OK or not wrong. Such findings are significant, for if there is no effect of judgments on behavior, ethics education or training that focus on ethical theories and thus judgment may have no effect on unethical behavior (Simpson et al., 1994). Therefore it is important to confirm or refute these results and to understand further the individual characteristics that may contribute to a person's software piracy intentions that are contrary to the person's ethical judgments.

Vitell and Grove (1987) propose that a person may use neutralizations after an ethical judgment, making intentions or behavior inconsistent with judgment. Such neutralizations may be a rationalization for placing other values above ethical values. It is believed that the computer abuser often goes through a stage characterized by a decline in ethical judgments and a rationalization process that enables unethical intentions (Conger, Loch, and Helft, 1995). Therefore, it appears that ethical intent is susceptible to neutralizations and other influences. For example, personal wealth and security may be values placed above concerns for honesty and property rights. In effect, ethical intentions or behavior may differ from ethical judgment.

Responsibility Denial

As previously shown in Figure 1, rationalizations and lack of awareness of consequences have been cited as a source of computer abuse. A personality characteristic that describes such behavior has been previously discussed among social psychologists. Schwartz (1977) suggests that individuals differ in their awareness of consequences and may or may not feel personally responsible for others. He describes this personality characteristic as Responsibility Denial (RD). He suggests that RD, defined as the tendency to ascribe responsibility to oneself or to depersonalized others, is a relatively stable personality characteristic related to the acceptance or rejection of rationales for denying responsibility for the consequences of one's behavior. Those high in RD would agree with or offer rationalizations for denying responsibility. In other words, they would not accept responsibility for their actions. Staub (1978) suggests that those low in RD tend to accept responsibility and to be responsible for the welfare of others, live up to commitments, and follow either personal or societal rules and dictates. In support of this proposition,

Schwartz (1973) found that ethical judgment had no impact on altruistic behavior among those high in RD.

Kohlberg and Candee (1985) similarly suggest that “moral responsibility” is an individual characteristic that provides consistency between what one says one should or would do and what one does; it is a concern for and acceptance of the consequences of one’s actions. Moral responsibility denotes follow through between one’s ethical judgment and ethical behavior. They propose that responsibility is a second set of rules or criteria used by the individual to form an intention to “follow through.” Therefore, we propose:

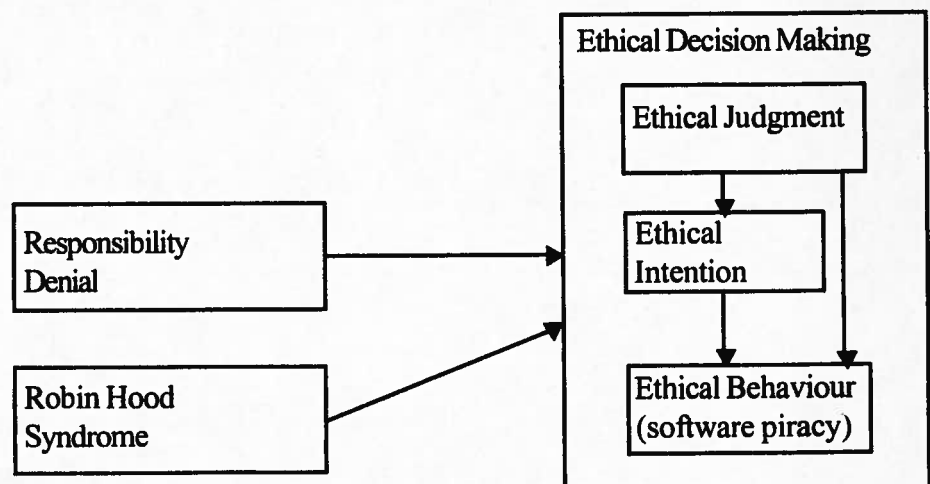
H1: Those high in Responsibility Denial (RD) will be more likely to pirate software.

Robin Hood Syndrome

Computer ethics literature (cf. Figure 1) also suggests that the Robin Hood syndrome may be related to higher levels of computer abuse. Robin Hood syndrome is the belief that harming a large organization to the benefit of an individual is the right behavior. Labeling of organizations as “the bad guy” may open the way for continuing hostility directed at the organizations (Snyder & Swann, 1978). Moreover, social science researchers (e.g., Staub, 1978; Kelman & Hamilton, 1989) suggest that dehumanizing or describing potential victims in negative terms disinhibits aggression toward the victims.

For those working within an organization, the “Robin Hood” perspective may be related to organizational commitment, which has been defined as the relative strength of an individual’s identification with and involvement in a particular organization. Organizational commitment is believed to be a stable individual char-

Figure 2: Model under study



acteristic related to acceptance of the organization's goals and values, a willingness to exert effort for the organization, and a strong desire to be a member of the organization.

Therefore, it is a proposition of this study that Robin Hood may also allow individuals to neutralize ethical judgments about software piracy and copy software offered for sale by large organizations:

H2: Those high in Robin Hood Syndrome will be more likely to pirate software.

Thus this study will test the model shown in Figure 2 below.

