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The roles of personality and general ethical judgments in intention to not repay credit card expenses

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There are no ‘card slaves’ but only cardholders who cannot meet their obligations. Recently, the issue that people are plagued by huge credit card debt has become more serious in Taiwan. This study proposed a model linking personality traits (locus of control (LOC) and risk-taking propensity), general ethical judgments regarding credit card use, and behavioral intention to not repay credit card expenses. External LOC and risk-taking propensity can predict intention to not repay through ethical judgments. Furthermore, external LOC can directly affect the intention. The model has been empirically justified by using the data collected from 448 credit cardholders in Taiwan (at least 20 years old). Those with ethical judgments of actively benefiting from illegal activities or passively benefiting at the expense of others tend to have an intention to not repay. By understanding the causes of not repaying credit card expenses, financial service providers should be able to effectively reduce card bad debts. In particular, relationship marketing strategies are helpful to mitigate cardholders’ intention to passively not repay.

Keywords: personality; locus of control; risk-taking propensity; general ethical judgments; not repaying credit card expenses

Introduction

The credit card industry has developed into a major financial service used by most consumers across all income classes. An example of the pervasiveness of credit card use is provided by the U.S. fast food industry. After the US fast food industry began to accept credit payment, credit sales rapidly grew to exceed cash transactions by 50–100% (Ritzer, 1995). The use of credit cards in Taiwan has also grown rapidly during the past decade. Based on recent statistical data, the number of credit cards issued in Taiwan has reached 41.95 million (Financial Supervisory Commission, Executive Yuan, 2006). Despite their convenience, the wide availability of such cards has created a problem of the card-user failure to repay the issuing company, creating heavy losses for credit card companies (e.g. banks).

‘Card slave’, a term coined in Taiwan to refer to a person who is being tied down with his/her credit card debts, has been hogging the news for months (Kang, 2006). People who fail to manage personal finances can bring serious long-term, negative social consequences (e.g. bankruptcies, suicide). Financial service providers would seriously face a ‘moral hazard’ situation where some debtors may try to avoid paybacks through a debt negotiation mechanism or the individual bankruptcy law. By understanding the causes of not repaying credit card expenses, financial service providers should be able to effectively reduce card bad debts. In particular, relationship marketing strategies are helpful to mitigate cardholders’ intention to passively not repay.
repaying credit card expenses, credit card companies should be able to effectively reduce their losses.

Ross and Robertson (2000) stated that decision-making about ethical issues may harm one or more of the groups or individuals affected by the outcome of the decision. It appears that failure to repay credit card expenses can be regarded as an ethically questionable behavior (EQB) in consumption (Fukukawa, 2002) due to its harmful outcomes. Research on EQB includes two streams (Fukukawa, 2002). The first stream concerns specific EQB, including tax evasion (Hessing, Elffers, & Weigel, 1988), shoplifting (Babin & Griffin, 1995; Krasnovsky & Lance, 1998), software piracy (Glass & Wood, 1996; Wagner & Sanders, 2001), and counterfeiting (Albers-Miller, 1999), while the second stream investigates consumer ethical judgments regarding EQB in different settings (Muncy & Vitell, 1992). As not repaying card expenses involves EQB, consumers’ decisions to engage in this action will depend on their ethical judgments. Rallapalli, Vitell, Wiebe, and Barnes (1994) have explored the relationship between individual personality and general ethical judgments. Additionally, Vitell (2003) suggested that future studies on consumer ethics could examine the link between general ethical judgments and intentions and/or behavior. While interest in the influence of personality on behavior is growing, little attention is paid to the relationship between individual traits and the intentions/behavior of not repaying credit card expenses. An important contribution of this study is to simultaneously investigate the relationships among personality, general ethical judgments, and behavioral intention to not repay credit card expenses (hereafter ‘intention to not repay’). Regarding the ethics of credit card use, this study strives to provide beneficial information for credit card companies.

Specifically, the current research is designed to examine the mediating processes that explain the linkages between personality and intention to not repay. That is, we attempt to see how the four dimensions of general ethical judgments (actively benefiting from illegal activities, passively benefiting at the expense of others, actively benefiting from questionable actions, and no harm/no foul) mediate the relationships between two well-established personality traits associated with ethical issues (locus of control (LOC) and risk-taking propensity) and the intention to not repay. These relationships will be empirically examined by using the data collected from a large and diverse sample in Taiwan. The results will provide evidence regarding how personality traits influence general ethical judgments, how judgments make individuals more likely to have an intention to not repay, and if personality directly affects the intention to not repay.

