DIGITAL PIRACY AMONG ADULTS IN SLOVENIA: AN APPLICATION OF THE THEORY OF INTERPERSONAL BEHAVIOR

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ABSTRACT: In this study, we aim to address the phenomenon of digital piracy by utilizing the Theory of Interpersonal Behavior (TIB), and testing the model on a sample of adult Internet users. Following the basic premise of the TIB, we suggest an individual’s piracy intention is influenced by perceived consequences (benefits and risk), affect, and norm susceptibility. Further, we hypothesize that piracy intention together with subjective knowledge leads to actual piracy behavior. Based on survey data from Slovenia, we show that piracy intention and subjective knowledge influence digital piracy behavior, while perceived positive consequences, affect, and norm susceptibility significantly shape an individual’s piracy intention.

Keywords: Theory of interpersonal behavior, Digital piracy, Perceived consequences, Piracy intention, Piracy behavior

JEL Classification: M30, M31

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INTRODUCTION

Digital piracy or the consumer practice of illegally downloading files from the Internet continues to represent a growing phenomenon and one of particular concern to movie, software, and music industries as well as final consumers (Taylor, Ishida, & Wallace, 2009). According to BASCAP (2011), a platform that connects all business sectors worldwide, digitally pirated music, movies, and software were set to account for between US$ 80 billion and US$ 240 billion in 2015. As a result, companies from the aforementioned industries are allying themselves with governmental and policing circles to tackle the piracy problem.

Although a well-researched phenomenon, digital piracy still lacks effective measures to leverage its incidence (Bateman, Valentine, & Rittenburg, 2013). In general, two approaches have been employed to combat piracy: preventives and deterrents. The former refer to the provision of additional benefits to legitimate consumers, charging low prices, and/or the use of hardware and software technology to prevent digital piracy. Deterrents refer to the use of educational and legal campaigns and sanctions to reduce piracy. More specifically, activities disseminate litigious information about piracy to the public.

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Despite numerous attempts to curb digital piracy, it is still prevalent and is expected to increase (Steele, 2016). For example, several studies indicate that employing legal strategies (actions taken against pirates and antipiracy regulations or laws by the government) are not as effective as hoped for (e.g., Gray, 2012; Jeong & Khouja, 2013, Sinclair & Green, 2016). Instead, educational strategies seem more beneficial, especially in situations of consumer resistance to piracy control and limited budgets (Jeong & Khouja, 2013). Rojek (2005) even suggests straying away from prosecution and moving to a policy of participation.

As a result, scholars devote their efforts to studying the antecedents of digital piracy. More specifically, the majority of studies focus on the antecedents of digital piracy intentions or antecedents of actual behavior. Among the most commonly elucidated piracy intention determinants are attitudes to digital piracy (e.g., Yoon 2011), subjective norms (e.g., Cronan & Al-Rafee, 2008), perceived behavioral control (e.g., Phau, Lim, Liang, & Lwin, 2014; Taylor et al., 2009), ethically charged variables such as deontological orientations (e.g., Bateman et al., 2013) or variables from the cost-benefit framework in the form of perceived benefits (e.g., Yoon, 2011) and perceived risks (e.g., Sinha & Mandel, 2008). It is believed that cognizance of underlying motivations to pirate can greatly enhance future public policy and industries’ actions (Cheng, Sims, & Teegen, 1997).

The purpose of this study is to gain insight into the factors of digital piracy among adult computer users by applying the Theory of Interpersonal Behavior. Hence, this research has two primary objectives. The first is to utilize a comprehensive model of choice behavior in determining some of the key factors influencing digital piracy. This theory has been relatively overlooked in the field of marketing, but has become more established in social psychology, informatics, and management studies (e.g., 1995; Cheng & Cheung, 2001; Moody & Siponen, 2013). As a result, calls for more empirical probing into this model in the consumer choice context have been voiced (Sheth, 1982). We thus hope to contribute to the existing marketing literature by applying the Theory of Interpersonal Behavior in a relevant research setting. In doing so, we aim to shed more light on the role of cognitive and affective measures of evaluation in their direct influence on future intention (Malhotra & McCort, 2001). The second objective is to empirically test the proposed model in the context of pirating digital content and ascertain which specific factors enable or impede individuals from engaging in digital piracy. We also intend to overcome a well-known limitation of previous studies, that is, we employ a sample of adult Internet users instead of relying solely on students (Jacobs, Heuvelman, Tan, & Peters, 2012; Williams, Nicholas, & Rowlands, 2010; Yoon, 2012). By extending our research to the general population, we obtain more comprehensive results yielding greater external validity (Jacobs et al., 2012).

