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Illegal Downloading, Ethical Concern, and Illegal Behavior

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Abstract Illegally downloading music through peer-to-peer networks has persisted in spite of legal action to deter the behavior. This study examines the individual characteristics of downloaders which could explain why they are not dissuaded by messages that downloading is illegal. We compared downloaders to non-downloaders and examined whether downloaders were characterized by less ethical concern, engagement in illegal behavior, and a propensity toward stealing a CD from a music store under varying levels of risk. We also examined whether downloading or individual characteristics of downloaders were similar for men and women. Findings revealed downloading was prevalent (74.5% of the student sample downloaded), men and women were equally likely to download and the factors characterizing downloading were similar for men and women. The comparison between downloaders and non-downloaders revealed downloaders were less concerned with the law, demonstrated by less ethical concern and engagement in other illegal behaviors. Downloaders were also more likely to indicate that they would steal a CD when there was no risk of being caught. Given these results, messages regarding illegality are unlikely to perturb downloaders and alternative recommendations are offered for targeting illegal downloading.

Keywords Risky behavior and illegal downloading · Music piracy · Stealing a CD and illegal downloading · Students' illegal downloading

Abbreviations

TRA	Theory of reasoned action
TPB	Theory of planned behavior
PBC	Perceived behavioral control
RIPS	Risk involvement perception scale

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Introduction

Advancing technology has paved the way for a proliferation of digital piracy, including the pirating of software, movies, e-books, and music. Digital piracy, defined by Cronan and Al-Rafee (2008, p. 528) as "the illegal copying/downloading of copyrighted software and media files", has serious costs and consequences for society, not the least of which is the apparent normalizing of illegal behavior. Current preventative methods have not deterred the behavior. This study examines the efficacy of one of these approaches, specifically the message that digital piracy is illegal, and focuses on one form of digital piracy, namely the illegal downloading of music through peer-to-peer (P2P) computer networks.

Illegal Music Downloading

Downloading music from the internet is an easy, fast, and efficient means to procure music files. Although,

individuals can download music legally for a small fee, illegal downloading through P2P computer networks is currently the dominant download method. The International Federation of the Phonographic Industry estimates that "95% of all music is downloaded without payment to artists or producers" (2006, p. 3). Illegal downloading is thus of serious concern, and it has an impact on society, the economy and the music industry, by closing stores, slowing innovation, damaging artist careers (Kennedy 2009) and displacing sales (Rob and Waldfogel 2006). Addition to this, the moral implications of increased acceptance of such illegal behavior among music-downloaders, and (although estimates on the financial damage vary), there is a little dispute that overall losses have been vast (e.g., Bhattacharjee et al. 2009) and will continue to grow.

The music industry has implemented numerous initiatives to respond to the threat of P2P file sharing. Establishing working partnerships with internet service providers to monitor and suspend downloaders, educating users and diversifying into other music channels (including developing legal P2P music procurement methods) (Kennedy 2009) are among the softer approaches to deterrence, but the Recording Industry Association of America (RIAA) has also publicized strong messages that downloading is illegal, including comparing downloading to stealing a CD (Coyle et al. 2009) and issuing fines for illegal downloading (Knopper 2005, 2007). Unfortunately, current anti-piracy arguments and monetary penalties have been ineffective and individuals continue to download music illegally, despite the knowledge that it is illegal (Ramayah et al. 2009). To inform future preventative initiatives, this article examines the relationship between illegal downloading, personal ethical attitudes, and engagement in other illegal behaviors, to identify individual characteristics of downloaders that will help to explain why individuals are not perturbed by current deterrence methods.

Theoretical Framework

Theory of Reasoned Action (TRA) and Theory of Planned Behavior (TPB)

According to the TRA (Fishbein and Ajzen 1975), behavior is directly linked to intention. Individuals are assumed to be rational human beings whose intentions are shaped by their attitudes toward a behavior (favorable or unfavorable) and their perceptions of subjective norms (what others' think they should do). The TPB (Ajzen 1985) includes a third element, Perceived Behavioral Control (PBC), which also influences intention. PBC incorporates individuals' perceptions of the difficulty of the behavior, i.e., whether or not it is under volitional control (Ajzen and Madden 1986).

TRA and TPB have already been successfully employed to examine and explain digital piracy (e.g., Chang 1998; Christensen and Eining 1991; Cronan and Al-Rafee 2008; Peace et al. 2003), highlighting the expected relationship between attitudes, subjective norms, and intention to engage in software piracy (e.g., Christensen and Eining 1991). Drawing on the TPB, Al-Rafee and Cronan (2006) examined factors that influence attitude and found a number of salient beliefs related to piracy, including the belief that digital piracy helps you save money that digital media is too expensive, that there is no fear of getting caught, and that digital piracy is unimportant. Subjective norms were the strongest predictors of attitude in this study; however, other variables were also significant predictors, including Machiavellianism and age. Cronan and Al-Rafee (2008) explored piracy intention through an extended model of TPB which included attitudes, PBC, past piracy behavior, and moral obligation. Past piracy behavior was the strongest predictor of intention in this research, however, moral obligation (guilt regarding pirating) was also a strong predictor with individuals low in moral obligation being more likely to pirate.

