# Illegal Download Attitudes, Leisure Boredom, Sensation Seeking and Value of Honesty

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#### Abstract

Activities of downloading free MP3/movies from unauthorized websites are blamed to have led to huge revenue loss caused by a continuous decline in music CD sales and overall poor film box-office performances in the past years. In this exploratory study, it attempts to identify some possible factors that may help to explain why people commit such acts despite the fact that they are legally liable to intellectual property rights infringement. Variables used in this survey include: attitudes towards illegal download behaviors, psychological perceptions of leisure boredom, personality traits of sensation seeking tendency, internalized value of honesty, Internet usage and demographics. Data from a sample of 431 respondents who are Internet users indicate that nearly all of these variables (except the factor of *Trendy/Excitement* in Download Attitudes) are found to have significant correlations to the levels of illegal download activities. Among them, Legal Interpretation and Beneficial *Returns* are the strongest predictors. Moreover, young male who are heavy Internet users are more likely to download free MP3/movies from unauthorized websites. In addition, people who are less honest and more active in downloading unauthorized MP3/movies tend to have a loose or liberal Legal Interpretations on the illegal act of downloading. Less honest female of younger age groups who have frequent illegal MP3/movies download experience tend to treasure more on Beneficial Returns. Less honest people of older age groups, who score high on leisure boredom and sensation seeking scales, tend to agree more on Trendy/Excitement brought about by these behaviors. Implications of these findings are further discussed in detail.

(Word count: 255)

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# Introduction

#### The Case of Napster

Illegal MP3 download has been claimed to be the cause of continuous decline in revenue of the global recording industry in recent years<sup>1,2</sup> (25% drop from US\$38 billion to less than US\$30 billion from 2000-2004).<sup>3</sup> In December 1999, the Recording Industry Association of America (RIAA) and the National Music Publishers Association (NMPA) filed a lawsuit against the MP3 file-swapping company Napster for copyright infringement. The public for a moment was alarmed of the consequences and liability caused by online piracy. Yet illegal MP3 download activities have no sign of reducing.

#### The Case of BT Download

With new and improved technology, the wave of online piracy has expanded from music to video. In January 2005, an unemployed man of 38 was arrested in Hong Kong who has become the first person in the world arrested for uploading movies on to the Internet using the latest BT (Bit Torrent)<sup>4</sup> file-sharing technology.<sup>5</sup> Although there was no evidence that this person had profited from uploading the movies, he had nevertheless infringed the copyright laws.

<sup>&</sup>lt;sup>1</sup>"唱片業兩年損失六億" Sing Tao Daily, January 14, 2005.

<sup>&</sup>lt;sup>2</sup> "頭號殺手在殺甚麼?" 人民日報市場報, March 8, 2005.

<sup>&</sup>lt;sup>3</sup> Fung R. (2005). "The Impact of Development of the Digital Society on Recording Industry." <u>http://www.hkatv.com/popup/copyrightissue/rickyfung\_speech.ppt</u>

<sup>&</sup>lt;sup>4</sup> "What is Bit Torrent?" <u>http://www.bittorrent.com/introduction.html</u> <sup>5</sup> South China Morning Post, January 14, 2005.

#### **The Problem**

In the 21<sup>st</sup> century, up/downloading is a way of life. Digital technology has never before made graphics, print, sound and multimedia combination so easy and convenient to be duplicated, stored and disseminated. The ever-improved technology and wider bandwidth have helped to allow more information and larger data files flow through the Net in light speed. Everything is just a click away. This new cyberspace has brought us new problems – cybercrimes, in which the Internet piracy problem is just one of them. Anonymity in the cyberspace tends to make people believe that the Internet is a "lawless place" and that this trans-jurisdictional superhighway has made law enforcement difficult.<sup>6</sup> The problem has become so extensive and severe that it is almost impossible to get it under control. For the younger generations who are growing up with the Internet, the situation seems to get worse.

In a recent survey done by the Hong Kong Institute of Asia-Pacific Studies on behalf of the Motion Picture Industry Association Limited, 17.2% of 1,502 respondents admitted to have downloaded free movies from the Net.<sup>7</sup> The rate was much higher (23.6% more) among younger age group of 15-24 than older age group of 45-64.<sup>8</sup> In another survey done by the Intellectual Property Department of Hong Kong, among the sample of 1,214 respondents, most people (95.7%) saw the need to protect IP rights but there were still 10% of the respondents admitted that they have "illegally downloaded MP3/movies/games from unauthorized websites and shared them with other people."<sup>9</sup> Among those admitted, over 40% of them were under the age of 30. Although 10% may not sound very astounding, the figures only included those who admitted to have "illegally downloaded the files and shared

<sup>&</sup>lt;sup>6</sup> Grabosky P. and Smith R. (2001). Telecommunication fraud in the digital age. *Crime and the Internet*. Ch. 3, p.30.