The remainder of the paper is organized as follows. First, we briefly review the existing literature on some of the theoretical frameworks applied in studying digital piracy and counterfeiting behavior. Next, we present theoretical grounding for the hypotheses development and continue by presenting the methodology used in our study. In the section before making final conclusions, we analyze the data using structural equation modeling.
1. THEORETICAL FRAMEWORK

A vast majority of existing studies applies models of attitude-behavior relations, such as the Theory of Reasoned Action (TRA) (e.g., Aleassa, Pearson, & McClurg, 2011) and the Theory of Planned Behavior (TPB) (e.g., Cronan & Al-Rafee, 2008). Although prominent theories, they have been subjected to criticism that attitudes alone are often poor predictors of actual behavior (e.g., De Pelsmacker & Janssens, 2007). Moreover, a substantial amount of variance in buying behavior remains unexplained by these models, suggesting that other relevant variables should be included when studying various kinds of social behavior (Bamberg & Schmidt, 2003; Shaw et al., 2005). In addition, many piracy studies employ student samples and thus omit other relevant groups. Namely, students are often considered inadequate because of their poor representation of the general population (Yoo & Lee, 2012).

In this study, we seek theoretical grounding in the Theory of Interpersonal Behavior (Triandis, 1980). The TIB is recognized as a more comprehensive theory that extends upon the antecedents of behavior predicted by the two most widely used models of behavior: the TRA and TPB. Namely, the TIB has been shown to account for more variance in a model when compared to the TRA and TPB (Bamberg & Schmidt, 2003). This theory covers emotive as well as habitual dimensions and recognizes that the individual's behavior is not always rational (McDonald, 2014). Despite these strengths, there is a dearth of digital piracy studies that rely on Triandis's model as a conceptual framework. For example, Ramayah et al. (2009) use Triandis's theory to examine Internet piracy among university students, while Limayem, Khalifa, and Chin (2004) examine factors that influence software piracy.

According to the TIB, the individual's behavior is a function of intention to engage in this behavior, facilitating conditions, and the strength of habit in performing the behavior. Intention, in turn, depends on perceived consequences of the behavior, affect towards performing behavior and social factors (Pee, Woon, & Kankanhalli, 2008). While intention refers to the individual's motivation regarding the performance of the behavior, facilitating conditions refer to objective factors present in the environment that are instrumental in achieving a certain task. Habits are described as situation-behavior sequences that are or have become automatic and which occur without self-instruction. Further, each act of behavior may lead to positive or negative outcomes, thus consumers believe this act has certain perceived consequences. Affect refers to an individual's emotional feelings: the “feeling of joy, elation, or pleasure, or depression, disgust, displeasure, or hate associated by an individual with a particular act” (Triandis, 1980). Social factors are described as those norms, roles, and values at the societal level that influence an individual's behavior (Limayem et al., 2004).

Against this theoretical background, a parsimonious conceptual model of digital piracy is proposed in which we focus on piracy behavior and intention, knowledge, perceived consequences, affect, and a social factor (Figure 1). We posit that digital piracy behavior depends on the individual's intention to engage in piracy and their subjective knowledge about where and how to reach digital content. In this case, subjective knowledge helps
an individual make certain behavior easy to perform and thus facilitates their behavior (facilitating condition). Moreover, facilitating conditions may be considered as factors in the individual's environment that make a behavior easy to perform, having either a situational (e.g., access to resources) or an internal dimension (e.g., knowledge) (Pee et al., 2008). Consistent with the TIB, we also posit that one's piracy intention depends on three factors: perceived consequences (benefits and risks), affect, and a social factor (norm susceptibility). When engaging in digital piracy, an individual anticipates certain consequences that can be either positive (benefits from pirating) or negative (risks of pirating). Not only the consequences, but also the feelings associated with illegal downloading are suggested to impinge upon one's future intent. Another driver of piracy intention is a social factor defined as norm susceptibility (i.e. conformity to reference group norms).