Conceptual framework

**Personality, general ethical judgments, and behavioral intention to not repay**

Figure 1 introduces a conceptual model, depicting the relationships among personality, general ethical judgments, and intention to not repay. The first part of the model emphasizes the personality traits of LOC and risk-taking propensity. These traits are selected because they are theoretically related to EQB. According to Mudrack and Peter (1993), one individual difference variable worth examining within the ethics literature is the LOC. Some studies have stated that LOC can influence the unethical behavior of individuals (Bass, Barnett, & Brown, 1999). Additionally, Rallapalli et al. (1994) studied the interrelationships between general ethical judgments and personality traits of consumers. Of the many possible personality traits (e.g. aggressiveness, achievement), only risk-taking propensity was significantly and positively related with all dimensions of ethical judgments.
The second part of the model depicts that these personality traits will have an influence on each of the four dimensions of general ethical judgments. General ethical judgments refer to an individual’s subjective probability beliefs concerning various ethically questioned consumer behaviors represented by four basic consumer ethical dimensions.
To study this construct, Muncy and Vitell (1992) developed a ‘consumer ethics’ scale in which questions with ethical implications can be divided into four classes, which were used for measuring ethical judgments. The first class, ‘actively benefiting from illegal activities’, consists of questions regarding actions that are initiated by the consumer and that are almost universally perceived as illegal (e.g. drinking a can of soda in a supermarket without paying for it). The second class, ‘passively benefiting at the expense of others’, include questions regarding consumers taking advantages of mistakes by the seller (e.g. not saying anything when the waitress miscalculates the bill in your favor). The third class, ‘actively benefiting from questionable actions or behaviors’, include questions regarding situations in which the consumer is actively involved in some deception, but their actions may not necessarily be considered illegal (e.g. using a coupon for merchandise they did not buy). Finally, the last class, ‘no harm’, include questions regarding situations in which consumers perceive their actions as doing little or no harm/foul (e.g. using computer software or games they did not buy).

The third part of the proposed model describes anticipated relationships between general ethical judgments and the intention to not repay. Actual behavior is ultimately the topic of interest, but this study has difficulty in measuring actual behavior of this nature. That is, we may be violating individuals’ rights to privacy by asking about unethical behavior. Though some factors and situations may interfere or constrain an individual’s ability to act upon his or her intentions, intention is still an important construct found to relate significantly to actual behavior (March & Woodside, 2005). As a result, behavioral intention is used as an adequate surrogate measure (Jones & Kavanagh, 1996). Additionally, the model postulates a direct influence of LOC on intention to not repay.

Although not shown in the model, individual age and level of education are included as control variables. Age appears related to ethical judgments, with older consumers being more ethical (Muncy & Vitell, 1992; Rawwas & Singhapakdi, 1998; Vitell, 2003; Vitell, Lumpkin, & Rawwas, 1991). Studies also indicate that people with high debt levels tend to be younger and less educated (Dessart & Kuylen, 1986; Sullivan, Warren, & Westbrook, 1989). To reduce the likelihood that individual demographic characteristics would confound, the relations examined in this study, it is necessary to control for these two characteristics.

**Personality influences on general ethical judgments**

The majority of research on ethical judgments (the second stream of research regarding EQB) has focused on examining consumer ethical judgments towards EQB in different settings (Rawwas, 1996). Previous studies generally regard ethical judgments as dependent variables and explore their antecedents (e.g. individual ethical ideologies) or examine the relationships between these ethical judgments and other variables (e.g. attitudinal characteristics; materialism) (Chan et al., 1998; Muncy & Eastman, 1998; Vitell & Muncy, 1992). Little research has examined the relationship between personality and general ethical judgments. Only Rallapalli et al. (1994) suggested that there were significant interrelationships between consumer ethical judgments and personality traits. They also argued that individual personality traits influenced consumer ethical judgments/actions.

A few studies on ethics have explored individual differences in how people deal with moral judgments. Each of these studies has attempted to delineate the ethical frameworks underlying ethical judgments (Brady, 1985; Kohlberg, 1984; Velasquez, 1992). Underlying each of these is a belief that the ethical judgments of individuals are affected by relatively stable individual differences in ethical ideologies. In light of the contingency framework
for understanding ethical decision-making in marketing (Ferrell & Gresham, 1985), personality traits are an integral part of individual factors that can potentially affect ethical/unethical decision-making. In a related study, Munch, Albanese, Mayo, and Marks (1991) suggested that understanding consumer personalities could help in understanding the process used by consumers to resolve ethical dilemmas. However, the type of personality traits that influence consumer ethical judgments and how they do so is less clear.

The most widely studied personality trait in the ethics literature is LOC, which has gained acceptance through several models of ethical decision-making (Stead, Worrell, & Stead, 1990; Treviño, 1986). In accordance with Rotter’s (1966) argument, LOC is a personality variable manifested by the extent to which individuals believe events are contingent upon their own behavior or characteristics. An individual with an internal LOC perceives outcomes to be a direct result of his or her efforts, whereas an individual with an external LOC perceives outcomes to result from external forces beyond his or her control, such as fate or the actions of others. Hence, individuals with an internal LOC are more inclined to take responsibility for the consequences of their behavior than are individuals with an external LOC, and also have higher ethical standards.

Some empirical studies have concluded that individuals with external LOC probably form intentions to behave unethically because they are inclined to ascribe responsibility to others or to situational factors (Dozier & Miceli, 1985; Hegarty & Sims, 1978, 1979; Lefcourt, 1982; Singhapakdi & Vitell, 1991; Treviño & Youngblood, 1990). Thus, it appears that, generally, individuals with external LOC may see an increased likelihood of shirking responsibility and thus may display low ethical standards. Thus, this study proposes a positive relationship between external LOC and general ethical judgments.

**H1a**: External LOC is positively related to the ethical judgments regarding actively benefiting from illegal activities.

**H1b**: External LOC is positively related to the ethical judgments regarding passively benefiting at the expense of others.

**H1c**: External LOC is positively related to the ethical judgments regarding actively benefiting from questionable actions.