<sup>&</sup>lt;sup>7</sup>"道德手段難解決網上侵權,"新報, February 23, 2005.

<sup>&</sup>lt;sup>8</sup> "專業人士最多非法下載電影",都市日報,February 18, 2005.

<sup>&</sup>lt;sup>9</sup> Annual Survey on Public Awareness of Protection of Intellectual Property Rights, Intellectual Property Right Department of Hong Kong, November 2004.

them with friends." There should be a lot more people if the survey would include those who have downloaded the files for the purpose of their own use (without sharing with others).

So, if the act of downloading unauthorized MP3/movies from the Net is against the law and thus considered to be "illegal", why would so many people dare to take the risks? What are the motivations or gratifications that drive them to commit these "cybercrimes"? Or, do they hold different views/attitudes towards such behaviors? Are there certain characteristics these people tend to possess?

# **Theoretical Frameworks**

#### Attitudes of Illegal Download

MP3/movies downloads are relatively new in the history of Internet. This is getting popular in recent years due to the improved compression methods and file-exchange technology. In order to explore people's attitudes towards these behaviors, the first part of this study attempts to focus on the attitudes towards illegal downloads.

In many ways, cybercrime is not much different from traditional crime except it is done with a computer. Yet as the political economy of information capital gradually emerged from the Internet, there inevitably exists an ongoing power struggle over market control, giving definitions of what supposed to be acceptable and unacceptable cyber-behaviors.<sup>10</sup> Intellectual property rights have always been a controversial issue that creates gray areas. With up/downloading and sharing files are so common in the Net nowadays, to what extend should the IP rights come into place? What is the "fair use" of a legal copy and what's not? Who can redraw the line and determine on its acceptable way of

<sup>&</sup>lt;sup>10</sup> Wall, D.S. (2001). "Cybercrimes and the Internet," pp. 10-11.

use?

Past history has shown that new technology always leads to mass production because those things, whether they are crops or goods in the agricultural and industrial revolutions, are easier and cheaper than ever for reproduction. In this digital era, the costs of mass duplication, reproduction and dissemination are drastically reduced to near zero. Internet has created an interactive environment for everyone to participate. Information accessibility is open to almost everyone. People are not just recipients but also contributors. So, should the rules of the game be changed? Should there be a different way of evaluating the digitized information in this knowledge-based society? If so, how should we put the correct value to these "products"?

According to Rishab Ghosh's Cooking Pot Markets Theory,<sup>11</sup> in this cyber world of economy, abundant information, creative contributions and even valuable software (e.g. Linux and Apache) can now be accessed free of charge over the Net and there may not always be a monetary value attached. People give and take as they wish for mutual support and benefits, and nothing else. This type of cyber culture is getting more common that people tend not to think of the ownership of the "*property rights*" when they click to download or forward text files, emails, internet stories, a picture or even video clips. In this information explosion era, no one seems to pay attention to the ownership of the "*rights*" from the Internet. As long as the message/information is received and read, it immediately becomes valueless and will soon be trashed. People enjoy this "eyeballing" and fast information exchange process, but they certainly will think twice if the information (whether it is the music or film) costs them money. So, have people in the film and music industry overestimated the loss claimed by IP rights infringement? How would people, particularly

<sup>&</sup>lt;sup>11</sup> Ghosh, R.A. (1998). "Cooking pot markets: an economic model for the trade in free goods and services on the Internet." <u>www.firstmonday.dk/issues/issues3\_3/ghosh/</u>

the younger generations, see the line being drawn with what IP rights are to be protected and what are not? Are people in the cyberspace expecting to have new copyright mechanisms that are very different from the traditional ones? If people do not share the same values, do they incline to fight against the price-setting system in their own ways?

One the other hand, for those who have accepted the current IP law definitions, are they not taking illegal piracy matters seriously? Is it because online piracy is similar to white-collar crimes in which victims are not so visible and thus receive less attention? Would the perceived difficulties of being arrested and convicted in fact have helped to encourage illegal download? Some answers regarding people's attitudes towards illegal download are hoped to be found from this research.

Besides the legal aspects, there are always some attractive beneficial returns and excitements that draw people to commit such acts. Therefore, identifying people's attitudes towards illegal download is the first and core part of this research.

RQ1: What attitudes do Internet users have towards illegal downloading?