Ethics

Hunt and Vitell's ethical decision-making theory (1986) has also been successfully employed to examine and explain digital piracy. The model incorporates deontological (universal rules guide right and wrong) and teleological (right or wrong is based on the consequences) evaluation, and ethical decisions are said to follow a number of stages, specifically: (1) identifying that the situation involves an ethical dilemma, (2) considering alternatives, and (3) deontological or teleological evaluations. The deontological evaluation involves comparing the behavioral options against predetermined rules or values that guide behavior. Teleological evaluations, on the other hand, involve the perceived consequences for all stakeholders, the probability of the consequences, an evaluation of the desirability of the consequences, and an evaluation of the importance of the stakeholders. These categories are important then, in understanding the nature of ethical judgment (including personal moral choice) and its impact on intention to engage in particular activities.

According to Hunt and Vitell's ethical decision model (1986), ethical judgment influences behavior through behavioral intention (and thus links to TRA). Furthermore, the actual consequences following the behavior are also evaluated by the individual, and this learning is incorporated back into the model as personal experiences. Personal experiences along with norms (organizational, industry, and cultural) influence future judgments, which suggests that Hunt and Vitell's (1986) ethical judgment concepts are

a useful complement to the TRA research of attitudes and social norms.

Frameworks have been developed to explain the relationship between ethical judgment and the TPB. Cronan and Douglas (2005) offer a model suggesting that the "attitude" construct in the TPB is similar to "ethical judgment" and cite research showing both constructs have been used to explain intention. Numerous other theories have been developed. Robin et al. (1996) introduced the perceived importance of the ethical issue which precedes ethical judgment. Researchers examining the specific application of Hunt and Vitell's (1986) theory of ethical decision making within information technology have found the explanatory power was high and both deontological and teleological evaluations explained ethical judgments. Teleological evaluations, however, had a stronger influence on moral intentions to pirate than did deontological evaluations, leading researchers to question what type of individuals depend more on deontological evaluation than teleological and vice versa (Thong and Yap 1998).

Deterrence Theory

Deterrence theory, a theory of the impact of the law on criminal behavior also helps to understand digital piracy by explaining how fear of the consequences of illegal behavior promotes deterrence. According to deterrence theory, individuals are deterred from illegal behavior if the consequences are perceived to be swift, certain and/or severe (Williams and Hawkins 1986). Therefore, as punishment certainty and severity increase, illegal behavior should decrease. Through an extended model of TPB that incorporates deterrence and expected utility theory, Peace et al. (2003) found that attitudes, PBC, and subjective norms were indeed significant in predicting the intention to illegally copy software. Furthermore, punishment severity, certainty of punishment, and software costs were directly related to attitudes toward pirating whereas punishment certainty was also related to behavioral control. The lower the cost of the software, the less an individual has to gain from pirating and greater perceptions of punishment severity and certainty were associated with decreased intention to pirate. Similarly, in their earlier examination of the decision to pirate, Glass and Wood (1996) found that increasing the scale of both the input (cost of the software) and outputs (negative consequences) decreased intention to pirate.

Digital Piracy

Deterrent messages communicating the legal consequences of downloading align with deterrence theory (Williams and Hawkins 1986). The need for such messages is also supported by research revealing individuals view downloading as more acceptable than other aberrant behaviors (Freestone and Mitchell 2004) and do not see the behavior as unethical (Ang et al. 2001) or criminal (Coyle et al. 2009). Other research, however, raises questions about the efficacy of such messages based on findings that downloaders may not be concerned with obeying the law. Activating anti-piracy arguments that downloading is unethical does not influence attitudes toward the behavior (d'Astous et al. 2005).

Tyler (2006) argues that people obey the law if they believe that breaking the law goes against their moral convictions. In accordance, Cronan and Al-Rafee (2008) found moral obligation (guilt from engaging in the act) predicted intention to pirate. Downloaders also have a different ethical profile than non-downloaders, characterized by less ethical concern (Levin et al. 2004). Those less concerned with the law also show a more positive attitude toward piracy, although only in a work setting (Goles et al. 2008). Therefore, it is conceivable that downloaders will not be dissuaded by messages that downloading is illegal.

Bommer et al. (1987), state that "'Legal' and 'ethical' are not necessarily synonymous. Nevertheless, the legal dimension is an important determinant in many ethical decisions" (p. 269). Furthermore, laws are typically targeted at behaviors perceived to be unethical by society; however, downloading may be an exception because attitudes toward the behavior are somewhat supportive (Altschuller and Benbunan-Fich 2009). Therefore, the decision to break the law through downloading may be driven by beliefs that downloading is ethical, less ethical concern in general, a willingness to break the law, or a combination of all three characteristics.