Figure 1. Conceptual model of digital piracy based on Triandis's theory of interpersonal behavior

2. HYPOTHESES DEVELOPMENT

2.1 Determinants of Digital Piracy Behavior

The first set of hypotheses examines potential antecedents of digital piracy behavior. More specifically, we look at two determinants of piracy behavior: digital piracy intention and subjective knowledge. Following the basic premise of the TIB, we suggest an individual's intention to engage in digital piracy, defined as a conscious plan to carry out this behavior (Eagly & Chaiken 1993), leads to actually engaging in pirating digital content from the Internet (H1). This hypothesis rests on the previously established evidence of a significant influence of intention on actual behavior in the digital piracy context. For example, Ramayah et al. (2009) provide empirical evidence of a significant relationship...
between future piracy intention and actual piracy behavior measured as a frequency of downloading various types of free content. Along these lines, Taylor (2012) finds that the individual’s digital piracy intention impacts their actual digital piracy behavior defined as the sum of downloaded and uploaded suspect digital files. Based on this evidence, we hypothesize:

**H1:** Digital piracy intention positively influences digital piracy behavior.

Along with the intentions, facilitating conditions are considered an accurate predictor of actual behavior according to the TIB (Triandis 1980). In this study, we examine subjective knowledge as an internal dimension of facilitating conditions. This concept has rarely been examined in digital piracy research. One of the few studies to empirically test the influence of the consumer’s perceived knowledge on behavior was conducted by Hennig-Thurau, Henning and Sattler (2007). Their study indicates that consumers’ file-sharing knowledge facilitates their obtainment of illegal movie copies. Hence, we hypothesize an individual’s perceived knowledge of where and how to share files positively influences their digital piracy behavior (H2).

**H2:** Subjective knowledge positively influences digital piracy behavior.

### 2.2 Determinants of Digital Piracy Intention

According to Triandis (1980), each act of behavior is perceived as having a potentially positive or negative outcome. When pirating digital content is perceived as having positive outcomes (benefits), individuals will be more motivated to engage in digital piracy and will thus form certain piracy intentions. In the existing piracy studies, several authors have attested to a significant impact of perceived benefits on intentions to pirate. For example, Yoon (2011) shows that an individual veers toward digital piracy behavior directly because of preferred expected consequences, such as saving money and time, possessing more digital products, and improving work performance. Similarly, Lyonski and Durvasula (2008) point out a significant correlation between social benefits of the illegal dissemination of music files and the intention to download such content. Thus, it is suggested that perceived positive consequences are positively related to future piracy intent (H3).

**H3:** Perceived benefits positively influence digital piracy intention.

By contrast, when digital piracy is perceived as having unfavorable outcomes individuals are less likely to form an intention to engage in digital piracy. Sinha and Mandel (2008) demonstrate that an increased risk of getting caught significantly lowers the individual’s tendency to pirate. Somewhat unexpected was their finding that for certain groups of consumers increasing the perceived risk led to an increase in their likelihood to pirate. While examining the role of four types of perceived risk (performance, social, prosecution, and psychological) in shaping behavioral intention to use pirated software, Liao, Lin, and
Liu (2010) find that only prosecution risk exerts a significant influence on intention. On the other hand, the role of legal (prosecution) risk proved negligible in a study by Hennig-Thurau et al. (2007) which, instead, pointed out the impact of technical and moral aspects or risk. Given the general tendency of studies to focus on prosecution and technical risks, we decided to tackle this risk controversy by hypothesizing that an individual's perception of technical risk reduces their intention to pirate (H4). Our decision to probe into the technical aspect is primarily guided by the finding of Konstantakis, Palaigeorgiou, Siozos, and Tsoukalas (2010) that consumers consider legal prosecution due to the use of pirated software as highly improbable; hence, technical risk is more likely to influence piracy intention.

**H4: Perceived technical risk negatively influences digital piracy intention.**

To better explain intention, Triandis (1980) also included a purely affective measure of attitude toward behavior. The affective aspect has rarely been investigated in the digital piracy context, with the exception of e.g. Al-Rafee and Cronan (2006) who examine the impact of affective beliefs in the form of happiness and excitement on attitudes to pirating digital material. Likewise, Wang and McClung (2012) reveal that anticipated positive emotions (feeling happy, pleased, and good) predict intentions to engage in illegal digital downloading. In the digital piracy context, we expect that the positive affect expected from pirating digital content will be positively related to one’s intent to engage in such behavior in the future (H5).