**H1d**: External LOC is positively related to the ethical judgments regarding no harm/no foul.

The trait of risk-taking propensity can also be reasonably expected to be associated with ethical decision-making. Fukukawa (2002) suggested that individual attitude towards performing EQB may be influenced by one important explanatory factor: risk-taking. Risk-taking is related to the extent to which a person seeks to be exposed to uncertain situations, especially uncertainty involving financial gains or losses. This factor could be interpreted as a type of personality trait concerned with the inclination of an actor to either seek or avoid risk (Kowert & Hermann, 1997). Studies have shown that risk-taking predicts criteria related to unethical behavior. For example, in Jackson, Hourany, and Vidmar (1972), the relationship between risk-taking and willingness to behave unethically in various hypothetical situational dilemmas reaches 0.44. Rallapalli et al. (1994) suggested that individuals with higher risk-taking propensity tended to have a stronger belief in benefiting from both illegal and questionable actions than individuals with lower risk-taking propensity. Such individuals with higher risk-taking propensity are likely to display greater need for sensation-seeking and may seek risk regardless of whether the decisions are framed as gains or losses (Tokunaga, 1993). Vitell, Wiebe, Singhapakdi, and Scherer (1990) also showed that individuals with high risk-taking propensity were more willing to take positions that were less socially desirable or morally questionable. Such individuals appear to place greater emphasis on ‘substance over form’ and
may consider breaking rules if doing so would best serve the group (Cohen, Pant, & Sharp, 1995). On the basis of the above arguments, it is conceivable that under conditions such as an individual possessing higher risk-taking propensity, that individual may be more likely to benefit substantially from unethical behavior. Thus, this study proposes a positive relationship between risk-taking propensity and general ethical judgments.

\[ H2a \]: Risk-taking propensity is positively related to the ethical judgments regarding actively benefiting from illegal activities.
\[ H2b \]: Risk-taking propensity is positively related to the ethical judgments regarding passively benefiting at the expense of others.
\[ H2c \]: Risk-taking propensity is positively related to the ethical judgments regarding actively benefiting from questionable actions.
\[ H2d \]: Risk-taking propensity is positively related to the ethical judgments regarding no harm/no foul.

**General ethical judgments and behavioral intention**

Past studies have identified the link between attitudes or judgments concerning an action and intention to perform that action. For example, Randall (1989) surveyed empirical studies that had examined the Fishbein and Ajzen (1975) model and found that the link between judgments and intentions was substantiated. Furthermore, some studies have argued that ethical judgment for certain behavior influences this unethical behavioral intention/behavior (Barnett & Valentine, 2004; Bass et al., 1999; Kwong, Yau, Lee, Sin, & Tse, 2003). Such studies have examined various ethical scenarios, including the purchase of pirated CDs, and whistleblowing. Hunt and Vitell (1986) described behavioral intentions as the ‘likelihood that any particular alternative will be chosen’ and postulated that ‘ethical judgments impact behavior through the intervening variable of intentions’. Moral evaluation is a key component in the model of ethical decision-making (Akaah & Riordan, 1989; Hunt & Vitell, 1986). Individuals confronting an ethical dilemma evaluate it on the basis of relevant ethical cognitions about themselves. Interestingly, an individual’s low ethical standards may be the key variable that breeds unethical behavior (Vitell et al., 1991). Thus, similar to the ethical judgment concerning specific action, general ethical judgments (actively benefiting from illegal activities, passively benefiting at the expense of others, actively benefiting from questionable actions, and no harm) are also essential in the formation of behavioral intention regarding ethical or moral issues, because they are integral to individual attitudes toward ethical issues (Chiu, 2003). Therefore, this study predicts the following four relationships between general ethical judgments and intention to not repay.

\[ H3a \]: The ethical judgments regarding actively benefiting from illegal activities are positively related to intention to not repay.
\[ H3b \]: The ethical judgments regarding passively benefiting at the expense of others are positively related to intention to not repay.
\[ H3c \]: The ethical judgments regarding actively benefiting from questionable actions are positively related to intention to not repay.
\[ H3d \]: The ethical judgments regarding no harm/no foul are positively related to intention to not repay.

**Personality and behavioral intention to not repay**

There are two reasons for theorizing a linkage between the trait of LOC and intention to not repay. First, following \( H1a–d \) and \( H3a–d \), LOC should indirectly influence the
intention to not repay through general ethical judgments. For example, individuals with external LOC are more likely to attribute responsibility to others or to situational factors, leading to their lower standard of ethics in judging the acceptability of questionable actions, thereby yielding unethical behavioral intentions. Second, external LOC may influence the intention to not repay directly in terms of psychological characteristics. Individuals with a strong external LOC are more likely to get into debt, such that they easily suffer credit-related problems, because they view money from a more extrinsic, materialistic perspective than a utilitarian one and also display anxiety about their inability to handle money (Tokunaga, 1993). In addition, the findings of Perry and Morris (2005) indicated that, although financial knowledge and income are important, those who believe that financial outcomes are due to chance or powerful others, i.e. externals, will be slightly less likely to take steps to manage their finances. Thus, this study adds a direct link from LOC to intention to not repay.

\[ H4: \text{There is a direct positive relationship between external LOC and intention to not repay.} \]

Based on the development of the above hypothesis, general ethical judgments (actively benefiting from illegal activity, passively benefiting at the expense of others, actively benefiting from questionable actions, and no harm/foul) may play two roles in the relationships between personality (LOC and risk-taking propensity) and intention to not repay. First, general ethical judgments may partially mediate the effect of LOC on intention to not repay. This relation suggests that LOC may have a direct influence on intention to not repay, but may also be related to intention to not repay through the role in shaping general ethical judgments. Individuals with higher external LOC may be more likely to not repay credit card expenses partly because of their lower ethical standards and partly because they view money from an extrinsic and materialistic perspective, leading to the display of anxiety about their inability to handle money regardless of ethical judgments. Second, general ethical judgments may fully mediate the relationship between risk-taking propensity and intention to not repay. Risk-taking propensity may be associated with the intention only through general ethical judgments made during credit card use. Individuals with a higher risk-taking propensity may be more likely to seek uncertain situations and to exhibit low uncertainty avoidance, making him or her have a lower ethical standard, and in turn more probably lead to intention to not repay.

