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# Deterring Online Music and Movie Piracy in Adults

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## **Deterring Online Music and Movie Piracy in Adults**

An honors thesis presented to the  
School of Criminal Justice,  
University at Albany, State University of New York  
in partial fulfillment of the requirements  
for graduation with Honors in Criminal Justice  
and  
graduation from the Honors College

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## Abstract

Online piracy of music and movies is common, despite being a form of theft and copyright infringement. Many individuals do not realize the real-life impacts of online piracy on artists and the entertainment industry. Moreover, few perpetrators are caught or punished for their actions. This allows potential perpetrators to rationalize and neutralize their piracy-related behaviors and, thus, avoid feelings of guilt or shame. This research uses an online experimental survey to examine framing tactics that may be used to prime feelings of guilt and shame and, in turn, deter online piracy. The survey exposed participants to one of three experimental conditions: (a) a deterrence condition in which fines were discussed, (b) a general appeal-to-guilt condition in which victims are portrayed as sustaining injury and distant from and (c) participants an appeal-to-guilt with close proximity condition in which victims are portrayed as sustaining injury and close to participants. Moreover, likelihood of engaging in future piracy was compared across the three experimental conditions relative to a control condition in which no fines or victims were mentioned to examine the extent to which perceiving online piracy as a crime not subject to punishment or victimless enabled would-be perpetrators to rationalize their illegal behavior. Anticipated feelings of shame and guilt were hypothesized to decrease anticipated likelihood of engaging in future online piracy when the amount of financial injury the victims would incur was greater and when victims were more proximal to the offender as compared to when no victims were mentioned. Findings showed that no messaging condition was successful in significantly impacting likelihood of engaging in piracy relative to the control condition. These results provide insights about framing strategies that may be integrated into policy or programs seeking to effectively deter potential perpetrators and prevent online piracy.

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## **Introduction**

Cybercrime constantly changes as people find new ways to commit crimes over the internet. Wall (2008) describes that, when thinking about cybercrime, many people think of large-scale hacks on large companies and government, images shaped by popular movies. These images may relate to the cyber-incidents that the public hears about through the media, but they do not reflect the average cybercrime. In reality, cybercrime takes on many different forms: cyberbullying, hacking, identity theft, and piracy are only a few of the crimes that can be committed over the internet.

Each cybercrime comes with a unique set of challenges in the same way that many other crimes require unique responses. In the blink of an eye, a cybercrime can cross state and national borders. For example, a software product that costs thousands of dollars can be illegally copied and downloaded for free by users in any country (McFarlane, 2013). These issues may not be resolved effectively with continued preventative advancements in technology. Thus, research is needed to find ways to deter these crimes before they occur (Copes, Vieraitis, & Jochum, 2007). To date, many efforts to stop the cybercrime of online piracy in the United States and Europe have failed to effect change (Marion, 2010). The few policies that have been successful have limited lifespans, eventually becoming ineffective over time (Orne, 2014).

Online piracy is defined as the unauthorized use or reproduction of another's work. This could be any type of file from songs, to e-books, to software. There are approximately 300 billion visits to piracy sites worldwide annually (MUSO, 2018). Residents of the United States led the world in visits to media piracy websites in 2017, with almost 18 billion visits countrywide (Broadband TV News, n.d.). Piracy is a billion-dollar industry in the United States alone, with massive amounts of money being lost from individuals who work in the media and

arts (Siwek, 2007). Although it is difficult to calculate the exact loss to the music/movie industry that piracy can create, estimates attribute \$16 billion and 373,000 jobs lost by employees in the industry to piracy in the United States annually. Additional losses to the public follow in the form of taxes that are not collected from the legal sales of music and movies (Siwek, 2007). This research is intended to find ways to deter individuals from engaging in piracy.