**H5: Affect positively influences digital piracy intention.**

According to the TIB, another significant determinant of digital piracy intention is social factors which involve an individual’s internalization of the reference group’s subjective beliefs with respect to the behavior. In this study, norm susceptibility plays the role of a social factor and is viewed as the extent to which an individual seeks compliance from other people when considering various products and brands. In the TIB context, it has been suggested that there is a positive relationship between social factors and the intention to engage in certain behavior. Namely, based on their empirical study Limayem et al. (2004) conclude there is a significant positive impact of two specific groups of people (family and friends) on an individual's piracy intention formation. On the other hand, several studies attest to the negative impact of norm susceptibility on attitudes to piracy and indirectly on piracy intention. For example, Wang, Zhang, Zang, and Ouyang (2005) provide empirical support for a negative influence of normative susceptibility on attitudes to software piracy, while Bashir, Phau, and Ferguson (2012) failed to empirically demonstrate the hypothesized negative effect of normative susceptibility on digital piracy intention. To address this inconsistency, we propose hypothesis 6 which posits that a social factor (norm susceptibility) positively influences one’s intent to pirate digital content (H6).

**H6: Norm susceptibility positively influences digital piracy intention.**
3. RESEARCH METHODOLOGY

The model depicted in Figure 1 was tested on a nationally representative sample of 10,000 consumers who had permanent residence in Slovenia and were at least 18 years old. The sample was obtained from the National Statistical Office and was representative of the population in terms of age, gender, type of settlement, and region. To increase the response rate, we offered a raffle with various monetary prizes for the first 100 respondents who completed and returned their questionnaires. Although a total of 1,523 self-administered paper questionnaires were returned, 910 respondents were included in the present study in order to test the stated hypotheses. A prerequisite for the inclusion in this study was the respondent’s use of computers. Namely, only those respondents who had at least some experience with computers/Internet were included in the study.

The final sample consisted of 57.3% females and 42.7% males, while their average age was 43 years (standard deviation of 16.7). More than 60% of all respondents (62.3%) reported having completed secondary school, 27.8% stated they had completed university, 7.8% had finished graduate studies, and 2.2% of the respondents had completed primary school. Over half of the study participants (53.6%) is employed full-time, 17.9% of the sample declared they were students, 13.6% were retired, and 10.3% were not working at the time of filling out the questionnaires. The remainder of the sample was either part-time employed (2.9%) or on temporary leave (1.9%).

The construct measures were based on the existing literature, but were adapted to the specific research context. All constructs were measured on five-point Likert-type scales, except piracy behavior. The latter was measured as the number of units respondents had illegally downloaded in the previous month in various categories (films/TV episodes, music tracks, games software, business/application software, books). As a measure that encapsulates very recent behavior, it is used as a proxy for current behavior. We operationalize the piracy intention construct as the likelihood a consumer will illegally download files from the Internet in the future (or within the next month). A two-item scale designed by Taylor and Todd (1995) was applied to measure future piracy intent. Next, subjective knowledge is operationalized as knowledge possessed by an individual with regard to file-sharing and downloading. We implement the consumer file-sharing knowledge scale previously used by Hennig-Thurau et al. (2007), resulting in a four-item scale. Perceived benefits are captured by three statements referring to specific benefits of illegal downloading perceived by an individual (cf. Hennig-Thurau et al., 2007). Perceived risk was operationalized as potential adverse consequences of illegally downloading files that could affect an individual’s computer and their data. As in case of benefits, perceived risk was also measured with three statements partly adapted from the scale of technical costs of the copy by Hennig-Thurau et al. (2007). In our study, affect is operationalized as an individual’s positive emotions associated with illegally downloading files reflecting an individual’s emotional state experienced during this activity. The three items measuring affect were drawn from previously conducted studies by Cronan and Al-Rafee (2008) and de Matos, Ituassu, and Rossi (2007). Norm susceptibility was measured with six items (cf. Bearden, Netemeyer, & Teel, 1989) and is defined as the extent to which consumers changed their initial decision because of their relevant others’ differing opinion.
4. DATA ANALYSIS

