



## Short Communication

# Safe harbor: Personality and the acceptance of online piracy


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## ABSTRACT

Online piracy causes significant monetary losses to many industries. Perceptions of victimization (who is hurt) and physicality (is the product physical or digital) drive attitudes regarding the moral superiority of online versus offline piracy. We investigate whether personality predicts the adoption of those perceptions. Participants completed two personality scales, disclosed whether they believed offline and online piracy were morally different, and justified their belief. Reduced empathy, perspective-taking, and preference for order predicted viewing online piracy as morally superior. Moreover, high empathy participants who perceived online piracy as morally superior to offline piracy made justifications denying victimization. Results suggest increasing empathy and clarifying victimization may reduce online piracy.

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## 1. Introduction

Illegally downloading content from the internet costs the U.S. music and movie industries billions of dollars per year (Gibbs, 2014). Although the exact numbers are disputed (e.g. Raustiala & Sprigman, 2012), online piracy's costs to the entertainment industry undoubtedly have been substantial. This study examines personality factors that predict the acceptance of online piracy.

### 1.1. Perceptions of online piracy vs. shoplifting

In a study of Finnish 9th graders, online piracy positively correlated with other delinquent behaviors and, like other delinquent behaviors, negatively correlated with measures of self-control and social control (e.g. parental supervision; Aaltonen & Salmi, 2013). Additionally, studies using Polish samples examined differences between traditional theft and online piracy, rather than similarities (Krawczyk, Tyrowicz, Kukla-Gryz, & Hardy, 2014). The authors examined student and non-student participants' attitudes toward a character in a vignette who steals a season of a TV show, either by physically stealing DVDs or by illegally downloading digital files. Versions of the vignettes varied on key dimensions that reflected proposed factors.

Krawczyk et al. (2014) identified five contextual factors predicting participants' perceptions of the theft. The most powerful factor was "Physicality." That means participants approved less when the theft involved tangible items. The second most powerful factor was "Direct

Loss." Thus, participants approved less when they perceived a clear victim of the behavior. The third most powerful factor was "Breach of Protection." That is, overcoming some protective obstacle decreased approval. Fourth most powerful was "Peer Status." Stealing from someone whom the thief knew personally produced less approval than when the victim was remote. The final significant factor was "Sharing," indicating that distributing the stolen material decreased approval versus stealing for personal use. Interestingly, "Availability of Alternatives" (i.e., whether cheap, legal alternatives existed) failed to predict participant attitudes. Finally, by using both student and non-student samples, this study established that these views extended beyond poor college students.

### 1.2. Reducing online piracy

Increasing the "physicality" of downloaded material appears impossible, as does legislating to increase self-control. However, Phau and Liang (2012) suggest reforms that would influence other factors mentioned above. First, they suggest making the piracy of the material more difficult. This strategy, on its face, makes sense: if you want to reduce theft, buy a better lock. The strategy also works on a psychological level: in terms of "breaching protection," making the violation more explicit (rather than casual) makes the act less acceptable. However, strategies intended to affect "breaching protection" would ideally apply to all who engage in piracy of the item—not just the first person—as digital locks are less effective after the initial breach. Another suggestion involves increasing the consequences for violation by penalizing the parents of child pirates, thereby motivating social control (Phau & Liang, 2012).

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To address victimization-related factors (e.g. “Direct Loss” and “Peer Status”), one could clarify the link between the piracy and its harmful consequences (e.g. “Piracy is not a victimless crime” campaigns). However, this strategy produces mixed results in actual practice (Cox & Collins, 2014; Levin, Conway Dato-on, & Manolis, 2007). Finally, efforts have been made to sanction companies that facilitate sharing of pirated content (e.g., Kazaa) but found questionable success (Bhattacharjee, Gopal, Lertwachara, & Marsden, 2006). Identifying the types of individuals who are accepting of online piracy may help in determining what strategies to utilize in reducing online piracy.