Methods

Sample

The data were collected by questionnaires, of which 448 usable questionnaires from those holding credit cards in Taiwan (at least 20 years old) were obtained. In recent years, heavy debt levels of cardholders and unethical marketing practices by credit card solicitors have created many social problems in Taiwan. It appears that samples from Taiwanese cardholders should be appropriate for this study. Of the 448 credit card consumers, 271 (60.5%) were male and 410 (91.5%) were 20–40 years old. The sample was highly educated, with 69.2% holding a college degree and 12.9% with a graduate degree. During the survey for this study, respondents were assured that all information would be kept confidential in order to increase the response rate and acquire more accurate information. A convenience sample was used in this study, but sample diversification (Table 1) and sample relevance have been taken into account (Sackett & Larson, 1990). In our study, the sample possessed the essential person and setting characteristics (i.e. using credit cards to consume) that defined membership in the intended target population/universe.
Measures

Locus of control
We measured LOC by using an abbreviated scale of LOC having 11 items developed by Barnett and Lanier (1995). Subjects were asked to respond to the items in the original forced-choice format by selecting the statement from each pair that best reflected their thoughts. Scores for each respondent ranged from 0 for an individual who selected all ‘internal’ statements, to a score of 11 for an individual who selected all ‘external’ statements. We measured a person’s LOC by using scores summed on 11 items. The coefficient $\alpha$ for the LOC measure was 0.63 in the current study, less than the commonly used criterion of 0.7. However, since the measure items used the 0–1 scale and their items reflected widely different situations, the reliability of our measurements should be acceptable. As argued by Nunnally and Bernstein (1994, p. 312), the ‘heterogeneity would be a legitimate part of the test if it were part of the domain of content implied by the construct’.

Risk-taking propensity
Risk-taking propensity was adapted from the Jackson Personality Inventory (JPI) (Jackson, 1976). A subset of the statements from the original JPI were selected in such a way that they can better reflect culture heterogeneity. After interviewing three scholars with related expertise, the scale for risk-taking propensity was composed of 11 statements. Respondents were asked to indicate ‘disagree’ or ‘agree’ to a series of 11 statements. A score of 0 was given for ‘disagree’ and 1 for ‘agree’ for each statement. The summation of responses yielded risk-taking propensity scores from 0 to 11. Higher scores reflected individuals who were prone to higher risk-taking. The coefficient $\alpha$ for this measure was 0.71.
General ethical judgments

The four basic consumer ethical dimensions given by Muncy and Vitell (1992) were used to represent the four subconstructs of general ethical judgments, based on which four scenarios regarding the ethics of credit card use were then developed. Scenario 1 was associated with credit card use of ‘actively benefiting from illegal activities’ initiated by the consumer. Scenario 2 was associated with credit card use of ‘passively benefiting at the expense of others’ initiated by the seller; that is, consumers benefited by a seller’s mistake. Scenario 3 was associated with credit card use of ‘actively benefiting from questionable actions’, in which the consumer was actively involved, but it was probably not deemed illegal. Scenario 4 was associated with credit card use of ‘no harm/foul’ where there existed indirect rather than direct immediate injury to the seller. These four scenarios were examined by interviewing five credit card business representatives and three scholars with related expertise for appropriateness and clarity. Additionally, pretests were conducted with ten business school graduate students. For each ethical scenario, we used three items in making ethical judgments (Reidenbach & Robin, 1990) (see the appendix), and the order of the four scenarios was randomized in order to avoid order effects. Respondents were asked to say whether they perceived each ethical scenario as unjust/just, not morally right/morally right, and unacceptable/acceptable on a seven-point scale. Moreover, we applied indirect questioning in designing each ethical scenario, which could reduce social desirability response bias (Fisher & Tellis, 1998). Respondents were asked to interpret the behavior of others, rather than directly being asked to report their beliefs and feelings (Kinnear & Taylor, 1991) so that they would give a more honest answer (Fisher & Tellis, 1998). The coefficient $\alpha$ for actively benefiting from illegal activities, passively benefiting at the expense of others, actively benefiting from questionable actions, and no harm/foul were 0.85, 0.87, 0.89, and 0.94, respectively.

Behavioral intention to not repay

Individual behavioral intentions can be measured by asking individuals to read scenarios that contain ethical dilemmas and then asking them to express the likelihood in a probability sense that they would perform the behavior (Ajzen & Fishbein, 1980; Hunt & Vitell, 1986). Following Hunt and Vitell, respondents were asked to read one scenario regarding not repaying credit card expenses and then to assess the likelihood that they would engage in this behavior. It was measured using a five-point scale anchored with ‘highly unlikely’ (1) to ‘highly likely’ (5). The other was a statement regarding actual intention to not repay anchored from ‘never’ (1) to ‘always’ (5). The two items were combined into a single scale to measure the intention ($\alpha = 0.70$).