Theoretically underpinned by the TPB (Ajzen 1985), ethical decision-making theory (Hunt and Vitell 1986) and deterrence theory (Williams and Hawkins 1986), this study examined individual characteristics which may help to explain why downloaders are not dissuaded by messages that the behavior is illegal, specifically propensity to obey the law and consumer ethical concern. Consumer ethics, defined by Muncy and Vitell (1992) as "the moral principles and standards that guide behavior of individuals or groups as they obtain, use, and dispose of goods and services" (p. 298) are directly relevant to individuals' decisions to engage or not engage in downloading. Cronan and Douglas (2005) argue that ethical judgment is similar to the attitude construct in the TPB, a framework that has been successfully employed to understand past piracy behavior (Cronan and Al-Rafee 2008).

Past research has found downloaders to be characterized by a history of past piracy behavior (Cronan and Al-Rafee 2008) and lesser ethical concern (Levin et al. 2004). Questions that remain, however, concern whether downloading is predicted

by engagement in other illegal behavior (in addition to past piracy behavior) and the nature of the relationship between downloading, past illegal behavior, and ethical concern. Therefore, based on the TPB, and extending prior research which focuses on past piracy behavior, this study examines the relationship between engagement in illegal behavior, ethical concern, and downloading. Behavior was examined directly in this study, based on research showing behavior to be a strong predictor of intention and vice versa (e.g. Peace et al. 2003):

H1 Past downloading behavior will be positively associated with a history of prior illegal behavior and lesser ethical concern.

Further, the RIAA's message comparing downloading to stealing a CD is also intended to communicate that downloading is illegal, equivalent to stealing a CD. There are a number of assumptions behind this deterrence method: the first is that informing downloaders that behavior is illegal will deter their behavior, an assumption we have already questioned in hypothesis one. The second assumption is that individuals who download would not steal a CD. Indeed, a number of researchers have argued that there is something inherently different about downloading and that downloaders perceive their behavior to be similar to recording a song from the radio, and do not liken it to stealing a CD from a store (Easley 2005). Hill (2007) also speculates that many people who commit digital piracy would not dream of stealing a CD from a store.

Research has supported the idea that individuals hold different attitudes toward stealing a CD and downloading. Specifically, individuals are more likely to report intending to download than intending to steal a CD (Lysonski and Durvasula 2008) and individuals perceive stealing a CD to be more illegal than downloading (Wingrove et al. 2011). However, based on the finding that downloaders show less moral obligation to obey the law (Wingrove et al. 2011) and less ethical concern (Levin et al. 2004) whether or not stealing a CD is viewed as illegal may be of little consequence. Drawing on deterrence theory (Williams and Hawkins 1986) and ethical decision-making theory (Hunt and Vitell 1986), it is possible that perceived certainty of the consequences also plays a role in intention to steal a CD.

Punishment certainty has been helpful for explaining digital piracy. Individuals perceive that digital piracy has a low risk of prosecution (Al-Rafee and Cronan 2006; Cheng et al. 1997), a factor found to predict intention to pirate (Ang et al. 2001; Coyle et al. 2009; Liao et al. 2010; Peace et al. 2003). Furthermore, increasing awareness of the risk of prosecution leads to less favorable attitudes toward downloading (Chiou et al. 2005), and decreases intention to pirate (Glass and Wood 1996), although the threat may have to be severe (Levin et al. 2007). The relationship also differs for men and women; women are more likely to be influenced by perceived risk of consequences than men (Chiang and Assane 2008). Other research has shown perceived risk is related to willingness to pay, although the relationship differs based on an individual's sensation seeking behavior (Sinha and Mandel 2008). Given the importance of risk in shaping digital piracy, and the finding that downloaders have less ethical concern and are less concerned with the law, it is possible that downloaders may also report intention to steal a CD if the risk of consequences is similar to risks associated with downloading. If downloaders would also steal a CD if the risks of getting caught are similar, the findings will suggest that messages comparing stealing a CD to downloading may be ineffective.

Lysonski and Durvasula (2008) found that even when the risk of stealing a CD was comparable to downloading, individuals were unlikely to report intention to steal a CD; however, they did not compare downloaders to non-downloaders. This study will extend the work of Lysonski and Durvasula (2008) by comparing downloaders and non-downloaders' intention to steal a CD under two levels of risk (no risk vs. some risk). Given that deterrence methods have largely been law based, further examination of the relationship between downloading and obeying the law is warranted. Based on deterrence theory (Williams and Hawkins 1986) and teleological evaluation from Hunt and Vitell's ethical decision-making theory (1986) we hypothesize that:

H2 Downloaders will be more likely than non-downloaders to indicate they would steal a CD from a music store when the risk (probability) of consequence is eliminated.