#### Leisure Boredom

Apart from the external influences, behaviors are related to one's psychological state. According to Iso-Ahola and Weissinger, "leisure boredom is the subjective perception that available leisure experiences are not sufficient to instrumentally satisfy needs for optimal arousal, and that the perceptions of leisure as boredom are usually associated with negative affect."<sup>12</sup> If people have too much time and too little things to do, or what they can do is of

<sup>&</sup>lt;sup>12</sup> Iso-Ahola and Weissinger, (1990). "Perceptions of Boredom in Leisure: Conceptualization, Reliability and Validity of the Leisure Boredom Scale." pp. 4-5.

low arousal and unsatisfying levels, problems usually arise. Leisure boredom has been found to be associated with deviant activities, such as drug use, alcohol use, adolescents smoking and juvenile crime.<sup>13</sup> As in the case of the arrested man of BT download in Hong Kong, he was then unemployed and might be bored during most of his leisure time. From this perspective, it is suspected that downloading MP3/movies from the Internet might give him exciting things to do to fill his spare time.

On the other hand, socially accepted leisure activities such as sports are found to be deterrents to antisocial activities by filling free time, alleviating boredom, and helping adolescents feel good about themselves.<sup>14, 15</sup> Yet research has found that physical activities among adolescents are declining in favor of more sedentary activities.<sup>16</sup> This is particularly the case in recent years because the household invasion of personal computers for the past decade has displaced a lot of sports activities for online activities. This situation is believed to get worse since more people are spending longer time on Internet, in which more leisure activities are involved with net surfing, online games, emails, icq, newsgroups or chatrooms, so on and so forth. If people spend more time in front of a computer and less on sports, it is therefore expected that leisure boredom may be related to the frequency of illegal MP3/movies download.

H<sub>1</sub>: People who score high on the Leisure Boredom Scale are more likely to download free MP3/movies from unauthorized websites.

<sup>&</sup>lt;sup>13</sup> Gordon and Caltabiano, (1996). "Urban-rural differences in adolescent self-esteem, leisure boredom, and sensation-seeking as predictors of leisure-time usage and satisfaction." p.885.

<sup>&</sup>lt;sup>14</sup> Iso-Ahola and Crowley, (1991). "Adolescent substance abuse and leisure boredom." pp. 260-271.

<sup>&</sup>lt;sup>15</sup> MacMahon, (1990). "The Psychological benefits of exercise and the treament of delinquent adolescents." pp. 334-351.

<sup>&</sup>lt;sup>16</sup> Gordon and Caltabiano, (1996). pp.883-4.

#### Sensation Seeking

Although people might have different attitudes towards downloading unauthorized MP3/movies, the Annual Survey of the IPD has found that most people "consider" such activities have infringed the IP rights. However there are still people who dare to take the risks. This is the sensation-seeking trait of a person that suspected to play a role. According to Thorton, criminal behavior is a form of risk taking behavior.<sup>17</sup> Different people have different needs and they tend to look for different kinds of stimulation to satisfy different degrees of arousal. In Zuckerman's optimal level of arousal theory, he defined sensation seeking as:

*"The need for varied, novel, and complex sensations and experiences and"* the willingness to take physical and social risks for the sake of such experiences."<sup>18</sup>

Very often, leisure boredom and sensation seeking are found closely related in determining one's behavior. In Gordon and Caltabiano's study, sensation seeking and leisure boredom are found to have influenced adolescent's deviant leisure participation.<sup>19</sup> It is therefore assumed that people of high sensation seeking tendency are likely to seek out new experiences because these activities are susceptible to boredom and can fulfill their stimulating needs for optimal arousal. Downloading different songs/music/movies not only give them excitement and entertainment, large variety of songs/music/movies available on the Net can also give them a sense of freshness to resist boredom. Therefore, leisure boredom and sensation seeking are expected to go hand in hand in this study that will affect illegal download tendency.

<sup>&</sup>lt;sup>17</sup> Trimpop, R. (1994), The Psychology of Risk Taking Behavior. p. 84.
<sup>18</sup> Trimpop, R. (1994), The Psychology of Risk Taking Behavior. p. 89.
<sup>19</sup> Gordon and Caltabiano, (1996). pp.897-9.

The Sensation Seeking Scale (Form V) has a total of 40 items factorized into 4 groups: Thrill and Adventure Seeking, Experience Seeking, Disinhibition and Boredom Susceptibility.<sup>20</sup> People who frequently engaged in illegal downloading activities are expected to have higher tendency to cross the line to seek new stimulants. To test whether this personality trait has any predicting effect on illegal download behaviors, only the Thrill and Adventure Seeking section was used in this study.

H<sub>2</sub>: People who score high on the Thrill and Adventure Seeking of the Sensation Seeking Scale are more likely to download free MP3/movies from unauthorized websites.