### **Prior Legislative Efforts to Address Online Piracy**

In response to the development and growth of the internet and its challenges, lawmakers have passed legislation aimed to limit people's engagement in piracy and protect copyright of intellectual property. The few policies that have been successful in deterring piracy have not lasted longer than a few months (Orne, 2014). This includes the United States's No Electronic Theft Act in 1997, which allowed the prosecution of internet pirates regardless of whether they made a profit. Additionally, the United States has federal regulations on piracy under the Digital Millennium Copyright Act (DMCA 1998). Lastly, a few states have created their own piracy laws. These regulations put punitive measures in place for those who engage in online piracy, but do not serve to eliminate piracy. Some policies were even followed by slight decreases in movie revenue (Orne, 2014).

Antipiracy measures in other countries have seen various levels of success. This includes the Council of Europe's Cyber Crime Treaty in 1997 to improve investigation techniques for transnational cybercrimes. In 2009, French lawmakers passed the Haute Autorité Pour la Diffusion Œuvres et la Protection des droits d'auteur sur Internet (HADOPI), which gave warnings to internet pirates that their actions were being tracked as they were engaging in piracy. After multiple warnings cases are referred to the courts for punitive action. This regulation was followed by a 25% increase in legal music sales. However, once the courts stopped strictly

adhering to and following up on referred cases, the deterrent effect subsided (Danaher, Smith, & Telang, 2017). Sweden's 2009 Intellectual Property Rights Enforcement Directive (IPRED) was meant to make detecting piracy easier for the rights holders with the goal of increasing risk for pirates. Following this policy, piracy rates dropped 32% and legal sales increased 26%. However, the policy was weakly enforced and failed within six months (Danaher, Smith, & Telang, 2017). Therefore, adhering to classic deterrence methods to deter online piracy may not be effective.

### **Deterrence Theory and Online Piracy**

Deterrence theory is composed of three major criteria: how (a) sure, (b) swift, and (c) proportionate the punishment is for committing crime (Beccaria & Voltaire, 1764, as cited by Lee, 2017). According to theory, deterrence also relies on the assumptions that potential offenders are capable of rational thought, and the imposed punishments are negative in nature. If punishment for an offense fails to meet all three criteria, then rational individuals are able to justify engaging in the offense to themselves or others. Current responses to online piracy do not meet the criteria to deter crime because of a lack of punishment. One estimate gave users only a one in 1,629 chance of frequent pirates being caught for online piracy (Mokey, 2009). The rate at which online piracy occurs likely puts strain on the resources of agencies to respond to crimes after they occur, so it is necessary to explore other means of deterring online crimes.

### **Rationalization and Neutralization**

Rationalizing and neutralizing are two techniques for minimizing feelings of responsibility for a criminal act, or any act that may result in guilt or shame. Rationalization is a technique centered on mitigating factors when the actors know that what they did was wrong (Copes, 2003). Rationalization techniques include considering motivating factors such as

revenge. This could include an employee not getting a raise and therefore stealing from the company. In that situation, the employee would be rationalizing his theft because he feels he deserved a raise and did not receive it (Moore & McMullan, 2009). In other words, actions may be rationalized as being “wrong, but justified.” To rationalize an act, the one committing it must understand that it is wrong but believe that extenuating circumstances rendered the behavior acceptable (Copes, 2003; Moore, 2009).

Alternatively, neutralization requires actors to convince themselves that what they did was not actually “wrong” with methods such as denying the presence of a victim (Sykes & Matza, 1957). Neutralization plays an important role in whether offenders feel guilt from crimes they have committed and is generally achieved through three possible techniques: denial of injury, denial of victim, and denial of responsibility. This is true for both physical and cybercrimes (Copes, Vieraitis, & Jochum, 2007; Sykes & Matza, 1957). Neutralization is often used when attempting to minimize feelings of guilt from nonviolent crimes, such as piracy or petty theft, especially when there is no perceived victim (Siponen, Vance, & Willison, 2012).

Thus, rationalization is tied to the justification of actions, whereas neutralization relies on minimizing the perceived severity of the actions. Yet the two often go hand in hand when offenders try to avoid feelings of guilt and shame.

### **Guilt and Shame**

The terms guilt and shame are often used interchangeably in daily colloquial language. These two mental states are distinguished from each other, however, based on where they begin. Guilt most often comes from internal moral beliefs, and shame often comes from external sources such as family and friends, or even the general public (Maley, 2015). Even so, these feelings may become intertwined.