Control variables

Two control variables were included in the analysis – consumers’ age and level of education. To control for differences among the four types of age and the two levels of education, we created three dummy variables for age (aged1, aged2, and aged3) and one dummy variable for education (edud1), respectively.

Analysis

The hypothesized relationships were tested by structural equation modeling (SEM). SEM was chosen for the analyses because it allowed us to take into account measurement error,
simultaneously estimated all path coefficients, and evaluated the fit of the overall model to the data. Following the two-step approach recommended by Anderson and Gerbing (1988), the measurement model was evaluated first by using confirmatory factor analysis (CFA), and then the structural model was analyzed to test the hypotheses and to perform a simultaneous test that determined whether the combined model (consisting of a measurement model and a structural model), as a whole, provided an acceptable fit to the data (Hatcher, 1994).

Results
Means, standard deviations, and correlations of all variables are provided in Table 2. Looking at the scale means, we found that F2 (actively benefiting from illegal activities) was the lowest of all the four dimensions of ethical judgments. As in prior research, respondents seemed to believe that the action was illegal and therefore unethical. Comparatively, F5 (no harm) had a mean of 3.65. Even though the act described in this factor was legal and did not cause great harm to the seller, respondents were somewhat neutral with regard to this behavior. Table 2 also shows that all the main variables were significantly positively correlated with each other except for the control variables.

Measurement model
Convergent and discriminant validities of the measurements were assessed with CFA. There were two indicators for intention to not repay and three indicators for each dimension of the general ethical judgments. It can be seen that the loadings of the indicators on their corresponding constructs were all significant at the 0.01 level (see the $t$-test results in Table 3), demonstrating convergent validity. Convergent validities for LOC and risk-taking propensity were not evaluated since the scores for LOC and risk-taking propensity were obtained by adding the values of their associated items. The fit statistics resulting from CFA were as follows: $\chi^2 = 243.35$ ($df=85$); GFI = 0.94; AGFI = 0.90; NFI = 0.94; CFI = 0.96; and RMSEA = 0.06.

We sequentially assessed the discriminant validity for each pair of constructs by constraining the correlation coefficient between them to be 1.0 and then performing a chi-square difference test on the constrained and unconstrained models. Discriminant validity is demonstrated if the difference of the two chi-square statistics resulting from the constrained and unconstrained models is significant (Anderson & Gerbing, 1988). Since we need to assess the discriminant validity for every pair of the seven constructs, we should control the experiment-wise error rate. Under the experiment-wise error rate of 0.01, the critical value of the chi-square test is $\chi^2 (1, 0.01/21) = 12.19$ by using the Bonferroni method. As shown in Table 4, the chi-square difference statistics for all pairs of constructs exceed 12.19, showing that discriminant validity is successfully achieved.

It deserves to be mentioned that, based on the above results, we further conclude that we have obtained strong evidence for the convergent validity and discriminant validity of the ‘general ethical judgments’ regarding the credit card use scale. This provides support for the four-factor structure.

Structural model
We tested the hypotheses by using a structural model (a simultaneous test on the combined model). In addition to the interesting main variables, we also introduced control variables
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<tr>
<td>11. F5</td>
<td>3.65</td>
<td>1.70</td>
<td>0.08</td>
<td>-0.01</td>
<td>-0.10</td>
<td>0.03</td>
<td>0.13**</td>
<td>0.17**</td>
<td>0.17**</td>
<td>0.20**</td>
<td>0.37**</td>
<td>0.36**</td>
</tr>
</tbody>
</table>

Aged1, Aged2, Aged3, three dummy variables for age; Edud, the dummy variable for education; F1, behavioral intention to not repay; F2, actively benefiting from illegal activities; F3, passively benefiting at the expense of others; F4, actively benefiting from questionable actions; F5, no harm; LC, locus of control; R, risk-taking propensity.

*p < 0.05.

**p < 0.01.
The hypothesized structural model displayed in Figure 2 is acceptable: $\chi^2 = 482.45 \text{ (df = 128)}$; GFI = 0.90; AGFI = 0.83; NFI = 0.91; CFI = 0.93; RMSEA = 0.07.

Table 4. Chi-square difference tests (for examining discriminant validity).