#### **Personal Values of Honesty**

Without a doubt, personal values affect behaviors. According to Scott, a value is defined as "a moral ideal, an individual concept of an ideal relationship (or state of affairs) ... [used] to assess the "goodness" and "badness," the "rightness" or "wrongness," of actual relationships...[which are observed or contemplated]"<sup>21</sup> In Rokeach's view, "values were more central concepts than attitudes, were determinants of attitudes, and were more resistant to change, with favorable attitudes emerging toward objects instrumental in the attainment of important values."<sup>22</sup> Thus internalized values of a person will be good predictors of one's behavior.

Hence, the value of Honesty from Scott's Personal Value Scales was adopted in this survey attempting to find out if honesty levels can predict illegal download behaviors.

<sup>&</sup>lt;sup>20</sup> Zuckerman, Eysenck and Eysenck, (1978), "Sensation seeking in England and America: Cross-cultural, age and sex comparisons." pp.139-149.

<sup>&</sup>lt;sup>21</sup> Braithwaite and Scott, (1991), "Values." *Measures of Personality and Social Psychological Attitudes*. Vol.1, Ch. 12. p.726. <sup>22</sup> Braithwaite and Scott, (1991), p.663.

H<sub>3</sub>: People who score high on Honesty level in the Personal Values Scale are less likely to download free MP3/movies from unauthorized websites.

#### **Demographics**

Since more leisure activities nowadays are displaced for online activities (particularly among the younger generations), it is expected that Internet usage will be positively, while age will be negatively, related to levels of illegal download behaviors.

- H<sub>4</sub>: People who spend more time on the Internet are more likely to download free MP3/movies from unauthorized websites.
- H<sub>5</sub>: People of younger age groups are more likely to download free MP3/movies from unauthorized websites.

Based on these theoretical frameworks, this study further puts forward the following research questions:

- RQ<sub>2</sub>: How do download attitudes relate to levels of illegal download behaviors?
- RQ<sub>3</sub>: To what extent can (1) download attitudes, (2) leisure boredom, (3) sensation seeking, (4) the value of honesty, (5) Internet usage, and (6) demographics of respondents predict the activities of illegal downloading of MP3/movies from unauthorized websites?
- RQ4: To what extent can (1) leisure boredom, (2) sensation seeking, (3) the value of honesty, (4) Internet usage, (5) illegal download levels, and (6) demographics of respondents predict download attitudes?

## Method

#### Sampling Procedure and Sample Profiles

Questionnaire was prepared in Chinese. A combination of print copies and online approach (via my3q.com) were used. Because of limited time and resources, a convenience sampling method was used in which emails were sent to researcher's social contacts and a mailing list comprised of over 400 university students email addresses. It was then snowballed out to reach a much wider group of people. A message soliciting for voluntary participation was also posted at a few online forums and newsgroup. Printed copies were distributed to a high school in Tuen Mun and 3 community/recreation centers in Mongkok, Tsuen Wan and Tsing Yi, where both younger and older age groups of diverse background were reached. Participation was voluntary. The only pre-condition required was that the respondent has to be an Internet user. From March 23 to April 5 2005, a total of 431 completed questionnaires were received of which 140 were hard copies and 291 were submitted online. Among the total 431 respondents, 61.5% had illegal download experience, 42.5% were male, and over 74% were below 35 years of age. With regard to the education levels, 32.3% had high school education, 39.7% received university/college education, and 19.5% reached post-graduate education level. (see Table 1-4)

#### Questionnaire Design and Measurements

The questionnaire was made up of 43 questions covering 7 aspects about the respondents: (1) frequency of downloading free MP3/movies from unauthorized websites (i.e. illegal download), (2) attitudes towards such download behaviors, (3) leisure boredom levels, (4) sensation seeking tendency, (5) levels of "honesty", (6) internet usage levels, and (7) demographics of the respondents.

*Frequency of downloading MP3/movies from unauthorized websites:* Respondents were asked to indicate how often they had such activities, namely "Never," "Seldom," "Sometimes" or "Often."

Attitudes towards illegal download behaviors: In order to understand people's motivations of illegal download, preliminary interviews with a few individuals who admitted to have such download experiences were done before the questionnaire was drafted. Their comments together with the information gathered from other survey sources were then summarized into 13 statements. These statements were then used to test on respondents' attitudes in which they were asked to rank their agreement in a 5-point Likert scale (1=strongly disagree and 5=strongly agree) in the questionnaire.

To avoid a legal preconception of the download behaviors, questions were phrased as "downloading free MP3/movies from unauthorized websites" (as used in the 2004 Annual Survey of the Intellectual Property Department of HK). However throughout this essay, to make it short, the term "illegal" is often used in describing such download behaviors.