Feelings of guilt and shame are known to influence those committing different types of crime. There are two types of guilt that are particularly relevant to understanding online piracy: other-directed guilt, which stems from doing something harmful to someone else, and self-directed guilt, which may come from failing to uphold promises made to one's self (Maley, 2015). In this research, I consider how guilt may diminish an individual's ability to rationalize his or her engagement in online piracy. Moreover, piracy is often considered a "victimless crime"; therefore basic moral obligations to others might not have a significant impact on individuals who are engaging in piracy (Hashim, Kannan, & Wegener, 2018; Siponen, Vance, & Willison, 2012). Also, cybercrimes can allow the offender to be anonymous, which eliminates the possibility for outside sources of shame to hold people back from committing crimes in the way that it does for physical crimes, thus allowing piracy to be easily neutralized (Thongmak, 2017). I predicted that exposing people to messages that enhance anticipated feelings of guilt and shame would deter online piracy more than when the messages do not target those feelings. I tested this by attempting to manipulate feelings of guilt and shame by having participants read information interventions regarding the potential victims of piracy. In one condition there are nationwide victim statistics, and in the other victim statistics that are in close proximity to the participant.

## **Methods**

### **Participants**

Participants were 67 adults recruited largely through undergraduate courses and student groups at the University at Albany. Participants ranged in age from 18 to 43 years old ( $M = 20.66$ ,  $SD = 3.45$ ). The sample was 31% men, 64% women, and 5% of nondisclosed gender.

Thirty-four percent of participants reported no income, 30% less than \$5,000, 9% \$5,001-\$10,000, 5% \$10,001-\$20,000, and 18% over \$20,000.

## **Materials**

An online survey was structured so that each participant was given an informational intervention about online piracy. Participants were randomly assigned to receive either no additional information or one of three messages that manipulated knowledge of piracy laws, knowledge of victims nationwide, and knowledge of local victims. They then responded to dependent measures and demographic measures.

**Informational interventions.** All participants first read that “Piracy is defined as the unauthorized use or reproduction of another’s work.”

**Message manipulation.** Participants were exposed to one of the four message conditions described next.

***Control message.*** Participants in the control condition received only the informational intervention described previously.

***Classic deterrence message.*** This message addresses participants’ knowledge that piracy is a crime, as well as the potential punishments that could come from engaging in piracy. Participants in the classic deterrence condition read that, “Piracy is a form of theft and copyright infringement. It includes copying a song or movie from an unauthorized source with or without payment, for personal use or to share. Penalties for illegal downloading include jail time, an injunction (court order) to cease further infringement, impounding (deletion) of all illegal work, and fines ranging from \$200 to \$150,000.”

***General appeal-to-guilt message.*** This message is meant to demonstrate the general presence of victims in online piracy. Participants in a general appeal-to-guilt condition read that,

“Piracy is defined as the unauthorized use or reproduction of another’s work. Nearly 373,000 jobs were lost due to internet piracy of copyrighted music and films in the United States. These people worked both directly and indirectly in the production, manufacturing, or retail of the creative materials that were pirated. In the same year, there was a loss of \$16.3 billion from those industries. Because of piracy, there is little room for emerging artists or producers in the industry. Further, many are forced to live only one paycheck away from homelessness due to losing nearly 10% of the royalties they would have made from their music or films because of piracy.”

***Appeal-to-guilt close proximity message.*** This message is meant to demonstrate the presence of local victims in online piracy. Participants in the appeal-to-guilt close proximity condition read that, “Piracy is defined as the unauthorized use or reproduction of another’s work. Over 7,500 jobs were lost due to internet piracy of copyrighted music and films in New York each year, many of those jobs coming from Albany and the Capital Region. These people worked both directly and indirectly in the production, manufacturing, or retail of the creative materials that were pirated. In the same year New Yorkers also lost approximately \$326 million from those industries. Because of piracy, there is little room for emerging artists or producers in the industry. Further, many are forced to live only one paycheck away from homelessness due to losing nearly 10% of the royalties they would have made from their music or films because of piracy.”