METHOD

A questionnaire consisting of the measures for RD and Robin Hood, as well as a vignette describing software piracy, was administered to 102 information systems majors in a southern university. The age distribution was: 20 percent, 17-21 years old; 50 percent, 22 to 26 years; 12 percent, 27-31 years; 8 percent, 32-39 years; 8 percent, 40-47 years; and 1 percent, 48-57 years. The software piracy vignette (adapted from Harrington, 1989) described a friend who was copying an expensive software package and giving it away for free. Vignettes have the advantage of providing a less intimidating way to respond to sensitive issues and provide realistic scenarios that place the subject in a decision-making role. Moreover they avoid the subject's tendency to try to gain experimenter approval and so are commonly used in ethics research.

Measurement of Ethical Judgment, Intent, and Behavior

A vignette was used to measure the dependent variables of ethical judgment and ethical intent. Each vignette was followed by Likert-type questions asking how much the subject agrees or disagrees with statements describing the behavior portrayed in the vignette.

Disagreement to statements such as "Those who knowingly accept the illegally copied software packages have not done anything wrong" and the subject "would copy software for my use or for my friends" were used to measure ethical judgment and ethical intent, respectively. The subjects were also asked about their previous behavior with the questions, "Have you ever copied software, other than for backup purposes, that was copyrighted?" and "What percentage of your software (if any) is copied from a copyrighted source?" Hunt and Vitell (1986) suggest that weaknesses in existing ethical research occur when subjects are asked if they think persons in vignettes were ethical (or unethical) in their behavior, rather than being asked what they would do in the same situation. The statements used in this study avoid such problems and are consistent with the ethical decision-making models proposed.

Measurement of RD

The RD scale consisting of 28 items developed by Schwartz (1973) was used. Schwartz (1973) reports the RD scale of 28 items has an alpha coefficient of .78 to .81, a good reliability. Test-retest reliability of the original scale over a seven- to ten-month period and under different testing conditions was .81. Additional validity of the original instrument was supported by a correlation of -.01 with social desirability. Finally those low in RD behaved as expected in a game requiring cooperation and received significant and positively-correlated peer ratings on considerateness, reliability and helpfulness. Thus the RD scale has good validity.

After factor analyzing the responses to this scale, the current study found RD to consist of two major factors, which were labeled *Responsibility* and *Responsibility Denial*. The questions comprising these factors differed slightly in their perspectives. The first factor indicated whether people would take initiative when common practice may be to ignore the situation (e.g., "If a good friend of mine wanted to injure an enemy, it would be my duty to try to stop my friend."). The second factor indicated whether people would use excuses for unethical or insensitive behavior (e.g., "When you consider how hard it is for an honest person to get ahead, it is easier to forgive those who deceive others in business."; "I wouldn't feel that I had to do my part in a group project if everyone else was lazy.").

Measurement of Robin Hood Syndrome

There is no known measure of Robin Hood Syndrome. Therefore several Likert-style statements were constructed and factor-analyzed. The result was two factors, labeled *Robin Hood* and *Company over individual*. The *Robin Hood* factor consisted of the statements, "It is OK to take advantage of a big company whenever possible, even if it means harming the company" and "It is OK to take advantage of an individual whenever possible, even if it means harming the individual." While the responses to these statements seemed to vary in the same direction (i.e., Cronbach alpha was 0.79), the vehemence with which the subject responded often differed, often with stronger disagreement to the second question (involving the individual) over the first (involving the company). Therefore a difference score was computed by subtracting the two responses to see if the subject differed in the vehemence of the agreement or disagreement to these two statements.

The second factor, called *Company over individual*, consisted of the statements "In working for a company, I am willing to put in a great deal of effort beyond that normally expected in order to help the company be successful" and "Harming an individual is more wrong than harming a company" (reverse-scored).

Table 1: Comparison of Ethical Judgments, Intentions, and Behavior

Judgment:	Agree (%)	Neutral (%)	Disagree (%)
1. "Those who knowingly accept illegally copied software packages have not done anything wrong."	6	6	88
Intention:			
2. "I would copy software for my use or for my friends, too."	31	25	44
Behavior:			
3. Have copied software, other than for backup purposes, which was copyrighted.	57		43
Behavior:	Percentage of Respondents		
4. Percentage of your software that is illegally copied from a copyrighted source:			
0 percent	37		
Less than or equal to 1 percent	11		
From 1 to 10 percent	35		
From 11 to 50 percent	7		
From 51 to 75 percent	4		
From 76 to 100 percent	6		

Table 2: Spearman Correlations

	1	2	3	4	5	6	7	8
1. Responsibility	(0.89)							
2. Responsibility Denial	-0.19	(0.73)						
3. Robin Hood (as a difference)	-0.13	0.13	-					
4. Robin Hood (as a sum)	-0.36	0.43	0.25	(0.79)				
5. Company over individual	0.82	-0.12	-0.11	-0.33	(0.83)			
6. Age	0.22	-0.12	-0.07	-0.24	0.26	-		
7. Ethical Judgment	0.36	-0.42	-0.16	-0.47	0.33	0.37	(0.81)	
8. Ethical Intent	0.09	-0.12	-0.26	-0.20	0.16	0.29	0.66	(0.91)
9. Percentage of software copied	0.05	0.25	0.22	0.24	0.09	-0.27	-0.39	-0.56
	0.66	0.02	0.05	0.03	0.43	0.02	0.001	0.000

First line is the correlation coefficient; second line is the p-value.
 Boldfaced numbers represent significance levels less than 0.05
 Cronbach alphas, where appropriate, appear in parentheses on the diagonal.