Based on Anderson and Gerbing’s (1988) recommendations, the data analysis consisted of two steps. First, a Confirmatory Factor Analysis with LISREL was used to check the validity and reliability of the measurement items. Then, full-information structural equation modeling was employed to examine the structural relationships in the model. The model fit measures showed the data conform well to the model ($\chi^2 = 931.13$, df = 194, $p < 0.00$, GFI = 0.915, CFI = 0.941, RMSEA = 0.065, sRMR = 0.045). All the multiple-item constructs display adequate composite reliability (CR) and average variance extracted (AVE). More specifically, CR values ranged between 0.79 and 0.90 and AVE values varied between 0.56 and 0.80, with cut-off values of 0.50 and 0.70, respectively (see Table 1).

Table 1. Average variance extracted (AVE), composite reliability (CR) and standardized factor loadings with t-values

<table>
<thead>
<tr>
<th>Scale Item</th>
<th>AVE</th>
<th>CR</th>
<th>Standardized factor loading (t-value)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Piracy intention</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I intend to illegally download files from the Internet in the future.</td>
<td>0.80</td>
<td>0.89</td>
<td>0.92 (7.31)</td>
</tr>
<tr>
<td>If the need or opportunity arises within the next month, I would illegally download files.</td>
<td></td>
<td></td>
<td>0.87 (11.60)</td>
</tr>
<tr>
<td><strong>Subjective knowledge</strong></td>
<td>0.70</td>
<td>0.90</td>
<td></td>
</tr>
<tr>
<td>I know several different file sharing networks.</td>
<td>0.72</td>
<td>0.92 (19.96)</td>
<td></td>
</tr>
<tr>
<td>I know how to find and illegally download software from file sharing networks on the Internet.</td>
<td>0.92</td>
<td>13.38</td>
<td></td>
</tr>
<tr>
<td>I know how to use file sharing software in order to illegally download files from these networks.</td>
<td>0.95 (9.24)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I know how to configure my firewall in order to be able to access file sharing networks.</td>
<td>0.73</td>
<td>19.83</td>
<td></td>
</tr>
<tr>
<td><strong>Perceived benefits</strong></td>
<td>0.58</td>
<td>0.80</td>
<td></td>
</tr>
<tr>
<td>Illegally downloading files increases my ability to collect music/films/games.</td>
<td>0.77</td>
<td>14.91</td>
<td></td>
</tr>
<tr>
<td>Illegally downloading files allows me to have files that I would not be able to afford.</td>
<td>0.79</td>
<td>14.20</td>
<td></td>
</tr>
<tr>
<td>Illegal downloading helps me get music/films/games faster compared to legal channels.</td>
<td>0.72</td>
<td>16.50</td>
<td></td>
</tr>
</tbody>
</table>
Perceived risk  

Illegally downloading files is risky because:
They might infect your computer with a virus or malware. 0.79 (11.30)
It could allow access to your data, files, or passwords. 0.79 (11.40)
They might damage your computer.

Affect  

Illegally downloading files would make me feel satisfied. 0.71 (17.99)
I like illegally downloading files from the Internet. 0.89 (9.72)
Illegally downloading files would make me feel happy. 0.74 (17.19)

Norm susceptibility  

It is important that others like the products and brands I buy. 0.69 (19.34)
If other people can see me using a product, I often purchase the products and brands they expect me to buy. 0.74 (18.65)
I like to know what brands and products make a good impression on others. 0.73 (18.80)
I achieve a sense of belonging by purchasing the same products and brands that others purchase. 0.83 (16.41)
If I want to be like someone I often try the products and brands that they buy. 0.83 (16.26)
I often identify with other people by purchasing the same products and brands they purchase. 0.82 (16.85)

To provide additional insight into the relationships among the constructs and a single-item measure of behavior we calculated a correlation matrix (Table 2). The valence of the correlation coefficients corresponds closely to our research hypotheses. Namely, both digital piracy intention and subjective knowledge are positively related to digital piracy behavior as reflected in the moderately high correlation coefficients. Similarly, perceived benefits and affect correlate positively with the intention, while the correlations of perceived risk and norm susceptibility with the intention are weak and of opposite signs (negative and positive, respectively).