**Dependent measures.** Following exposure to one of the four messages, participants reported their likelihood of committing piracy by answering the question, “How likely are you to engage in online music or movie piracy?” on a 5-point Likert scale ranging from -2 (*Very Unlikely*) to +2 (*Very Likely*).

This question was followed by three items assessing participants' feelings regarding anticipated feelings of guilt and perceived shame. To measure anticipated guilt, participants responded to the item, "I would feel bad if I pirated a song or movie." To measure anticipated shame, participants responded to the statements, "I would feel ashamed if I pirated a song or movie" and "Others would see me differently if they knew I pirate songs and movies." Responses to each of these three items were given on 5-point Likert scales ranging from -2 (*Strongly Agree*) to +2 (*Strongly Disagree*).

**Demographic measures.** Participants were required to be at least 18 years of age to participate in the study. Participants reported their age, gender, and income.

### **Procedure**

Participants were recruited from university classes via email and by electronic messages distributed to university organization groups and listservs. Interested participants were directed to follow the link provided in the email. After following the link, participants were brought to a Qualtrics website survey page with an information sheet. The information sheet contained information about participants' rights as well as a brief introduction to the purpose of the study. Participants indicated whether they voluntarily agreed to participate in the study. Participants who elected to continue reported their age to ensure they were eligible to participate (i.e., at least 18 years old), and the survey questions were then administered.

First, all participants read the informational intervention. Then participants were randomly assigned to one of the four message conditions. This was followed directly by asking participants how likely they are to engage in online piracy. Participants then answered a series of questions regarding their anticipated feelings of guilt and shame.

After completing the survey, participants were reminded of their rights as participants and debriefed with more information about the study. This page included references for further reading on online piracy and links to some of the federal acts that govern piracy and cybercrime. Participants were not compensated but were thanked they for completing the study.