Sex

Finally, we examined whether the prevalence of downloading or the relationship between ethical beliefs, downloading, or intention to steal a CD, varied between males and females. Study of male and female ethical beliefs indicate differences in the way men and women view ethical (and non-ethical) behaviors. Research has shown that the two sexes have differing opinions on the acceptability of certain unethical behaviors, as well as different motivations for choosing ethical paths for action, including the social, business, or professional environment in which these decisions are made (Kreie and Cronan 1998). Both sexes, however, agreed that significant motivating factors for their ethical decision making were the legal environment and a sense of moral obligation. This is particularly interesting, as the authors suggest that this implies an

awareness of consequences for an action is likely to alter how an individual behaves, regardless of sex.

Past research examining gender and music piracy has found that males are more likely to engage in music piracy than females (Cronan and Al-Rafee 2008); although researchers argue that the gap is closing (Odell et al. 2000). Furthermore, Al-Rafee and Cronan (2006) found that although males had more accepting attitudes toward digital piracy than did females, this difference was not significant. This combined with the idea that the legal environment and a sense of moral obligation are likely to have a greater impact than gender on downloading lead to the following hypothesis:

H3 Men and women will be similar in both their prevalence of downloading, and the relationship among downloading, ethical beliefs, and engagement in other illegal behavior.

Methodology

Sampling

A university sample was selected for this study because downloading is prevalent among university students (Levin et al. 2004; Lysonski and Durvasula 2008; Wade 2004) and students condone downloading (Siegfried 2004). The RIAA also focuses on university campuses because they believe that downloading among student samples is most detrimental to the industry (Knopper 2005). Such a sampling frame is similar to that used in previous research on piracy (e.g., Al-Rafee and Cronan 2006) and ethical behavior (e.g., Leonard and Cronan 2001), therefore, a student sample is representative in this context (Cronan and Al-Rafee 2008). While we acknowledge the limitations of a tertiary student sample, every effort was made to ensure diversity among respondents. In addition, New Zealand Universities offered open entry at the time of the study and the proportion of school leavers undertaking tertiary study in New Zealand is much higher than in many OECD countries. This, combined with the high proportion of overseas students enrolled in tertiary study in New Zealand, contributed to the likelihood of a greater cross-sectional representation in the population of this study.

A sample of 196 participants (93 males and 103 females) from the University of Otago, Dunedin, New Zealand was recruited. The University of Otago is the third largest University in New Zealand. Verbal announcements were made in two residential colleges on two consecutive evenings, asking for volunteers to take part in a study of how people acquire music and risky behavior. As residential colleges in New Zealand are not restricted by discipline the sampling technique enabled students from a range of study areas to take part, including business, health sciences, and art. Furthermore, the majority of students entering University in New Zealand reside in Residential Colleges; therefore, the sample was representative of the typical first year student and was not limited by socio-economic, gender, or ethnic differences.

All subjects had access to high speed internet access through the University. The study was reviewed for ethics and approved by the University of Otago, Department of Marketing. All participants gave written consent to participate. Demographic data revealed that the participants ranged from 18 to 24 years of age with most participants being 18–20 years old ($n = 172$). This age group is consistent with other studies on pirating software. The participants were primarily Caucasian ($n = 161$). The remaining participants identified themselves as Maori ($n = 6$), Pacific Islander ($n = 4$), East Asian ($n = 8$), or identified as "other" ($n = 17$).

Downloading Frequency and Categorization

Frequency of downloading was measured on a seven-point scale from "never, 1 or fewer songs a week, 2–5 songs a week, 6–10 songs a week, 11–20 songs a week, 21–30 songs a week, >30 songs a week". We classified participants who indicated that they never downloaded music as non-downloaders and participants who indicated any amount of downloading as downloaders. Other researchers have also classified downloaders based on whether or not they download and if so, how many songs they download (Levin et al. 2004).

Ethical Concern

Ethical concern was measured using the modified Consumer Ethics Scale (Vitell and Muncy 2005). The scale includes seven sub-scales and three were retained for this study, including: actively benefiting from illegal actions (ACT), passively benefiting from illegal actions (PAS) and no harm, no foul (NOH). Four items were omitted across the three sub-scales because they were not relevant to the context (i.e., using a long distance access code that does not belong to you) or were perceived to be overtly gendered (i.e., spending over an hour trying on clothing and not buying anything). Cronbach's alpha reliabilities for ACT, PAS, and NOH were 0.65, 0.72, and 0.72, respectively.

Four of the seven Consumer Ethics Scale sub-scales were omitted because too few of the items were relevant to the sample (items in the questionable sub-scale), the sub-scales were not directly relevant to the issue under study

(doing good and recycling) or the sub-category would confound the core research issue (downloading). The Consumer Ethics Scale measures participants' attitudes toward unethical behavior, on a five point Likert scale, from 1 ("strongly believe it is wrong") to 5 ("strongly believe it is not wrong"), with high scores reflecting less ethical concern.