Table 2. Correlation matrix

<table>
<thead>
<tr>
<th></th>
<th>1.</th>
<th>2.</th>
<th>3.</th>
<th>4.</th>
<th>5.</th>
<th>6.</th>
<th>7.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Digital piracy intention</td>
<td>1</td>
<td>0.52</td>
<td>0.52</td>
<td>-0.10</td>
<td>0.53</td>
<td>0.02</td>
<td>0.30</td>
</tr>
<tr>
<td>2. Subjective knowledge</td>
<td></td>
<td>1</td>
<td>0.40</td>
<td>-0.14</td>
<td>0.47</td>
<td>0.08</td>
<td>0.32</td>
</tr>
<tr>
<td>3. Perceived benefits</td>
<td></td>
<td></td>
<td>1</td>
<td>-0.05</td>
<td>0.44</td>
<td>0.07</td>
<td>0.30</td>
</tr>
<tr>
<td>4. Perceived risk</td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td>-0.20</td>
<td>-0.10</td>
<td>-0.08</td>
</tr>
<tr>
<td>5. Affect</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td>0.22</td>
<td>0.35</td>
</tr>
<tr>
<td>6. Norm susceptibility</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td>-0.09</td>
</tr>
<tr>
<td>7. Digital piracy behavior</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
</tbody>
</table>
As suggested in the first hypothesis, the data confirm that the intention to pirate is positively related to actual digital piracy behavior (std. factor loading = 0.10). We also find support for the hypothesis that knowledge of how and where to share files leads to digital piracy behavior (std. factor loading = 0.56). Similarly, we find a significant positive relationship between perceived benefits and future piracy intent (std. factor loading = 0.32). Although we expected a significant negative influence of perceived risk on piracy intention, we could not provide empirical evidence of a statistically significant relationship. However, there seems to be a strong positive relationship between affect and piracy intention, as suggested in Hypothesis 5 (std. factor loading = 0.54). Contrary to our expectations, we found a negative relationship between norm susceptibility and intention (std. factor loading = -0.13). That is, the more people adhere to norms and beliefs or relevant reference groups, the less likely they are to form piracy intentions. The results are summarized in Table 3.

Table 3. Testing the conceptual model

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Structural path</th>
<th>Standardized factor loading (t-value)</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1: +</td>
<td>Piracy Intention → Piracy Behavior</td>
<td>0.10* (2.73)</td>
<td>Supported</td>
</tr>
<tr>
<td>H2: +</td>
<td>Knowledge → Piracy Behavior</td>
<td>0.56* (14.41)</td>
<td>Supported</td>
</tr>
<tr>
<td>H3: +</td>
<td>Perceived Benefits → Piracy Intention</td>
<td>0.32* (7.81)</td>
<td>Supported</td>
</tr>
<tr>
<td>H4: -</td>
<td>Perceived Risk → Piracy Intention</td>
<td>0.02 (0.59)</td>
<td>Not supported</td>
</tr>
<tr>
<td>H5: +</td>
<td>Affect → Piracy Intention</td>
<td>0.54* (11.92)</td>
<td>Supported</td>
</tr>
<tr>
<td>H6: +</td>
<td>Norm Susceptibility → Piracy Intention</td>
<td>-0.13* (-4.38)</td>
<td>Not supported</td>
</tr>
</tbody>
</table>

Model fit: $\chi^2 = 931.13$, df = 194, p < 0.00, GFI = 0.915, CFI = 0.941, RMSEA = 0.065, sRMR = 0.045

Note: * significant at the .05 level (one-sided)

5. DISCUSSION OF THE FINDINGS

This research offers new insights into the dynamic nature of acquiring illegal digital content by applying the relatively under-researched Theory of Interpersonal Behavior and testing it on a sample of adult computer users. The results show that an individual’s piracy intent and their subjective knowledge of downloading significantly impinge on digital piracy behavior, while perceived positive consequences, an affective attitude and norm susceptibility significantly shape the individual’s piracy intention. However, we could not provide empirical support for the hypotheses that perceived risk negatively influences future piracy intention and norm susceptibility positively impacts intention.

Interestingly, it seems that compared with future piracy intention subjective knowledge is a significantly stronger determinant of piracy behavior (with path coefficients 0.56 and 0.10, respectively). Both one’s intent and their subjective knowledge about file-sharing and downloading tend to increase the level of engaging in digital piracy behavior. These findings are consistent with previous studies in the domain of digital piracy. For example,
Ramayah et al. (2009) demonstrate that intention to pirate leads to actual Internet piracy behavior among university students. Further, Hennig-Thurau et al. (2007) show that consumer file-sharing knowledge correlates positively with the number of illegal movie copies that an individual watches.