### 1.3. The current study

Krawczyk et al. (2014) showed that physicality and victimization drive perceptions that downloading illegal content categorically differs from shoplifting. The current study examines whether personality characteristics predict adoption of those perceptions. Specifically, we predicted that participants with low empathy and perspective-taking would be (relatively) more accepting of online piracy and more likely to minimize its harm, compared to shoplifting. Also, we predicted that participants high in constructs related to Need for Closure would be (relatively) less accepting of online piracy because of desires to maintain the status quo and clear behavior definitions (e.g. stealing is stealing, regardless of an object's physicality).

### 1.4. Hypotheses

- Participants who are accepting of online piracy (compared to shoplifting) will show less empathy and perspective-taking (as measured by the Interpersonal Reactivity Index) and will minimize victimization of the behavior.
- Participants who are accepting of online piracy (compared to shoplifting) will score lower on the Need for Closure Scale and its subscales because they will have a more flexible concept of what constitutes shoplifting (i.e., if it isn't physical, it isn't shoplifting).

## 2. Method

### 2.1. Participants

We recruited 253 participants using Amazon's Mechanical Turk (Mturk) and paid them 75 cents for participating. Eleven participants were dropped from the analysis, for either completing the study too fast (in the top 2.5%) or too slow (in the bottom 2.5%). 242 participants remained (107 males; 132 females; 2 transgender individuals; 1 undisclosed) with a mean age of 34.73 years ( $SD = 10.12$ ). Self-reported ethnicities included: 200 “White,” 19 “Black or African American,” 13 “Asian,” 1 “American Indian or Alaskan,” 2 “multiple ethnicities,” 6 “other,” and 1 undisclosed.

### 2.2. Procedure

Participants completed the measures online. The central question to which they responded was “Do you think there is a moral difference between shoplifting and downloading illegal content?” (“Yes,” “No,” “Unsure”). We refer to this as the “Moral Difference” question. After indicating whether they perceived a moral difference, participants were asked to explain their answers. We refer to this as the “Moral Difference Justification.”

Participants also responded to two questions, “To what extent do you agree with the statement, ‘It is morally wrong to shoplift?’” and “To what extent do you agree with the statement, ‘It is morally wrong to illegally download movies, TV shows, games, or applications from the Internet?’” using a six-point, Likert-like scale (1 = “Completely Disagree,” 6 = “Completely Agree”). Because we sought to examine why

people perceive online piracy as an exception to theft, we subtracted the former score from the latter score, such that lower values indicated perceptions of moral superiority of downloading over shoplifting.<sup>1</sup> We refer to this value as “Moral Disparity Scores.” Participants also completed the Interpersonal Reactivity Index (IRI; Davis, 1980) and the Need for Closure Scale (NFCS; Webster & Kruglanski, 1994).

#### 2.2.1. Coding of Moral Difference Justifications

Two research assistants coded the Moral Difference Justifications for two themes: Differential Victimization (e.g. “Shoplifting from a store directly affects the people working in the store. Downloading on the Internet is a more gray area...”) and Differential Physicality (e.g. “One is taking a physical item, the other is downloading content.”). Interrater agreement was sufficient (Cohen's  $d = 0.61$  for Victimization and 0.72 for Physicality). A third coder resolved any disagreements among the first two coders.

#### 2.2.2. Interpersonal Reactivity Index

The IRI (Davis, 1980) consists of 28 statements (e.g. “I often have tender, concerned feelings for people less fortunate than me.”) that participants rate using a five-point, Likert-like scale (1 = “Does not describe me well,” 5 = “Describes me very well”). The scale is reliable (internal reliability 0.71 to 0.77; test-retest 0.62 to 0.71) and features Perspective-taking, Fantasy, Empathic Concern, and Personal Distress subscales.