Illegal Behavior

Criminal behavior was measured using eight behaviors based on items from the Risk Involvement Perception Scale (RIPS; Shapiro et al. 1998). Cronbach's alpha reliability for the eight behaviors was 0.76. The original RIPS includes 26 risky and/or illegal behaviors and behaviors that had associated deterrent consequences (illegal or institutional) were included in this analysis. The eight behaviors selected from the RIPS included: using marijuana; shoplifting; abused prescribed drugs; taking speed, ecstasy or mushrooms, not wearing a seatbelt; taking cocaine/crack; cheating on an exam/test/essay; and driving 20 km/h + over the speed limit. The wording of some of the items was modified slightly in this study, for instance, "Driving 15 mph over the speed limit" was changed to "driving 20 km/h + over the speed limit". Responses were indicated on an eight point scale from 0 = never to 8 = daily, with, higher scores reflecting greater participation in the risk taking behavior.

Illegal Scenarios

The likelihood of stealing a CD was measured through two statements borrowed from Lysonski and Durvasula (2008). Participants were asked to indicate (on a seven-point scale with 1 = very likely to 7 = very unlikely) how likely or unlikely they would be to engage in the following scenario-based behavior:

> Stealing a CD from a music store with a 100 percent certainty of not getting caught.
> Stealing a CD from a music store with some risk that an invisible security camera might observe you.

The higher the score, the more likely an individual would be to steal a CD under the scenario conditions.

Procedure

We asked participants to complete five questionnaires, including a brief demographic questionnaire, a questionnaire on their downloading behavior, on consumer ethical beliefs, engagement in illegal behaviors, and the illegal scenarios questionnaire. Participants completed the study in the dining room at their respective college at the end of one meal time. To ensure anonymity, participants were asked to find their own space within the room and to complete the survey without talking to others. The study took approximately 10 min to complete. Participants received a low value chocolate bar as a token of thanks for their participation.

Results

Prevalence of Downloading Music

The majority of participants engaged in downloading (74.5%; downloaders = 146, non-downloaders = 50). Table 1 presents frequency counts of the number of songs participants downloaded per week.

Logistic regression was used to examine H1 (past downloading behavior will be positively associated with a history of prior illegal behavior and lesser ethical concern) and the results indicate that both ethical concerns and past behavior were significant at the $p < 0.05$ level. Initial univariate analyses revealed downloading was associated with lower levels of ethical concern on the three sub-scales, ACT O.R. = 1.14, $p = 0.03$, PAS O.R. = 1.09, $p = 0.03$, NOH O.R. = 1.18, $p = 0.01$, and higher levels of past illegal behavior, O.R. = 1.06, $p = 0.04$. To determine the best predictors, and also consider the level of overlap between different predictors, multivariate logistic regression with all predictors entered via a backward stepwise procedure was used. This left downloading predicted by lower ethical concern on the NOH subscale, O.R. = 1.19, $p = 0.01$, and higher levels of past illegal behavior, O.R. = 1.06, $p = 0.01$. This suggests that the three subscales of ethical concern all overlap in their prediction of downloading, with NOH being the strongest.

A MANOVA used to examine H2 [downloaders will be more likely than non-downloaders to indicate that they would steal a CD from a music store when the risk (probability) of consequences is eliminated] supported the hypothesis: risk influenced downloaders behavior, with

Table 1 Frequency of downloading per week

Songs downloaded (*n*)	Downloaders (*n*)	Percent of sample
0 (Do not download)	50	25.5
≤1	62	31.6
2–5	51	26.0
6–10	19	9.7
11–20	6	3.1
21–30	6	3.1
>30	2	1

downloaders more likely than non-downloaders to steal a CD from a music store when the risk of prosecution was eliminated. A 2 downloading category (downloader/non-downloader) × 2 gender (male/female) MANOVA, on stealing a CD with no risk, or stealing a CD with some risk, revealed a significant main effect of downloading category ($F_{2,190} = 4.57$, $p < 0.05$, $\eta^2 = 0.05$). Univariate analyses revealed downloaders and non-downloaders did not differ in their intention to steal a CD when there was some risk of getting caught ($M_{\text{download}} = 6.35$, $M_{\text{do not download}} = 6.52$, $F_{1,190} = 0.831$, $p = 0.363$, $\eta^2 = 0.00$). However, downloaders were significantly more likely than non-downloaders to indicate that they would steal a CD when there was no risk of getting caught ($M_{\text{download}} = 5.36$, $M_{\text{do not download}} = 6.23$, $F_{1,190} = 8.38$, $p < 0.01$, $\eta^2 = 0.04$). Although, the mean for downloaders was still high suggesting that stealing a CD was unlikely even among downloaders.