With regard to future piracy intention, three drivers significantly shape one’s contemplation of potential future action. Namely, perceiving desirable consequences of pirating digital content and experiencing positive emotions associated with illegally downloading files both encourage the tendency to engage in future digital piracy. Contrary to our expectations of a positive influence, norm susceptibility (a consideration of relevant others’ opinions) significantly reduces one’s piracy intention. A possible explanation might be that those respondents who are generally susceptible to norms of significant others with respect to products and services suppress their tendency to pirate. Namely, the impact of this personality trait might span across various products and activities (even downloading) and is not limited to products and brands. This could be aligned with the empirically supported finding of Wang et al. (2005) that consumers who were normatively susceptible were less likely to have a favorable attitude to software piracy, which indirectly reduces their piracy intention. Allegedly, software piracy does not have a positive social image; hence, higher susceptibility to social influence tends to have a negative influence on a favorable attitude to software piracy. Besides fearing that relevant others will not approve of digital piracy behavior, another potential reason could be our choice of the original measurement scale which was drawn from the study by Bearden et al. (1989). Hence, it was not tailored to the specific digital piracy context, but instead addressed the impact of others in situations of purchasing products and brands in general. Interestingly though, a recent study by Kos Koklic, Kukar-Kinney, and Vida (2016) revealed a strong correlation between a general and piracy-specific measure of norm susceptibility. The two measures even showed the same relationship with digital piracy behavior. This finding makes the first explanation more plausible.

The only construct that seems to exhibit no significant impact on piracy intention is perceived risk. Apparently, potential technical difficulties of pirating digital content are not crucial in consumers’ consideration of future piracy actions. Given the well above-average values of respondents’ agreement with the technical risk items, we might conclude that this is a relevant aspect of concern, but not in the light of intention formation. Namely, consumers’ perception of considerable technical difficulties from pirating digital content is not the main driver of digital piracy intention. The high rating of technical risk spans even across various groups broken down by demographic variables age, gender, and education. Instead, other types of perceived risk that were not captured in our measure might play a pivotal role in influencing digital piracy intention. For example, despite the equivocal evidence of the role of prosecution risk in affecting intentions (e.g., Hennig-Thurau et al., 2007; Sinha & Mandel, 2008), it is possible that our sample of adult computer users would in fact hinge their intentions on this type of risk. Another potential reason for the insignificant role of perceived risk in piracy intention is the greater prominence of other constructs in the model, such as affect and perceived benefits. However, taking into account that there have been relatively few reported prosecutions regarding copyright
infringements and violations in Slovenia and piracy prosecution is still in the early stages of implementation (Bureau of Economic and Business Affairs, 2014), other facets of risk such as psychological risk might be more distinct.

Although not the primary objective of this study, a compelling finding refers to the strength of piracy intention antecedents. That is, among the three significant drivers, affect was the strongest determinant of piracy intention (with a path coefficient of 0.52). This finding underpins Triandis’s (1980) contention that affect (emotions) is a significant aspect that needs to be considered in modeling human intention formation. Given the entertaining context of acquiring files from the Internet, Taylor et al. (2009) also highlight that it is critical to include emotional content in a psychological model of intentions and behavior. Although the belief component (perceived benefits) also strongly determines an individual’s piracy intention, the role of affective determinants indeed seems more pronounced. Hence, empirical evidence of the role of cognitive and affective antecedents of future intention is provided, as articulated by Malhotra and McCort (2001).

6. RESEARCH IMPLICATIONS, LIMITATIONS, AND FUTURE RESEARCH

The present study affords useful implications for various stakeholders, for example companies from the affected industries and public policy-makers. The study findings indicate that the core construct worth focusing on is the individual’s subjective knowledge as it remarkably determines one’s piracy behavior (especially compared to piracy intention). However, to a large extent, consumer’s knowledge about where and how to reach digital content is beyond a company’s control. One possibility of building on this pivotal construct is to systematically examine the levels of knowledge possessed by various groups of consumers. Admittedly, for most companies this is not a feasible practice and can hardly be put into practice.