*Leisure boredom levels:* To avoid a lengthy questionnaire and make this part less repetitive, only 8 out of the original 16 statements from Iso-Ahola and Weissinger's research were used<sup>23</sup>. 4 out of the 8 statements were reverse-coded. Respondents were asked to rank their agreement in the same 5-point Likert scale. The scores were then added up. The higher the respondent scored on the scale, the stronger the perception of boredom in his or her leisure time.

*Sensation seeking:* To find out if people's sensation seeking traits can predict the levels of illegal download behaviors, 3 items ("Parachute jumping", "Flying an airplane" and

<sup>&</sup>lt;sup>23</sup> Iso-Ahola and Weissinger (1990), "Perceptions of Boredom in Leisure: Conceptualization, Reliability and Validity of the Leisure Boredom Scale." pp. 1-17.

"Skiing very fast down a high mountain slope") from the *Thrill and Adventure Seeking* subdivision of the Sensation Seeking Scale<sup>24</sup> were chosen to test on respondent's risk-taking tendency. To make the items more familiar and relevant to most Hong Kong respondents, 1 item was added ("Bungee jumping") to make this section a total of 4 statements in the same 5-point Likert scale for respondents to rank. The higher the total score one gets, the more likely one would tend to seek adventurous satisfaction. Such individual would tend to be more of a high-risk taker.

*Value of "Honesty":* 12 out of the original 20 items from Scott's long version Honesty Scale<sup>25</sup> were selected to test on respondent's personal values of honesty. The 5-point Likert scale was again employed where 1=strongly disagree, 2=disagree, 3=depends on situation, 4=agree, and 5=strongly agree. Among the 12 selected statements, 6 were reverse-coded. The total scores were then added up such that the higher the total score one gets, the more "honest" one would tend to be.

Internet Usage: It was measured by hours in a per weekly basis on respondents' time spent on the Internet for non-school/work related purposes.

*Demographics:* Variables of gender, age, education levels and occupation were included in this survey.

# Findings

#### **Illegal Download Attitudes**

To identify respondents' attitudes towards illegal download behaviors, factor analysis

<sup>&</sup>lt;sup>24</sup> Zuckerman, Eysenck and Eysenck (1978), "Sensation Seeking in England and America: Cross-cultural, Age and Sex Comparisons." pp.139-149. <sup>25</sup> Braithwaite and Scott (1991), pp. 733-4.

was applied to the 13 items of download attitudes. As a result, a three-factor solution is obtained (eigenvalues greater than 1.0). It has explained a total of 53.9% variance of the variable illegal download levels (see Table 5).

Factor 1, under the name of *Beneficial Returns* (eigenvalue= 4.38, variance= 33.66, Cronbach's alpha= .76), consisted of 5 items in which majority of the respondents agreed that illegal download behaviors did yield positive returns (mean score ranges from 2.94 to 3.91, s.d. from 1.01 to 1.17). *Beneficial Returns* referred to the benefits/rewards gained from illegal downloading: either directly saving respondent's money or time ("Convenience" and "Save money"), or indirectly helping the respondent to acquire recognition or reputation among their social groups ("Peer influence", "Helping others by sharing files," and "Can't wait until legal copies are out").

Factor 2, *Legal Interpretation* (eigenvalue=1.42, variance=10.91, Cronbach's Alpha= .71) had reflected respondents' attitudes towards the "legal" issue on copyright infringement. The mean score ranges from 2.53 to 3.18, which indicates that majority of respondents agreed that such behaviors are not *serious crimes* ("It is illegal but no big deal" mean=3.1, s.d.=1.01), and it imposes less severity because it is "Not easy to get arrested or convicted" (mean=3.18, s.d.=1.08). Moreover, majority thought that publishers were taking too much profit ("Fight against rip-off from publishers" mean=3.13, s.d.=1.21), and that most things in their views should be shared free over the Internet ("Most things are free on the internet" mean=3.11, s.d.=1.09). The above results have reflected that respondents who tend to commit illegal downloading also tend to possess different or opposite views towards copyright infringement.

Yet compared to the above results, it is worth noting that there were actually more people who considered such downloading acts as "illegal" ("Disregard it as illegal"

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mean=2.53, s.d.=1.11), which means that more respondents were aware that such behaviors were illegal but they did it anyway. According to the 2004 Annual Survey done by the Intellectual Property Department of Hong Kong, findings also showed that over 70% of the their respondents admitted that downloading free MP3/movies/games from unauthorized websites infringed the IP rights, and the report emphasized that such figures were growing steadily every year.<sup>26</sup> However, it seemed as if it had no effect on curbing down the number of people who committed such acts. What one thinks and what one acts are not necessarily quite the same.