To better understand the significant difference between downloaders' and non-downloaders' mean scores for stealing a CD with no risk of being caught, we categorized participants as more or less likely to steal a CD using a *K*-means cluster analysis. Findings showed 46 participants (23%) most likely to steal a CD and 150 participants (77%) to be least likely. Descriptive analysis for likelihood to steal a CD with no risk on a scale of 1 = "very likely" to 7 = "very unlikely" revealed a mean score of 2.61 for this group. A χ^2 analysis between downloading category (downloader/non-downloader) and intention to steal a CD (most likely/least likely) was performed to examine what percentage of participants most likely to steal a CD were, indeed, downloaders. The sub-set of participants most likely to steal were significantly more likely to be downloaders than non-downloaders (downloaders = 91.3%, non-downloaders = 8.7%, $\chi^2_{1,195} = 9.07$, $p < 0.01$).

H3 predicted men and women to be similar in both their prevalence of downloading, and the relationship among downloading, ethical beliefs, and engagement in other illegal behavior. The results of a χ^2 analysis revealed that men and women were similarly likely to download music (men = 77.7%, women = 71.8%, $\chi^2_{1,196}) = 0.877$, $p = 0.341$). Logistic regression examining the relationship among downloading, ethical concern, and past illegal behavior was also used to examine whether the predictors for downloading differed between males and females. Interaction terms were added to both the univariate and multivariate logistic regressions, but no interaction term was significant, $ps > 0.18$. The MANOVA presented to test H1 was also used to address H3. The results showed no interaction between downloading category and gender ($F_{2,190} = 0.122$, $p = 0.885$, $\eta^2 = 0.00$), indicating the relationship was similar for males and females.

Discussion

The purpose of this study was to examine why messages communicating the legality of downloading have been ineffective by focusing on the individual characteristics of downloaders. While past research typically examines intention, we focused on behavior as the dependent variable to identify individual characteristics of downloaders. In particular, we investigated whether downloaders are generally concerned with obeying the law. Past research on ethics and downloading has tended to focus on ethical attitudes toward digital piracy. This study extends this research by identifying specific characteristics of downloaders, and in doing so, offers insights for future deterrent methods.

Downloading and Concern for the Law

Extant theory argues that ethics and the law are not synonymous but are closely related in that the law deters unethical behavior and unethical behavior is typically illegal (Bommer et al. 1987). However, the relationship among downloading, ethics, and the law is somewhat unclear because pirating is perceived to be less aberrant than other illegal behaviors (Freestone and Mitchell 2004). To extend past research, which has tended to focus on attitudes toward the behavior rather than characteristics of the downloader, we explored downloaders propensity toward illegal behavior. Following Cronan and Douglas's (2005) extended TPB, we hypothesized that downloaders would be characterized by less ethical concern and a history of illegal behavior (H1). Downloaders differed from non-downloaders in their level of ethical concern on all three sub-scales of the Consumer Ethics Scale and engagement in past illegal behavior. The "no harm, no foul" subscale of the consumer ethics scale showed the largest difference between downloaders and non-downloaders, although, downloaders also showed significantly less concern in their attitudes toward actively and passively benefiting from illegal behavior. When controlling for past engagement in illegal behavior, "no harm, no foul" was the only subscale to add unique prediction to the model. That is, whereas some downloading is predicted by past illegal behavior and a lower concern toward actively and passively benefiting from illegal behaviour, some downloading is predicted by the belief that no harm is being committed.

Downloading and Risk

Deterrence theory (Williams and Hawkins 1986) and Hunt and Vitell's (1986) ethical decision-making theory refer to

the probability of consequences (a component of teleological evaluations) and how risk of negative consequences influences engagement in illegal behavior. Therefore, H2 predicted that the probability of consequences would influence downloaders' engagement in illegal behavior.

The MANOVA between downloading category and illegal behavior revealed downloaders were more likely than non-downloaders to steal a CD when there was no risk of being caught. When the probability of being caught was increased, stealing a CD was unlikely, regardless of an individual's downloading history. A closer examination of intention to steal a CD was implemented by identifying those more likely to steal the CD than not, when there was no risk of being caught (91.3% of this group were downloaders). The analysis revealed that although intention to steal was unlikely, 23% of this sub-sample indicated they would indeed steal the CD under the no-risk condition.

Downloading, Ethical Beliefs, Illegal Behavior, and Sex

H3 predicted men and women to be similar in both their prevalence of downloading, and the relationship between downloading, ethical beliefs, and engagement in other illegal behavior. The findings revealed that the majority of participants (74%) in the student sample engaged in downloading, consistent with prior research that noted that downloading was prevalent in student samples (e.g., Lysonski and Durvasula 2008). Furthermore, males and females in this 2010 study were equally likely to engage in downloading; confirming the suggestion by Odell et al. (2000) that the gender gap would close with time. Moreover, the relationships among downloading, ethical concern, and engagement in other illegal behavior were the same for male and female participants of this study, supporting the proposition made by Kreie and Cronan (1998) that an awareness of consequences was more likely to impact on ethical behavior than sex.