The Cronbach reliability of this measure is 0.83, and it appears to more closely measure the organizational commitment aspect of Robin Hood syndrome.

RESULTS

Table 1 presents the frequency of responses related to ethical judgment, intention and behavior. Of note is that more respondents had unethical intentions (31 percent) than those having unethical judgments (6 percent). This result is consistent with previous findings that people form intentions that differ from their judgments. Similarly, unethical behavior exceeded both judgment and intention with 57 percent having copied illegally.

Because those not owning a computer would not have the incentive to pirate software and would be less likely to empathize with the vignette, fifteen (15) individuals who did not own a computer were eliminated from further analysis. Table 2 shows the correlations between the variables under study using the 87 remaining individuals. The correlations between ethical judgment, intent and behavior are significant at the $p < 0.001$ level, showing a clear relationship between them consistent with the ethical decision-making models previously discussed.

Ethical judgment was significantly correlated with all independent variables proposed, except Robin Hood as a Difference. Ethical intent was significantly correlated with Robin Hood as a Difference and with Age. Unethical behavior was significantly correlated with Responsibility Denial, Robin Hood both as a Difference and as a Sum, and Age. A Mann Whitney U test, equivalent to a non-parametric T test (not shown) using the question "Have you ever copied software, other than for backup purposes, that was copyrighted?" showed that Responsibility, Responsibility Denial, and Company over Individual significantly differentiated software pirates from others at the $p < 0.05$ level.

Limitations

Although the study found a clear relationship between ethical judgment, intent, and behavior, the finding may be partially due to common method variance or same-source bias. Unfortunately, this potential bias is unavoidable. Nevertheless, the strength of the relationship between ethical judgment, intent, and behavior suggests that a relationship exists beyond that which may be caused by common method variance.

This study is also subject to the limitation of a student sample taken in one university in one region of the country. Thus the results may not be generalizable to IS students or personnel in other regions.

DISCUSSION AND CONCLUSIONS

This study hypothesized that Responsibility Denial and the Robin Hood syndrome influence IS students' unethical behavior regarding software piracy. The hypotheses were supported. Software piracy is clearly related to these characteristics. The characteristics also are related to unethical judgments suggesting that those high in RD or Robin Hood syndrome are more likely to see nothing wrong with software piracy. This finding is somewhat unexpected, for it is believed that RD and Robin Hood are more frequently used to rationalize behavior that is in opposition to judgments. It may be that those high in RD and Robin Hood syndrome may be denying that their behavior is wrong by rationalizing the unethical judgment itself. Alternately, those high in RD and Robin Hood syndrome may have low levels of moral development, a suggestion supported by the correlation of these variables with age. Further research is needed to confirm these possible findings.

This study also found that the ethical judgments of these IS students are generally ethical with respect to the software piracy. Only 6 percent said that there was nothing wrong with copying licensed software. This compares favorably to Harrington's (1995) study, which found that twenty one (21) percent of IS personnel did not believe software piracy to be wrong, as well as to a study by John Carroll (cf. Parker, 1983), who found that approximately 25 percent of students in 1977 believed it is ethical to use a program known to them to be proprietary in such a way as to avoid being charged for its use. While beyond the scope of this study, it is possible that the low percentage found in this study may be because these students have been exposed to business ethics courses and ethics modules in their IS programs. Therefore ethics education may be raising the awareness that software piracy is wrong.

However, it is important to point out how the findings of this study may help answer the question of whether ethics education can be improved. The fact that a large percentage of students know software piracy is wrong yet still have pirated software points to the fact that students will behave unethically even if taught ethical theory. The relationship found here between Responsibility Denial and software piracy points up the possibility that a focus on acceptance of responsibility and an awareness of the consequences of one's actions may reduce unethical behavior. The relationship between Robin Hood syndrome and software piracy also suggests that some do not understand that the organization consists of and is people and its ongoing viability will benefit those who work there. Therefore, interventions that encourage students to think about the good of society and the importance of organizations to society may also be a useful addition to some business ethics classes. While not all organizations are benevolent, it may be par-

ticularly helpful for those high in Robin Hood syndrome to learn of organizations' concern for their employees and contributions to the good of society.

Finally, business ethics researchers may wish to consider responsibility denial and Robin Hood syndrome in their future research. Greater understanding of how these personality characteristics are developed and changed, as well as their role in other computer ethics abuses, should prove fruitful.

ENDNOTES:

- ¹ The term, ethical decision making, refers to the process of coming to a decision involving ethics. The actual decision arrived at may be ethical or unethical.
- ² The term "moral" is interchangeable with "ethical" in this literature. Hence, this paper will use the term, ethical, since it is the term most appropriate in this study.

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