## **Results**

### **Analytic Strategy**

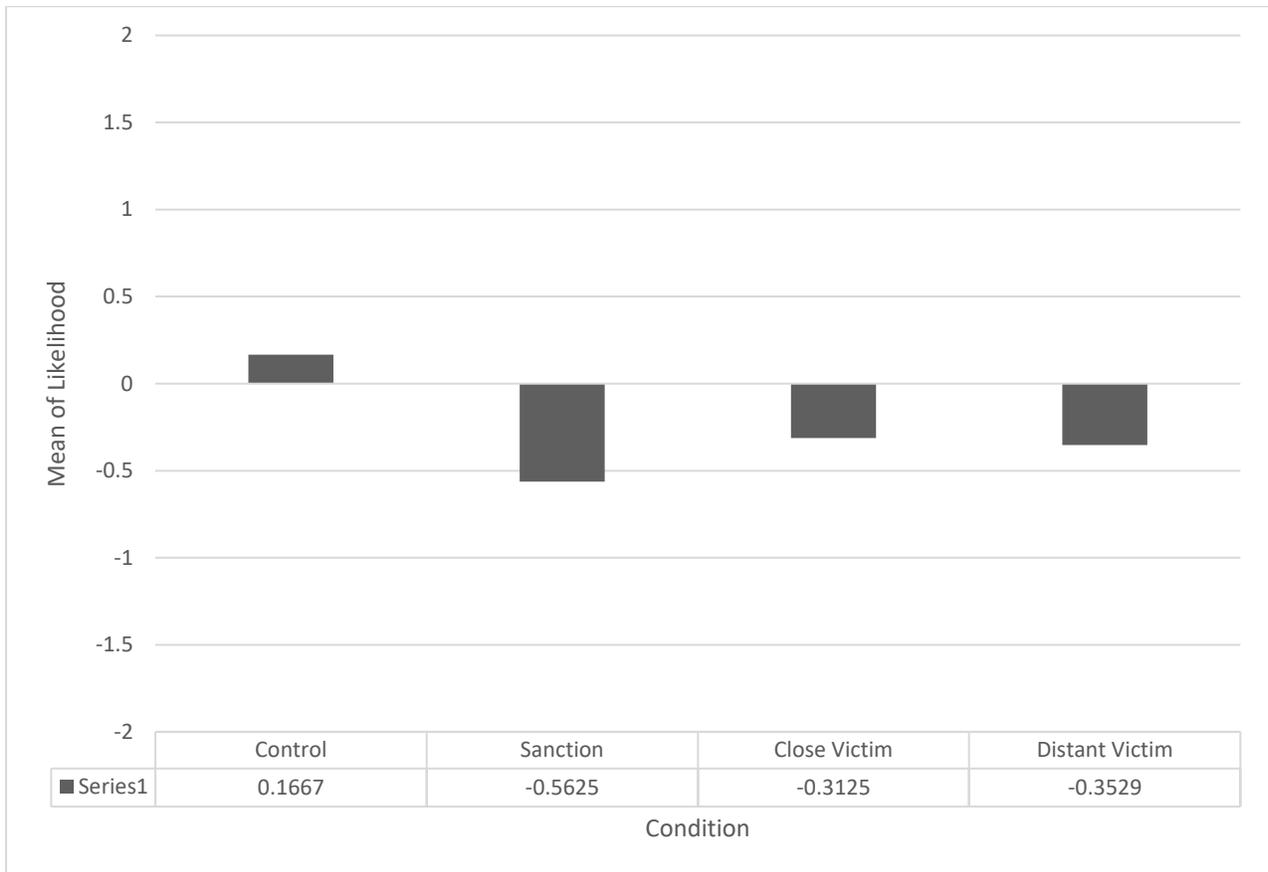
To test whether participants' likelihood of engaging in online piracy was impacted by the classic deterrence, appeal-to-guilt, or appeal-to-guilt with close proximity messages, I conducted a one-way between-subjects analysis of variance (ANOVA) and planned contrasts comparing the average likelihood in each message condition relative to the control condition. I then explored the correlations between anticipated likelihood of engaging in online piracy on the one hand and participants' beliefs about expected feelings of guilt and shame if they engaged in online piracy. Finally, I examined whether message type affected such feelings using a series of one-way between-subjects ANOVAs and planned contrasts.

### **Anticipated Likelihood of Engaging in Online Piracy as a Function of Message Type**

Results of the one-way ANOVA revealed a nonsignificant effect of message type,  $F(3, 63) = .76, p = .52$ . The planned contrasts showed that participants in the control condition were just as likely to anticipate engaging in online piracy as were participants who received the classic deterrence,  $t(63) = 1.45, p = .15$ , appeal-to-guilt,  $t(63) = 1.05, p = .30$ , and appeal-to-guilt with close proximity messages,  $t(63) = .95, p = .35$ . (See Figure 1.)