Ethical Concern and Illegal Behavior

The influence of moral obligation on intention to download was demonstrated by Cronan and Al-Rafee (2008) in an extended model of TPB. This study builds on this research by focusing on individual characteristics, revealing that a lack of ethical concern regarding consumer behavior in general, rather than ethical attitudes toward pirating specifically, is also associated with downloading. In accord with Levin et al. (2004), the study shows that downloaders are characterized by less ethical concern, as measured by the Consumer Ethics Scale (Vitell and Muncy 2005). This study also extends past research by revealing that not only do downloaders show less concern for the law, they are also more likely than non-downloaders to engage in other illegal behavior. Downloaders lack of concern for the law aligns with past research showing downloaders condone downloading even though they know it is wrong (Altschuller and Benbunan-Fich 2009), and may help to explain why messages communicating downloading as illegal have been largely ineffective.

These findings indicate that when the consequences of stealing a CD are removed, approximately one-fifth of downloaders report a propensity to steal a CD from a store. This extends the research of Lysonski and Durvasula (2008) who examined intention to steal a CD under varying levels of risk, but did not compare downloaders to non-downloaders. The identification of a sub-set of individuals who were more likely to steal a CD than not was an important classification in this study, given that when we examined the sample as a whole, we found stealing a CD was generally unlikely regardless of risk.

The finding that many individuals engaged in downloading but would not steal a CD aligns with the suggestions of past researchers (e.g., Hill 2007) and supports the notion that the internet has its own ethical culture (Johnston and Johal 1999). On the other hand, the fact that 20% of downloaders showed the propensity to steal a CD (when the probability of consequences was controlled) is alarming and suggests that for a sub-set of downloaders, it is the risk of consequences that influences their engagement in illegal behavior, both online and offline, rather than how illegal they perceive the behavior to be.

Thong and Yap (1998) found teleological evaluations had a stronger influence on digital piracy than did deontological evaluations. In this study, the probability of consequences, one component of teleological evaluations, was also found to influence a sub-set of downloaders intention to steal a CD. Non-downloaders were unlikely to steal a CD, irrespective of the probability of consequences. These findings further inform Hunt and Vitell's (1986) ethical decision-making model, by suggesting that individuals who engage in illegal behavior are more likely to rely on teleological evaluations than are individuals who would not break the law. These findings, showing downloaders as sensitive to risk, support past research that found that increasing consequences for digital piracy decreases intention (Glass and Wood 1996) and that increasing risk leads to increased willingness to pay for legal downloads (Sinha and Mandel 2008).

Contribution

These findings show individual characteristics may influence propensity toward downloading. Furthermore, deterrent messages communicating that downloading is illegal or comparing downloading to stealing a CD are unlikely to

deter the behavior because downloaders show little concern for the law. Specifically, downloaders have less ethical concern, engage in other illegal behavior, and a sub-set indicated a propensity to steal a CD if the risk of getting caught were removed. Furthermore, increasing the likelihood of being caught stealing a CD, decreased downloaders' reported likelihood of stealing a CD. Thus, in accordance with the suggestion of past researchers (Chiou et al. 2005; Liao et al. 2010) we suggest that one method to combat digital piracy is aggressive media coverage of criminal action against illegal downloaders, focusing in particular on amplifying the perception that there is a high probability of getting caught.

Deterrent messages regarding legal fines and legal prosecution, however, have not been found to influence intention to download (d'Astous et al. 2005), however, focusing on the probability of being caught to increase downloaders' perceptions that the risk is serious may be more effective. Past research indicates that individuals do not perceive the threat to be serious because they believe that digital piracy laws are rarely enforced (Peace et al. 2003). Knopper (2007) reported that there had only been 18,000 lawsuits targeting downloading between Sep 2003 and 2006 and it follows that an increase in the incidence of penalties would increase the public's perception of the risk of consequences. The need to increase perceptions of the probability of prosecution aligns with the findings of past research (Levin et al. 2007; Peace et al. 2003) and is consistent with Witte's Extended Parallel Process Model (Witte 1992), which recognizes that individuals need to perceive that they are susceptible to a threat to be motivated to take action (Witte and Allen 2000). It is worth mentioning here that media coverage is only one form of deterrence and we did not consider other preventative methods. These suggestions are intended to add to methods to combat digital piracy offered by other researchers (e.g., Cronan and Al-Rafee 2008).

The finding that downloaders also engage in other illegal behavior is concerning and suggests that much illegal behavior is already normalized in the youth market. Goles et al. (2008) argued that engaging in downloading and music piracy may lead to an erosion of ethics in society. This study suggests that this erosion may already be occurring. Cause and effect could not be examined due to the cross-sectional nature of the research, however, because downloaders showed less ethical concern toward other aberrant consumer behaviors, were more likely to engage in other illegal behavior, and demonstrated a propensity to steal a CD if the risk of consequences were removed, combined with the high prevalence of downloading (74.5% of the sample engaged), all suggest that downloading may be a precursor to more serious illegal acts. This does not mean that downloaders perceive downloading to be the same as stealing as CD, but rather that they are willing to engage in other illegal behaviors. The notion that downloading leads to engagement in other illegal behavior is very serious given the prevalence of downloading, especially among young individuals (e.g., Knopper 2005).