A more promising strategy for companies would be to focus on decreasing consumers’ intentions to engage in digital piracy. In this domain, leveraging digital piracy intention through means of perceived benefits and positive affect seem more appropriate. For instance, marketers of digital content could invest their efforts to reduce the benefits of pirating as perceived by consumers. This could be achieved by narrowing the gap between the characteristics of legally and illegally acquired digital content, especially in light of these three features: (1) ability to collect files; (2) affordability of files; and (3) availability of files. Companies could either increase the positive perception of legally obtained files or decrease the positive perception of illegally obtained content or do both as part of a deterrent educational strategy.

When designing marketing communications with the aim of alleviating the digital piracy phenomenon, marketers could also apply the affective component. Namely, this study demonstrates that experiencing positive emotions on the part of consumers boosts their tendency to engage in digital piracy. Persuasive appeals that would call into question the happiness and satisfaction associated with illegally downloading files might help to divert consumers’ emotions and consequently lead to less pronounced digital piracy intentions and behavior.
Given that companies can better control digital piracy when they employ a combination of preventive and deterrent strategies (Jeong & Khouja, 2013), it would make sense to consider concurrently running educational campaigns (for example, by focusing on the gap between legal and illegal obtainment) as well as providing added value, extended services and/or low prices. Similarly, Sinclair and Green (2016) advocate that companies need to work with the technological transformations to improve the consumer experience and the product offering. By combining strategies, companies would on one hand motivate consumers to reduce or stop pirating and, on the other, incentivize them to purchase legitimate products.

The findings of this study also offer grounds for public policy implications. Use of the aforementioned preventive and deterrent strategies (Gopal & Sanders, 1997) has so far met with limited success. Hence, public policy actions could attempt to raise awareness about the limited benefits of obtaining illegal content and emphasize advantages of obtaining and having legal alternatives. Since individuals are most responsive to consequences that affect them personally (Yoon, 2011), public policy campaigns could point out the benefits for consumers themselves. Another potentially useful finding for public policy is the importance of positive affect in driving digital piracy intention. Along with companies, public policy-makers could also design campaigns to illuminate the fallacious nature of consumer happiness experienced when illegal downloading.

Digital piracy is a phenomenon that continues to perplex scholars and practitioners. Accordingly, considerable effort has been made to explore its antecedents and consequences. This study tests a conceptual model of digital piracy intentions and behavior grounded in the Theory of Interpersonal Behavior. It adopts a survey-based approach in the gathering of data among adult computer users in Slovenia. The findings underline the importance of subjective knowledge (facilitating condition) and digital piracy intention in influencing behavior, while perceived benefits (consequences), affect, and norm susceptibility (social factor) are relevant determinants of the digital piracy intention. Our key implications relate to the findings that personally relevant positive consequences in the form of perceived benefits and positive affect experienced with illicit downloading are the strongest drivers of future intentions. Thus, copyright holders as well as public policy-makers could build their appeals on reducing the positively charged perception of the consequences of illegal downloading and the emotional state associated with performing the activity.

There are several limitations of this study which also suggest potentially promising avenues for future research. First, the measurement scales used in our research have a limited scope and do not capture some other facets that might prove relevant in shaping one’s digital piracy intent and behavior. Including other aspects such as prosecution risk (Sinha & Mandel, 2008) or psychological risk (Liao et al., 2010) might provide additional insight into the mechanism of digital piracy intention formation. Similarly, extending the scope of perceived benefits into the domain of anti-industry and social aspects is another area worth examining in future studies (Hennig-Thurau et al., 2007).

Second, only a subset of Triandis’s original model was applied in this study. Habits as a potentially relevant construct in an individual’s routine piracy behavior might improve the
explanatory power of the proposed model. Namely, habits play an important role in some situations of a consumer’s digital piracy behavior as pointed out by several researchers (e.g., Ramayah et al. 2009; Yoon, 2011).

Third, the current study employs the original norm susceptibility scale which is a well-established and tested measurement instrument (Bearden et al., 1989). It helped us gain insight into the normative influence of others on an individual’s choice of products and brands in general. Notwithstanding the prominent role of this scale, future digital piracy research should allow for examining the influence of relevant others in the specific situation of illegally downloading files from the Internet. Despite these limitations, we hope the study contributes to the existing literature in the field of digital piracy.

REFERENCES