Factor 3, *Trendy/Excitement* (eigenvalue=1.21, variance=9.33, Cronbach's Alpha= .66) consisted of 3 excitement-seeking elements, namely "Being Trendy" (mean=2.26 s.d.=.98), "Curious" (mean=2.59, s.d.=1.08) and "Challenge the Authorities" (mean=1.6, s.d.=.76).

In summary, the 3 factors have shown strong prediction on people's attitudes towards illegal download, in which a total of 53.9% variance of the variable illegal download levels has explained. Among the three, *Beneficial Returns* yields the strongest result (variance=33.66%). This may indicate that direct benefits, or positive attractions, are important and effective factors to attitude change.

#### Hypotheses Testing

- H<sub>1</sub>: People who score high on the Leisure Boredom Scale are more likely to download free MP3/movies from unauthorized websites.
- H<sub>2</sub>: People who score high on the Thrill and Adventure Seeking of the Sensation Seeking Scale are more likely to download free MP3/movies from unauthorized websites.

<sup>&</sup>lt;sup>26</sup> Annual Suvey, IPD of HK, November 2004.

- H<sub>3</sub>: People who score high on Honesty level in the Personal Values Scale are less likely to download free MP3/movies from unauthorized websites.
- H<sub>4</sub>: People who spend more time on the Internet are more likely to download free MP3/movies from unauthorized websites.

The 3 predictor variables in the above hypotheses namely Leisure Boredom (H<sub>1</sub>), Sensation Seeking (H<sub>2</sub>), and Internet Usage (H<sub>4</sub>), are found to have positive relationships to illegal download levels, where (1) the more bored the respondents felt in their leisure time; (2) the more they inclined to engage in the thrill and adventure seeking activities; and (3) the more time they spent on the Internet, the more likely they would commit illegal downloading (Leisure Boredom: r = .17,  $p \le .01$ ; Sensation Seeking: r = .21,  $p \le .01$ ; Internet Usage: r= .32,  $p \le .001$ ,  $\beta = .24$ ,  $p \le .001$ ). As for the predictor of Honesty (H<sub>3</sub>), it yields a negative correlation to illegal download levels, which means the higher the respondents scored on the honesty scale, the less likely they would commit illegal downloading (r = ..25,  $p \le .01$ ;). Therefore, based on these results, hypotheses H<sub>1</sub>, H<sub>2</sub>, H<sub>3</sub> and H<sub>4</sub> are all supported.

H<sub>5</sub>: People of younger age groups are more likely to download free MP3/movies from unauthorized websites.

In terms of demographics, male respondents were more likely than female in committing such acts ( $r = .12, p \le .05; \beta = .10, p \le .01$ ). And for age and education levels, they were all negatively related to illegal download levels, which means respondents of younger age groups, with comparatively lower education levels, were more likely to do the illegal downloading (Age:  $r = -.37, p \le .001, \beta = -.11, p \le .05;$  Education:  $r = -.24, p \le .001$ ). Thus, hypothesis H<sub>5</sub> is also supported.

#### Illegal Download Attitudes and Levels of Illegal Download

To test on the relationships between illegal download attitudes and illegal download levels, Pearson's correlation and simple regression were used. Results in Table 6 showed that *Beneficial Returns* and *Legal Interpretation* are significant factors: the more the people considered to gain from it, the more likely they would tend to do the downloading (r = .35,  $p \le .01$ ); and the more the people tend to interpret and take the copyright law in a "less serious" way, the more likely they would do the downloading (r = .39,  $p \le .01$ ). The regression analysis also echoed the same effects ( $\beta = .26$  and .31 respectively,  $p \le .001$ ). However in this analysis, *Trendy/Excitement* is not a significantly predictor of illegal download levels. This means that *Being Trendy*, *Curious* or *Challenge the Authorities* are not "strong enough" to lead to illegal download.

Overall as shown in Table 6, *Illegal Download Attitudes* (other than *Trendy/Excitement*), *Leisure Boredom*, *Sensation Seeking*, *Honesty*, *Internet Usage*, *Gender*, *Age* and *Education* are all significant predictors to *Illegal Download Levels* in which they have explained a total of 39% variance of the variable.

#### **Predicting Illegal Download Attitudes**

#### **Beneficial Returns**

As shown in Table 7, all variables are significantly correlated to *Beneficial Returns*: Leisure Boredom ( $r = .15, p \le .01$ ), Sensation Seeking ( $r = .16, p \le .01$ ), Honesty ( $r = ..24, p \le .001, \beta = ..16, p \le .001$ ), Internet Usage ( $r = .10, p \le .05$ ), Illegal Download Levels ( $r = ..35, p \le .001, \beta = .24, p \le .001$ ), Gender ( $r = ..15, p \le .01, \beta = ..21 p \le .001$ ), age ( $r = ..33, p \le .001, \beta = ..12, p \le .05$ ), and Education Levels ( $r = ..24, p \le .001$ ). However, in a separate regression analysis, results show that Illegal Download Levels, Gender, Honesty and Age are the only significant predictors of *Beneficial Returns*. In short, the more frequent one tends to commit illegal downloading, the more one tends to treasure *Beneficial Returns*. At the same time, younger female with lower education levels who are less honest would tend to treasure more on *Beneficial Returns*.