Figure 1

Means for Likelihood of Engaging in Piracy by Condition



## **Correlations between Anticipated Likelihood of Engaging in Piracy and Beliefs and Feelings**

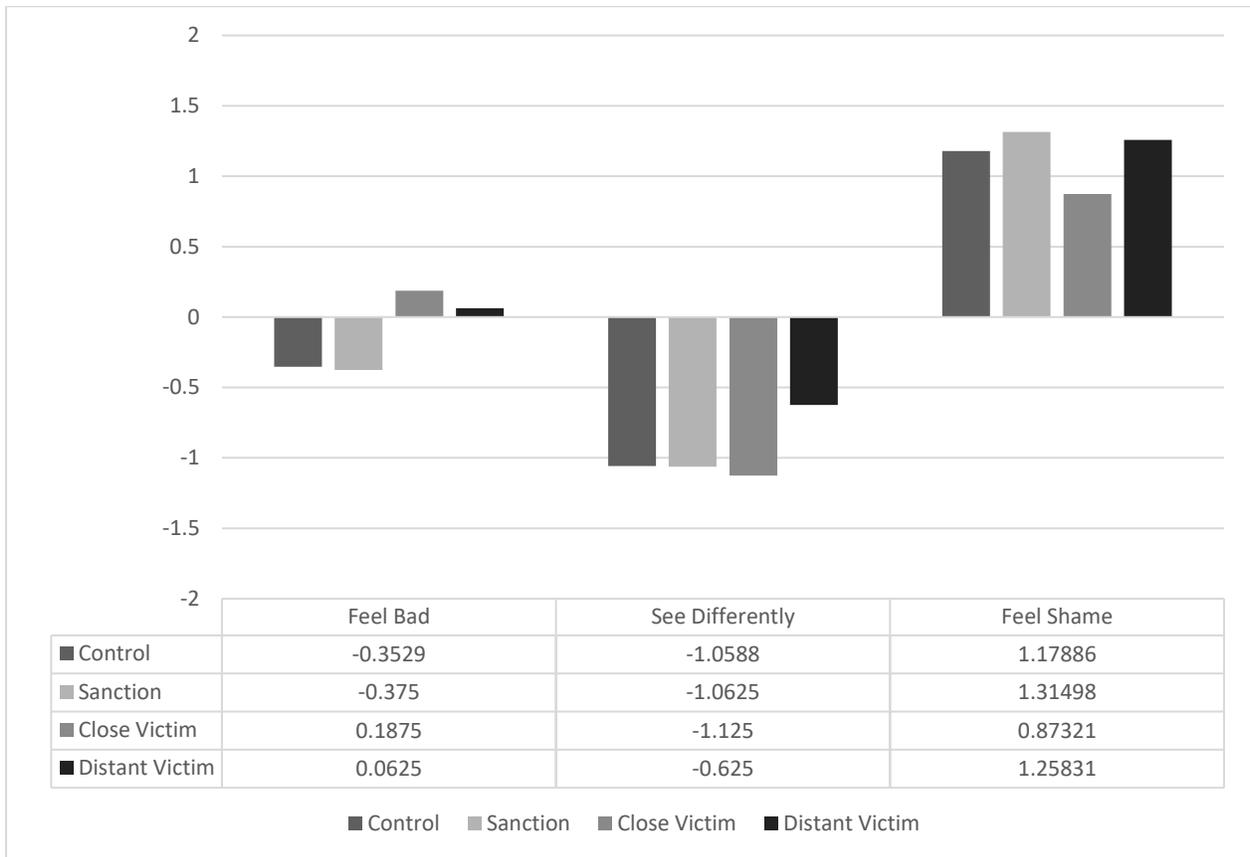
As expected, anticipated likelihood of engaging in online piracy was associated with participants' beliefs about how other people would see them and feelings of guilt and shame. Specifically, participants were less likely to think they would engage in online piracy in the future the more they believed other people would see them differently,  $r(65) = -.37, p = .002$ , the more they anticipated feeling badly,  $r(65) = -.35, p = .004$ , and the more they anticipated feeling shame,  $r(65) = -.24, p = .06$ .

## **Effect of Message Type on Beliefs and Feelings**

Contrary to expectations, message type did not have any significant effects on participants' beliefs about how other people would see them if they engaged in online piracy nor their expected feelings of guilt or shame, all  $F_s(3, 61) \leq .96, p_s \geq .42$ . The planned contrasts showed that participants who received the control message were just as likely to expect to be seen differently by others and feel bad or shameful as were participants who received the classic deterrence, all  $t_s(61) \leq .08, p \geq .94$ , appeal-to-guilt, all  $t_s(61) \leq -1.19, p \geq .24$ , and appeal-to-guilt with close proximity messages, all  $t_s(61) = -1.31$  to  $.18, p \geq .19$ . (See Figure 2.)

Figure 2

Means of Anticipated Feelings across Conditions



## Discussion

This study aimed to examine whether cybercrime can effectively be deterred. Results demonstrated that neither of the messaging techniques designed to increase feelings of guilt and shame had a significant effect on lowering participants' likelihood of engaging in online piracy relative to either a classic deterrence message or a control condition. This suggests that classic deterrence does not work to prevent online piracy, consistent with than prior findings like those of Moore and McCullen (2009) suggested. In that study, few participants said that knowledge that what they were doing was illegal had any impact on whether they would or would not engage in piracy. My findings are also consistent with findings showing that deterrence-focused laws, such as France's HADOPI, are only as successful as the resources that can be dedicated to enforcing them; even if they boast great success at the start, they require significant dedicated time to continue enforcing the law (Danaher, Smith, & Telang, 2017).