Some researchers argue for using the four IRI subscales separately (Davis, 1980), while others advocate using it as a unidimensional construct (Cliffordson, 2002). We intended to first use the full scale, and if significant, analyze the subscales. In particular, we expected Empathy and Perspective-taking to predict disapproval of online piracy, because individuals possessing these characteristics can more easily identify victimization. Inter-item reliability was high for the full scale ( $\alpha = 0.90$ ) and sufficient for the subscales, ranging from 0.74 (Fantasy) to 0.89 (Empathy).

#### 2.2.3. Need for Closure Scale

The NFCS contains 41 statements (e.g. “I don't like situations that are uncertain”) that participants rate using a six-point, Likert-like scale (1 = “Strongly Disagree,” 6 = “Strongly Agree”; Webster & Kruglanski, 1994). It contains five subscales: Preference for Predictability, Preference for Order, Decisiveness, Discomfort with Ambiguity, and Close-Mindedness.

We used the Roets and Van Hiel (2007) version of the NFCS, which measures Decisiveness as a motivation, rather than a behavior; this is consistent with how the other facets are conceptualized. This version also shows increased internal consistency for the unidimensional NFC construct (ranging from 0.82 to 0.87; Roets & Van Hiel, 2007). As with the IRI, we first used the complete NFCS, and with significance established, examined the subscales. We expected all subscales to predict disapproval of online piracy (because a clear, consistent definition of theft would appeal to high NFC individuals). Reliability for the current study was high when using the complete scale ( $\alpha = 0.93$ ) and sufficient for the subscales (0.72, Closemindedness; 0.84, Order and Predictability).

## 3. Results

We first examined Moral Difference responses. Specifically, we compared (1) individuals who perceived no difference between shoplifting and illegally downloading content and (2) individuals who were accepting of online piracy. Therefore, we discarded respondents who indicated that they were unsure (36 respondents) and individuals who

<sup>1</sup> The questions comprising participants' Moral Disparity Score varied in specificity (i.e., only the piracy question specified types of items taken). We perceived piracy as an exception to the general category of shoplifting, but it is possible that a parallel wording of the questions could alter the results.

regarded shoplifting as morally superior to downloading illegal content (5 participants responded “Yes” to the Moral Difference question but produced positive Moral Disparity Scores). 212 respondents remained (84 were accepting of online piracy and 128 saw no difference).

IRI scores for the Accepting group ( $M = 3.25$ ,  $SD = 0.55$ ) were significantly lower than the No Difference group ( $M = 3.47$ ,  $SD = 0.53$ ),  $t(210) = -2.93$ ,  $p = 0.004$ ,  $d = -0.40$ . Regarding the NFCS, scores were lower in the No Difference group ( $M = 3.84$ ,  $SD = 0.69$ ) than in the Accepting group ( $M = 3.68$ ,  $SD = 0.66$ ) to a marginally significant degree,  $t(210) = -1.69$ ,  $p = 0.092$ ,  $d = -0.23$ .

To determine what facets of Interpersonal Reactivity and Need for Closure drove the effect, we analyzed the subscales. To limit Type I error and account for inter-correlation among subscales, we conducted MANOVAs using Moral Difference as the independent variable and the subscales as the dependent variables. The overall MANOVA for the IRI subscales was significant, Wilks'  $\lambda$  (5206) = 3.99,  $p = 0.004$ ,  $\eta^2 = 0.27$ . The No Difference group ( $M = 3.96$ ,  $SD = 0.80$ ) showed significantly higher Empathy scores than the Accepting group ( $M = 3.51$ ,  $SD = 0.91$ ),  $F(1,210) = 14.36$ ,  $p < 0.001$ ,  $\eta^2 = 0.25$ . The No Difference group ( $M = 3.80$ ,  $SD = 0.77$ ) also showed significantly higher Perspective-taking scores than the Accepting group ( $M = 3.51$ ,  $SD = 0.81$ ),  $F(1,210) = 7.24$ ,  $p = 0.008$ ,  $\eta^2 = 0.18$ . The groups showed a marginally significant difference for Fantasy scores,  $F(1,210) = -3.56$ ,  $p = 0.061$ ,  $\eta^2 = 0.13$ , such that the No Difference group ( $M = 3.55$ ,  $SD = 0.81$ ) was higher than the Accepting group ( $M = 3.35$ ,  $SD = 0.70$ ). The groups did not differ regarding Personal Distress,  $p = 0.321$ .