Limitations

This study focused specifically on consumer ethical attitudes, engagement in illegal behavior, and the risk of consequences. Therefore, we do not know the importance of individual characteristics or the risk of consequences when compared to other influencing factors such as price or punishment severity (Peace et al. 2003). Moreover, based on the findings of past research, these factors were assumed to influence behavior directly through intention, although this assumption was not examined in this study. The study was also limited to a relatively small sample of self-selecting university students from residential colleges at one university. Self-selection may have also increased the percentage of individuals who engaged in piracy. Furthermore, Cronbach alpha values for some variables were lower than desired (0.65). A further limitation of the study can be found in the use of a New Zealand sample alone. However, culturally New Zealand is very similar to Australia and to an extent other English-speaking western countries such as the UK and US. Furthermore, the rates of downloading observed in this study are similar to that observed in the US (76.5%: Cronan and Al-Rafee 2008; 63%: Levin et al. 2004).

Future Research

The study suggests a number of related areas for future research. In particular, longitudinal research examining cause and effect between downloading and engagement in other illegal behavior is necessary. Given the prevalence of downloading compared to other illegal behaviors it is possible that downloading leads to other illegal behaviors however this claim needs to be examined. Future research could also compare downloaders' ethical attitudes toward other illegal behavior, taking into consideration how perceived importance of the issue influences attitudes (Robin et al. 1996). Furthermore, future research needs to examine how the factors examined in this study (punishment certainty, consumer ethical beliefs, and engagement in illegal behavior) interact, modify, or are modified by other important factors (such as price) that previously were found to influence illegal downloading. Finally, these findings could inform future research directly testing TPB to explain downloading.

Appendix 1

SECTION ONE: DEMOGRAPHIC BACKGROUND

Age: _____ years Sex: ❑ Male ❑ Female

Ethnicity (choose one):

❑ Caucasian ❑ Pacific Islander ❑ Other (please specify)

❑ Maori ❑ Asian _____

SECTION TWO: ETHICAL BEHAVIOURS

This part of the questionnaire asks you to reflect on ethical behaviours, please read the statements below and indicate for each question which is true of you.

	Strongly believe that it IS wrong		*Neutral*		*Strongly believe that it is NOT wrong*
Reporting a lost item as "stolen" to an insurance company in order to collect the insurance money	1	2	3	4	5
Giving misleading price information to a salesperson for an unpriced item	1	2	3	4	5
Installing software on your computer without buying it	1	2	3	4	5
Drinking a can of soda in a store without paying for it	1	2	3	4	5
Moving into a residence, finding that the Sky TV is still hooked up, and using it without paying for it	1	2	3	4	5
Returning damaged goods when the damage was your own fault	1	2	3	4	5
Lying about a Child's age to get lower price	1	2	3	4	5
"Burning" a CD rather than buying it	1	2	3	4	5
Joining a CD club just to get some free CDs with no intention of buying any	1	2	3	4	5
Observing someone shoplifting and ignoring it	1	2	3	4	5
Getting too much change and not saying anything	1	2	3	4	5
Taping a movie off the television	1	2	3	4	5

SECTION THREE: RISK BEHAVIOURS

This part of the questionnaire asks you to consider your risk taking behaviours.
Circle a number from 0 to 8 to indicate how often you have been involved in the following activities in the past 12 months. A "0" means never, while an "8" means daily.

	Never		Rarely		Occasionally		Often		Daily
Used Marijuana	0	1	2	3	4	5	6	7	8
Shoplifted	0	1	2	3	4	5	6	7	8
Taken Speed, Ecstasy or Mushrooms	0	1	2	3	4	5	6	7	8
Not worn your seatbelt	0	1	2	3	4	5	6	7	8
Taken Cocaine/Crack	0	1	2	3	4	5	6	7	8
Cheated on an exam/test/essay	0	1	2	3	4	5	6	7	8
Driven 20km/h + over the speed limit	0	1	2	3	4	5	6	7	8
Abused prescribed drugs	0	1	2	3	4	5	6	7	8

SECTION FOUR: DOWNLOADING ATTITUDES

Please indicate how likely you would be to do the behaviours in each of the following scenarios.

	Very Likely								Very Unlikely
Stealing a CD from a music store with a 100 percent certainty of not getting caught	0	1	2	3	4	5	6	7	8
Stealing a CD from a music store with some risk that an invisible security camera might observe you	0	1	2	3	4	5	6	7	8

SECTION FIVE: MUSIC PROCUREMENT

How many songs do you download a week? (Please indicate)

- ❑ I do not download music
- ❑ 0-1 songs
- ❑ 2-5 songs
- ❑ 6-10 songs
- ❑ 11-20 songs
- ❑ 21-30 songs
- ❑ More than 30 songs

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