#### Legal Interpretation

Correlational analyses also showed that Leisure Boredom ( $r = .15, p \le .01$ ), Honesty ( $r = ..27, p \le .001, \beta = ..17, p \le .001$ ), Internet Usage ( $r = .11, p \le .05$ ), Illegal Download Levels ( $r = .39, p \le .001, \beta = .35, p \le .001$ ), and Age ( $r = ..17, p \le .001$ ) are significantly related to *Legal Interpretation*. Nevertheless, only *Illegal Download Level* and *Honesty* significantly predict *Legal Interpretation*. This means that the less honest tend to interpret law in a different way and thus tend to involve more with illegal downloading activities.

#### Trendy/Excitement

Table 7 showed that Leisure Boredom ( $r = .19, p \le .001, \beta = .19, p \le .001$ ), Sensation Seeking ( $r = .11, p \le .05, \beta = .15, p \le .01$ ), Honesty ( $r = .15, p \le .01, \beta = .16, p \le .001$ ), and Age ( $r = .15, p \le .01, \beta = .26, p \le .001$ ) are significant predictors of the variable *Trendy/Excitement*. It can be explained that people who are older, with higher leisure boredom, being less honest and inclined to risk-taking activities will tend to seek out more excitement, or dare to challenge the authorities.

## **Conclusion and Discussion**

Based on the results of this exploratory study, it is concluded that levels of illegal downloading behaviors of MP3/movies are found to have significant relationships with the following aspects of a person: his/her attitudes towards illegal download behaviors,

particularly in terms of *legal interpretation* and *beneficial returns*; his/her psychological perception of leisure as boredom or excitement; his/her personality traits of sensation seeking tendency; and his/her internalized values of honesty.

Among all variables, Legal Interpretation, Beneficial Returns, and Internet Usage are the strongest and most significant predictors to levels of illegal downloading behaviors. Among those, male respondents of younger age groups are more frequently involved in downloading unauthorized MP3/movies.

With the efforts of combining the socio-psychological elements in this exploratory research, it has successfully identified two crucial predictors to the levels of illegal download: Legal Interpretation and Beneficial Returns. In fact, it can be analyzed in terms the "push" and "pull" effects.

Findings revealed that people had different views/interpretations towards illegal acts of MP3/movies download. In fact, IP rights are relatively new concept in law and how broad can these rights being extended to is still a debatable issue. From the angle of criminology, deviant acts are often a result of power struggle, in which the definitions are set by those powerful groups who hold resources to law-making processes. Yet in the world of cyberspace, the rules of the game may be different. As David Wall puts it, "the construction of deviance is not so simply one-sided because definitions of crime and deviance arise not only from the social activity of elite or power groups, but also from that of common members of society and offenders themselves.<sup>27</sup> Indeed, this information society we live in now has only come into place starting mid-1990s when the Internet usage skyrocketed ever since.<sup>28</sup> Much of its infrastructure and superstructure are yet to be constructed and strengthened.

<sup>&</sup>lt;sup>27</sup> Wall D.S. (2001), Cybercrimes and the Internet. p.11.
<sup>28</sup> Furnell S. (2002), Cybercrime, p. 5.

The information superhighway is difficult to patrol. Individuals, minorities and the underprivileged are now empowered by the unlimited potential resources available on the Net. The IP rights as enjoyed in the real world may have to be redefined because it may not involve "tangible" products of printed materials, videotapes, or music CDs, but a bunch of 1s and 0s found in ever-changing formats of storage device. If the current systems in the real world are imposed onto this cyberworld, people will then be "pushed" to go around it. In order to tackle the online piracy problem, the law enforcement bodies alone may not be successful in curbing it down. Therefore, besides the powerful authorities (governments and publishers of big corporations), members in the community have to come together to seek out a solution that is acceptable to most people.