The overall MANOVA for the NFCS subscales was significant, Wilks'  $\lambda$  (5206) = 2.52,  $p = 0.031$ ,  $\eta^2 = 0.24$ . Among the NFCS subscales, the No Difference group ( $M = 4.34$ ,  $SD = 0.92$ ) showed significantly higher Preference for Order scores than the Accepting group ( $M = 3.96$ ,  $SD = 0.79$ ),  $F(1,210) = 9.62$ ,  $p = 0.002$ ,  $\eta^2 = 0.21$ . The groups showed no significant differences for Preference for Predictability ( $p = 0.10$ ), Decisiveness ( $p = 0.82$ ), Discomfort with Ambiguity ( $p = 0.33$ ), or Closemindedness ( $p = 0.56$ ).

In examining correlations with Moral Disparity scores (see Table 1), the IRI subscales performed similarly, with the Empathy and Perspective-taking subscales showing significant positive correlations with Moral Disparity scores. However, no NFCS subscales significantly correlated with Moral Disparity scores.

### 3.1. Moral Difference Justifications

We analyzed the Moral Difference Justifications to determine the degree to which participants in the justification categories differed on specific personality variables. Of the 84 participants who identified a moral difference between shoplifting and downloading, 44 emphasized physicality and 29 emphasized victimization (13 used both and 24 used neither).

Participants mentioning victimization as a Moral Difference Justification ( $M = 3.81$ ,  $SD = 0.80$ ) showed significantly higher Empathy scores compared to those who did not ( $M = 3.35$ ,  $SD = 0.94$ ),  $t(82) = -2.26$ ,  $p = 0.027$ ,  $d = 0.50$ . However, Empathy scores of participants who mentioned victimization remained numerically lower than the scores of participants in the No Difference group ( $M = 3.96$ ,  $SD = 0.80$ ), although this difference was non-significant ( $p = 0.369$ ).

Perspective-taking scores were higher for participants mentioning victimization as a Moral Difference Justification ( $M = 3.63$ ,  $SD = 0.83$ ) compared to those who did not ( $M = 3.44$ ,  $SD = 0.80$ ). However, this difference failed to reach significance ( $p = 0.311$ ) and both group values fell below the No Difference group.

Preference for Order scores were higher among participants mentioning physicality as a Moral Difference Justification ( $M = 4.05$ ,  $SD = 0.75$ ) compared to those who did not ( $M = 3.86$ ,  $SD = 0.84$ ). However, this difference failed to reach significance ( $p = 0.291$ ) and both group values fell below the No Difference group.

## 4. Discussion

IRI subscales performed as expected: participants with high empathy and perspective-taking scores viewed online piracy and shoplifting as morally equivalent. These participants may have more easily recognized victimization, even for remote and abstract victims.

Among NFCS subscales, only Preference for Order performed as predicted. Webster and Kruglanski (1994) described this construct as the “extent to which individuals professed a preference for order and structure in their environment” (p. 1050) and found that it was the only subscale to show a significant positive correlation with authoritarianism and a significant negative correlation with cognitive complexity. Perhaps Preference for Order stood out as the lone significant predictor among the NFCS subscales because it represents a preference for consistency and clarity, *particularly* in regard to criminal behavior.