<table>
<thead>
<tr>
<th>Construct pair</th>
<th>Unconstrained $\chi^2$ (85)</th>
<th>Constrained $\chi^2$ (86)</th>
<th>$\chi^2$ difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>(F1, F2)</td>
<td>369.44</td>
<td>126.09**</td>
<td></td>
</tr>
<tr>
<td>(F1, F3)</td>
<td>355.99</td>
<td>112.64**</td>
<td></td>
</tr>
<tr>
<td>(F1, F4)</td>
<td>371.65</td>
<td>128.30**</td>
<td></td>
</tr>
<tr>
<td>(F1, F5)</td>
<td>373.65</td>
<td>130.30**</td>
<td></td>
</tr>
<tr>
<td>(F1, LC)</td>
<td>389.63</td>
<td>140.28**</td>
<td></td>
</tr>
<tr>
<td>(F1, R)</td>
<td>378.00</td>
<td>134.65**</td>
<td></td>
</tr>
<tr>
<td>(F2, F3)</td>
<td>792.41</td>
<td>549.06**</td>
<td></td>
</tr>
<tr>
<td>(F2, F4)</td>
<td>728.94</td>
<td>485.59**</td>
<td></td>
</tr>
<tr>
<td>(F2, F5)</td>
<td>815.27</td>
<td>571.92**</td>
<td></td>
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<tr>
<td>(F2, LC)</td>
<td>422.04</td>
<td>178.69**</td>
<td></td>
</tr>
<tr>
<td>(F2, R)</td>
<td>405.76</td>
<td>162.41**</td>
<td></td>
</tr>
<tr>
<td>(F3, F4)</td>
<td>813.73</td>
<td>570.38**</td>
<td></td>
</tr>
<tr>
<td>(F3, F5)</td>
<td>838.84</td>
<td>595.49**</td>
<td></td>
</tr>
<tr>
<td>(F3, LC)</td>
<td>428.65</td>
<td>185.30**</td>
<td></td>
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<tr>
<td>(F3, R)</td>
<td>423.75</td>
<td>180.40**</td>
<td></td>
</tr>
<tr>
<td>(F4, F5)</td>
<td>934.68</td>
<td>700.33**</td>
<td></td>
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<tr>
<td>(F4, LC)</td>
<td>424.68</td>
<td>181.33**</td>
<td></td>
</tr>
<tr>
<td>(F4, R)</td>
<td>432.68</td>
<td>189.33**</td>
<td></td>
</tr>
<tr>
<td>(F5, LC)</td>
<td>444.14</td>
<td>200.79**</td>
<td></td>
</tr>
<tr>
<td>(F5, R)</td>
<td>428.20</td>
<td>184.85**</td>
<td></td>
</tr>
<tr>
<td>(LC, R)</td>
<td>381.19</td>
<td>137.84**</td>
<td></td>
</tr>
</tbody>
</table>

Note: F1, behavioral intention to not repay; F2, actively benefiting from illegal activities; F3, passively benefiting at the expense of others; F4, actively benefiting from questionable actions; F5, no harm; LC, locus of control; R, risk-taking propensity.

**Significant at the 0.01 overall significance level by using the Bonferroni method.
Consistent with H1a–d, the effect of external LOC on each of the four dimensions of general ethical judgments was positive (actively: $\beta = 0.14$, $p < 0.01$; passively: $\beta = 0.15$, $p < 0.01$; questionable: $\beta = 0.16$, $p < 0.01$; no harm: $\beta = 0.10$, $p < 0.05$).
as was the influence of risk-taking propensity (H2a–d) (actively: $\beta = 0.19$, $p < 0.01$; passively: $\beta = 0.16$, $p < 0.01$; questionable: $\beta = 0.14$, $p < 0.01$; no harm: $\beta = 0.16$, $p < 0.01$). These results indicated that personality traits of individuals influenced their ethical judgments that they had in consumption. In other words, individuals with high levels of external LOC and risk-taking propensity were more likely to judge a particular questionable behavior to be morally acceptable than their counterparts.

The second set of predicted relationships described links between consumer ethical judgments and the intention to not repay. H3a–d predicted that general ethical judgments of individuals regarding credit card use would influence their intention to not repay. Figure 2 reports that the ethical judgments regarding actively benefiting from illegal activities and passively benefiting at the expense of others were significantly positively related to the intention to not repay ($\beta = 0.12$, $p < 0.05$; $\beta = 0.32$, $p < 0.01$), supporting hypotheses H3a and H3b. However, neither the ethical judgments regarding actively benefiting from questionable actions nor those regarding no harm had significant effect on intention to not repay ($\beta = 0.04$, n.s.; $\beta = 0.02$, n.s.). Thus, hypotheses H3c and H3d were not supported.

For the final set of predicted relationships, this study predicted that the intention to not repay would be directly influenced by LOC. Figure 2 shows that the path coefficient for LOC was statistically significant ($\beta = 0.10$, $p < 0.05$), supporting H4. Although not specifically hypothesized, we wonder whether risk-taking propensity has a direct effect on intention to not repay. Thus, we estimated an alternative model that included a direct link between risk-taking propensity and intention to not repay. Results showed that the fit of this partially mediated model was not significantly better than the hypothesized (fully mediated) model. The difference of two chi-square statistics was 0.07, much less than the critical value $\chi^2 (1, 0.05) = 3.84$. This suggests that individual ethical judgments do fully account for the relationship between risk-taking propensity and intention to not repay.

In summary, these results provide some evidences that personality traits (LOC and risk-taking propensity) influence consumer ethical judgments for credit card use and that the two dimensions of general ethical judgments, actively benefiting from illegal activities and passively benefiting at the expense of others, influence their intention to not repay. Additionally, LOC still has a direct effect on the intention. Specifically, on the basis of the test for mediation (James & Brett, 1984), our findings indicated that the ethical judgments regarding actively benefiting from illegal activities and passively benefiting at the expense of others partially mediated the relationship between LOC and the intention, whereas these two ethical judgments completely mediated the relationship between risk-taking propensity and the intention.

**Discussion**

Extending existing research on specific kinds of EQB and ethical judgments, the proposed model suggests that personality traits impact the intention to not repay by affecting individual ethical judgments. Specifically, this study examines how LOC and risk-taking propensity influence individual ethical judgments concerning credit card use, and how these ethical judgments affect the intention. Besides the indirect effect through general ethical judgments, LOC can directly affect the intention. Building on previous research, this study provides evidence that certain personality traits are related to consumer ethical judgments. Moreover, these results confirm the positive relationship often reported between ethical judgment for specific action and that behavioral intention.
(Barnett & Valentine, 2004; Bass et al., 1999; Chiu, 2003) in which ethical judgment regarding specific action is further extended to general ethical judgments and their influences on specific unethical action concerning credit card use (i.e. intention to not repay credit card expenses) are investigated. Taken together, this study provides more detailed evidence of the variety of connections between personality, general ethical judgments, and intention to not repay.