Moore and McCullen's (2009) study showed that individuals used rationalizations such as "it's not hurting anyone" to avoid feeling guilty for engaging in piracy and illegal peer-to-peer (P2P) file-sharing. Yet in the present study, manipulations that directly addressed the sentiments that were reflected in those rationalizations had no effect on the likelihood of pirating. The messages were not strong enough to evoke heightened feelings of guilt and shame to effectively deter. Participants reported similar levels of guilt and shame regardless of whether they were exposed to the control, classic deterrence, appeal-to-guilt, or appeal-to-guilt with close proximity condition. There are a few potential reasons why the intervention messages did not have the intended impact. First, because there was no check to ensure the participants were fully attending to the message, they may have skimmed or skipped them entirely. Secondly, these messages may

not have contained the type of information necessary to make an individual feel that piracy is wrong or feel guilty for committing piracy.

Consistent with Moore and McCullen's (2009) findings, however, significant correlations demonstrated that the more participants in this study expected to feel bad, be seen differently, and feel ashamed for committing online piracy, the less likely they were to report being likely to commit piracy. Therefore, stronger messages that manipulate individuals' feelings of guilt and shame may, in turn, reduce likelihood of engaging in online piracy.

### **Limitations and Future Research**

This research is not without its limitations. With regard to the sample and study design, the sample size of this study was small, with approximately only 20 participants in each condition. The study may have lacked the statistical power necessary to detect whether the intervention messages would impact the average person's likelihood to engage in piracy. Another limitation is that the participants were young and with little variance in age. It is possible that college-aged participants may have different opinions and feelings about piracy than older or younger participants (Morning Consult, n.d.). More importantly, the study lacked manipulation checks to ensure individuals read and understood the message they read. If participants did not read the intervention message at the start of the survey, it would fail to impact their reported likelihood of piracy.

In addition, this study does not examine the different motivations that can drive an individual to commit cybercrime. Mental state and motivation may be key information needed to understand online criminal behaviors, so future study should examine these constructs with regard to cybercrimes. Identifying the reasons that people engage in cybercrime will help to guide the development of policy to curb it.

This study also has a limited scope. Research on propensity to commit piracy and internet property crimes cannot necessarily be generalized to explain all cybercrimes. While piracy is a common form of cybercrime, it is important to realize that many cybercrimes do not fit the mold of having no perceived harm, and more severe internet crimes must be treated and deterred differently.

Research stemming from this study also could consider the presence of a perceived victim in a specific crime. This study did not look at whether the subject was aware that there was a victim who was being impacted directly by pirates. In crimes such as piracy the victim is typically thought to be the corporation that owns the rights to the song or movie being downloaded, not the individual artists who were involved in the process (Hashim, Kannan, & Wegener). Controlling for the presence of a perceived victim can provide a more in-depth view of the rationalization and neutralization tactics used by a specific subject.

Guilt and shame were used together in this research. In the future looking at whether or not guilt and shame have an impact on piracy when used separately may be an important factor to deterring online piracy. Since the reported rates of guilt compared to shame were similar in the responses from participants, it is likely that participants did not understand the difference. Therefore, examining further if shame such as friends and family seeing the individual compared to guilt coming from oneself may be warranted.

## **Conclusion**

Classic general deterrence does not successfully deter piracy, as shown by my research and prior case studies by Danaher, Smith, and Telang (2017). That research demonstrated that, although the most successful antipiracy legislation was based on deterrence theory, it did not succeed in permanently lowering rates of piracy. Indeed, attempts at antipiracy legislation in the

United States have not seen any levels of success. The correlations I found between anticipated feelings of guilt and shame and anticipated likelihood of engaging in piracy suggest that targeting those feelings of guilt and shame may yield greater success.

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