Unexpectedly, among participants accepting of online piracy, those with higher empathy were more likely to make justifications denying victimization. That is, the high-empathy supporters of online piracy were more likely to provide excuses to minimize concerns of victimization. Perhaps participants who are (relatively) high in empathy but want free music and movies experience cognitive dissonance (Festinger & Carlsmith, 1959). That is, their empathic concern is dissonant with their desire for free goods, creating negative arousal that is resolved by weakening existing antipiracy attitudes. Thus, strong counterarguments would be necessary to reinforce the victim status and allow such individuals to resolve their dissonance by refraining from piracy. For example, the aforementioned study by Levin et al. (2007) showed that victimization messages have limited effect on the acceptance of online piracy. However, the messages in this study did not feature strong arguments, emphasizing dollar amounts lost by the

**Table 1**  
Correlations for study variables.

|                       | 1                 | 2       | 3                  | 4       | 5       | 6      | 7      | 8      | 9      | 10     | 11     | 12   |
|-----------------------|-------------------|---------|--------------------|---------|---------|--------|--------|--------|--------|--------|--------|------|
| 1. Moral Disparity    | 1.00              |         |                    |         |         |        |        |        |        |        |        |      |
| 2. IRI scores         | 0.13 <sup>†</sup> | 1.00    |                    |         |         |        |        |        |        |        |        |      |
| 3. Perspective-taking | 0.15*             | 0.75**  | 1.00               |         |         |        |        |        |        |        |        |      |
| 4. Fantasy            | 0.04              | 0.66**  | 0.31**             | 1.00    |         |        |        |        |        |        |        |      |
| 5. Empathy            | 0.23**            | 0.84**  | 0.63**             | 0.45**  | 1.00    |        |        |        |        |        |        |      |
| 6. Personal Distress  | -0.12             | 0.37**  | -0.04              | 0.05    | 0.05    | 1.00   |        |        |        |        |        |      |
| 7. NFC scores         | 0.05              | 0.07    | -0.12              | -0.06   | 0.04    | 0.33   | 1.00   |        |        |        |        |      |
| 8. Order              | 0.11              | 0.17*   | 0.10               | -0.04   | 0.23**  | 0.12   | 0.82** | 1.00   |        |        |        |      |
| 9. Predictability     | 0.10              | 0.14*   | -0.02              | -0.05   | 0.16*   | 0.28** | 0.88** | 0.76** | 1.00   |        |        |      |
| 10. Decisiveness      | -0.03             | 0.05    | -0.13 <sup>†</sup> | 0.03    | -0.09   | 0.36** | 0.66** | 0.32** | 0.41** | 1.00   |        |      |
| 11. Ambiguity         | 0.01              | 0.14*   | -0.02              | 0.09    | 0.03    | 0.30   | 0.85** | 0.60** | 0.70** | 0.62** | 1.00   |      |
| 12. Closemindedness   | 0.07              | -0.39** | -0.58**            | -0.30** | -0.34** | 0.24** | 0.55** | 0.23** | 0.40** | 0.29** | 0.35** | 1.00 |

<sup>†</sup>  $p < 0.10$ .

\*  $p < 0.05$ .

\*\*  $p < 0.01$ .

entire industry (i.e., “the coversheet emphasized that downloading results in \$150 million in lost profits for artists or companies,” pp. 118). In contrast, Cox and Collins (2014) found a stronger negative perception for illegally downloading movies than for illegally downloading music, and they attributed this to the public awareness campaigns waged by the movie industry. This public awareness campaign often features elaborate and clever anti-piracy messages that play before watching a film on DVD (Crotty, 2012). No corresponding message precedes listening to music on a CD. Thus, well-constructed information campaigns might produce substantial practical effects on online piracy, even if statistical effects sizes in laboratory settings remain modest. This strategy may be especially potent to high-empathy individuals.

A similar counterargument may not be possible for individuals whose rationale for dismissing online piracy rests on the physicality of the object. Perhaps over time, though, as so much of the intellectual property we access becomes digitized, the idea of what constitutes valued intellectual property will evolve to include intangible property.

#### 4.1. Implications

These results suggest personality characteristics predict one's acceptance of online piracy. In particular, individuals accepting of online piracy are likely to have lower empathy, perspective-taking, and preference for order. To the extent that these characteristics are malleable, targeted interventions may be employed to interact with these characteristics to reduce online piracy.

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