**Personality and general ethical judgments**

This study first examined the influence of personality traits, including LOC and risk-taking propensity, on the ethical judgments of individuals regarding credit card use. Both LOC and risk-taking propensity were found to predict all dimensions of general ethical judgments. As predicted, external LOC individuals were more likely to judge ethically ambiguous actions as ethical. This relationship likely occurred because such individuals easily attribute responsibility to others or to situational factors (Treviño & Youngblood, 1990), in turn leading to their low ethical standards for making judgments. Similarly, risk-taking propensity was related to each of four dimensions of general ethical judgments. It seemed that when an individual possessed a higher risk-taking propensity, he or she was more likely to seek and be exposed to uncertain situations and to exhibit low uncertainty avoidance, and thereby was less sensitive to ethical problems, leading to lower ethical standards. Particularly, four types of low ethical standards existed – actively benefiting from illegal activities, passively benefiting at the expense of others, actively benefiting from questionable actions, or no harm (behavior that is questionable but causes no harm).

**General ethical judgments and behavioral intention to not repay**

The second portion of this study examined the relationship between the four dimensions of general ethical judgments and intention to not repay. As hypothesized, the ethical judgments regarding actively benefiting from illegal actions and passively benefiting at the expense of others were both significantly positively related to intention to not repay. The findings contrasted with the non-significant relationship between the other two ethical judgments, actively benefiting from questionable actions and no harm, and intention to not repay. The relationships between general ethical judgments and the intention can be further stated in the three aspects. First, this study found that individuals who possessed the ethical judgments of actively benefiting from illegal activities were likely to take part in the action of not repaying credit card expenses. The result appeared to be consistent with the argument of Vitell and Muncy (1992), indicating that the actions for actively benefiting from illegal activities were mostly initiated by consumers, and these activities were more likely to be perceived as illegal by most consumers. Second, the ethical judgments of passively benefiting at the expense of others showed a stronger positive effect on the intention than the ethical judgments of actively benefiting from illegal activities. Most of the actions regarding passively benefiting at the expense of others may benefit due to the mistakes of seller (Vitell & Muncy, 1992), and therefore the resulting benefits are likely to be accepted. The thought may be explained by the technique of consumer justifications of ‘denial of injury’ – a state in which individuals contend that their misconduct is not really serious, because no party directly suffers as a result of it (Sykes & Matza, 1957; Strutton, Vitell, & Pelton, 1994). This result seems to suggest that if credit card companies had not sent bills or informed payment notices to the
holders, holders also cannot actively repay payments, because they do not see the mistake as their fault and do not believe the credit card companies will suffer any loss as a result. Third, the other two dimensions of general ethical judgments, actively benefiting from questionable actions and no harm/foul, both failed to contribute significantly to intention to not repay. The results may be traced back to their definitions. Actively benefiting from questionable actions indicates consumers who are actively involved in some deception, but whose actions are not as likely to be seen as illegal as those actively benefiting from illegal activities and almost seem to be considered as ‘perceived legality’ (Vitell & Muncy, 1992). Since individuals with the ethical judgments of actively benefiting from questionable actions could consider the action of not repaying as unethical and illegal, they are less likely to harbor the intention to not repay. Further, the actions of no harm/foul, which appear acceptable to many, may be so rated, because no direct harm is done to anyone (although indirect harm may occur). Individuals with the ethical judgments of no harm/foul may think that the action of not repaying can directly injure the credit card companies, and thus they are less likely to have the intention to not repay.

**Personality and behavioral intention to not repay**

The final portion of this study examined the direct relationship between personality and intention to not repay. Regarding the trait of LOC, two possible ways were found for the linkage between LOC and the intention. First, LOC indirectly influenced the intention through the ethical judgments regarding actively benefiting from illegal activities or passively benefiting at the expense of others. Second, LOC directly influenced the intention. In other words, the influence of LOC on the intention was partially mediated by general ethical judgments. On the other hand, the trait of risk-taking propensity did not have a direct effect on the intention. There existed only an indirect effect through the ethical judgments of actively benefiting from illegal activities or passively benefiting at the expense of others. The influence of risk-taking propensity on the intention was completely mediated by general ethical judgments.

**Managerial implications**

The results of our study have some managerial implications. First, credit card companies’ losses may be reduced if customers’ personality traits can be paid more attention. For example, credit card companies can give a simple personality test (LOC and risk-taking propensity) to credit card applicants before deciding credit limit, although some countries have rules against such implementation due to discrimination. This suggestion can help credit card companies set up a more mature credit card management system. In addition, we find that individuals having the ethical judgments of actively benefiting from illegal activities or the ethical judgments of passively benefiting at the expense of others are likely not to repay credit card expenses. Thus, for those showing the tendency of actively benefiting from illegal activities, credit card companies should further carefully examine their backgrounds and history about credit card use and avoid unethical marketing practices so as to reduce heavy bad debts due to the wide availability of credit cards. Additionally, for those having tendency of passively benefiting at the expense of others, credit card companies should not only provide better management on the credit card business such as customers’ bills, but also add some severe rules in order to restrain those having the
tendency of passively not repaying (e.g. evading the duty of repayment deliberately and ascribing the blame to suppliers).

Steenhaut and Van Kenhove (2005) examined the relationship between relationship commitment and the reaction of shoppers to receiving too much change (passively benefiting). They found that, when the amount of excess change is larger, the less committed consumer is less likely to report receiving excess change, whereas the consumer with a high relationship commitment towards the retailer is more likely to report it. Thus, in addition to adding more rules, developing a closer bond between the credit card company and the consumer is imperative. From this point of view, relationship marketing strategies can be seen as a type of ‘blocking’ strategy of credit card company against the action of passively not repaying (Van Kenhove, De Wulf, & Steenhaut, 2003). In other words, enhancing the affective commitment of the consumer towards the credit card company lowers an individual’s tendency to apply the techniques of neutralization as a means of assuaging guilt, thus lowering the tendency to engage in passively not repaying. We suggested that credit card companies should make effort to provide satisfactory tangible and intangible inputs. The consumers’ perception about the inputs of the credit card company may influence their relationship commitment to the credit card company, which may in turn have impacts on their decision to act ethically or unethically (e.g. their reaction to not receiving credit card bills or payment notices or bill errors beneficial to consumers).

Limitations and future directions

Some limitations of this study should be noted. First, we used indirect questioning to reduce the distortion of private opinions that are revealed to the researcher by asking respondents to report on ‘the nature of the external world’ rather than about themselves. It is expected that respondents project their unconscious biases into ambiguous response situations and reveal their own attitudes (Campbell, 1950). In other words, the technique of indirect questioning can mitigate the effects of a social desirability bias. However, rather than provide insights into the self, indirect questions may actually reveal what respondents predict a ‘typical other’ might do or think (Maccoby & Maccoby, 1954). The validity of indirect questioning can be examined in future research. Second, since respondents (cardholders) provide the ratings of personality traits, general ethical judgments, and intention to not repay, it is possible that relations among these constructs may have been inflated by common method variance. However, while it is difficult to obtain data from different sources in the present study, the technique for procedural remedies can be used to partially mitigate this concern. The potential remedy is to proximally or methodologically separate the measures by having respondents complete the measurements of the predictor and criterion variables under different conditions (Podsakoff, MacKenzie, & Lee, 2003). In our study, we use different item characteristics (e.g. different response formats and different scale anchors) for the measurement of the predictor and criterion variables that may reduce this problem. Future work should incorporate more procedural designs such as creating a temporal separation by introducing a time lag between the measurement of the predictor and criterion variables. Third, the data used are cross-sectional. Nonetheless, since the theoretical argument indicates that personality traits affect an individual’s ethical judgments about something, which in turn lead to behavioral intentions, our interpretation of the results has proceeded with a theoretical causal order. Future work should use longitudinal methodologies to confirm these relations. Finally, we conduct the research in Taiwan. Different results
may be obtained in different countries. How the influence of ethical judgments by their determinants and the influence on unethical behavioral intention (e.g. behavioral intention to not repay) differ across cultures and countries can be studied in future research.

To expand on the current findings, future research may need to examine whether additional determinants could influence intention to not repay. For example, according to Fukukawa (2002), perceived unfairness may moderate the relationship between ethical judgments and EQB. That is to say, under certain situations, consumers might perceive the potential to redress this unfair balance and so become ethically permissive, allowing the lowering of their ethical judgments. In addition, the linkage of intention to actual behavior should be further examined so as to recognize whether other factors interfere with the two associations. Finally, different or additional personality traits (e.g. Machiavellianism) and the four dimensions of general ethical judgments perhaps could apply to other unethical behavioral intentions.

In conclusion, our results support previous research demonstrating the importance of the relationship between ethical judgments and unethical behavioral intentions. It appears that the ethical judgments regarding actively benefiting from illegal activities or passively benefiting at the expense of others have impacts on individual’s intention to not repay. Additionally, the results provide compelling evidences that external LOC and risk-taking propensity can predict general ethical judgments, and in turn lead to intention to not repay. External LOC can also directly affect the intention. Implications derived from this study are useful for credit card companies.

Acknowledgement
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References


**Appendix**

*The Scales for General Ethical Judgments Regarding Credit Card Use*

**Actively Benefiting from Illegal Activities**

Someone (A) picks up another person’s lost credit card and uses it. In your opinion, the above behavior is:

1. unjust __:__:__:__:__:__ just
2. not morally right __:__:__:__:__:__ morally right
3. unacceptable __:__:__:__:__:__ acceptable

**Passively Benefiting at the Expense of Others**

Someone (B) uses a credit card to consume, but has not received the credit card bill. He/she has no intention to check with the credit card company and still continues using the card. In your opinion, the above behavior is:

1. unjust __:__:__:__:__:__ just
2. not morally right __:__:__:__:__:__ morally right
3. unacceptable __:__:__:__:__:__ acceptable
Actively Benefiting from Questionable Actions

When the credit card company calls to press for payment of the credit card expenses, someone (C) declares that he/she has not received the credit card bill (although he/she has received it in fact). In your opinion, the above behavior is:

(1) unjust __:__:__:__:__:__:__ just
(2) not morally right __:__:__:__:__:__:__ morally right
(3) unacceptable __:__:__:__:__:__:__ acceptable

No Harm/ No Foul

Someone (D) applies for many credit cards but hardly uses them. In your opinion, the above behavior is:

(1) unjust __:__:__:__:__:__:__ just
(2) not morally right __:__:__:__:__:__:__ morally right
(3) unacceptable __:__:__:__:__:__:__ acceptable