The advantages or gratifications derived from *Beneficial Returns* apparently is an attractive "pull" factor to illegal downloading. Besides the monetary benefits (*Save Money*) and *Convenience* (save time), *Peer Influence*, *Helping Others by Sharing Files* and *Can't Wait Until Legal Copies Are Out* are also "beneficial" to the respondents too because they need to "get involved," gain recognition or even admiration among social peers. As in the case of the arrested man for BT download, despite the fact that this man had not made any profit from uploading the movie files, he still dared to do it for free. He even placed a nickname with a symbolic image onto the files to signify "quality guaranteed" of his "products." This is what Ghosh puts it in the cooking pot market theory that: "they are clearly not getting cash; their 'payment' might be the contributions from others that balance their own work, or something as intangible as the satisfaction of having their words read by millions around the world" (in this case the movies), and that it also "provides a rational explanation for people's motivations to produce and trade in goods and services, where a

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monetary incentive is lacking."29

Compared to other cybercrimes (e.g. fraud, viruses, theft, and hacking etc.), the damage of Internet piracy is indirect and the victims are much less visible. This may be the reason why people particularly the younger ones tend to take this issue less seriously. Internet piracy comes to the attention of people only in recent years when MP3 became a popular hit. The innovation of MP3 player has obviously displaced discman (then walkman) in this diffusion process. One thing can be sure is that the increase in the sales of MP3 players certainly encourages MP3 download, and vice versa. With the newly introduced portable multimedia player (MPEG 4 player) starts to get popular, would it also encourage BT download or other P2P files sharing activities as well? It may not take too long for us to know the answer.

Besides education, which may take a longer time to see the effect, changing business model may provide a better solution to illegal MP3/movies download. More business websites are now providing legal MP3 download service at a per piece price. It may soon be the case for movies in the near future if market demands.

All in all, to change one's behavior may require changing one's values and attitudes first. This exploratory research has only identified a few motives and attitudes that relate to illegal download behaviors. Yet limited by resources and time, this study can only cover a small sample, which may be biased and thus may not represent the accurate views of the population in Hong Kong. More in-depth studies can be done in the future to see if other variables can predict these behaviors as well. The relevant findings may be crucial to help solve the illegal download problems and formulate relevant policies for the governments.

<sup>&</sup>lt;sup>29</sup> Ghosh R.A. (1998), "Cooking pot markets: an economic model for the trade in free goods and services on the internet," <u>www.firstmonday.dk/issues/issues3\_3/ghosh/</u>

If resources allow, a better-conducted research can be done to find out if such attitudes change after time, or, in the form of comparative studies, that if people's attitudes vary from place to place.

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- "Intellectual Property in Hong Kong," at http://www.ipd.gov.hk/eng/pub\_press/publications/iphk\_e.pdf
- "What is Bit Torrent?" at http://www.bittorrent.com/introduction.html
- Various articles, information and news clips found at <u>http://anti-bt.com/</u>, <u>http://www.mpaa.org</u> and <u>www.respectcopyright.org</u>

Download Levels	Frequency	Percent	<b>Cumulative Percent</b>
Never	166	38.5	38.5
Rarely	99	23.0	61.5
Sometimes	103	23.9	85.4
Often	63	14.6	100.0
Total	431	100.0	

Table 1:Illegal Download Levels

# Table 2: Gender Distribution of Respondents

Gender	Frequency	Percent	<b>Cumulative Percent</b>
Female	248	57.5	57.5
Male	183	42.5	100.0
Total	431	100.0	

Age Groups	Frequency	Percent	Cumulative Percent
Below 18	83	19.3	19.3
18-24	61	14.2	33.4
25-34	177	41.1	74.5
35-44	86	20.0	94.4
45-54	17	3.9	98.4
55 and above	7	1.6	100.0
Total	431	100.0	

Education Levels	Frequency	Percent	Cumulative Percent
Primary or below	8	1.9	1.9
High School	139	32.3	34.1
Vocational Training	29	6.7	40.8
University/College	171	39.7	80.5
Post-Graduate or above	84	19.5	100.0
Total	431	100.0	

How much do you agree/disagree with the	М	(D	Factors			
statements regarding to downloading free MP3/movies from unauthorized websites?	Mean	SD	1	2	3	
Beneficial Returns						
Convenience	3.91	1.01	.74			
Peer influence	2.94	1.09	.70			
Helping others by sharing files	2.94	1.10	.61			
Save money	3.49	1.13	.59			
Can't wait until legal copies are out	3.00	1.17	.58			
Legal Interpretation						
It is illegal but no big deal	3.10	1.01		.71		
Not easy to get arrested/convicted	3.18	1.08		.70		
Disregard it as illegal	2.53	1.11		.64		
Fight against rip-offs from publishers	3.13	1.21		.57		
Most things are free on the internet	3.11	1.09	.44	.54		
Trendy/Excitement						
Being trendy	2.26	.98			.75	
Curious	2.59	1.08			.75	
Challenge the authorities	1.60	.76			.67	
Eigenvalues			4.38	1.42	1.21	
Variance explained (%)			33.66	10.91	9.33	
Cronbach's Alpha			.76	.71	.66	

# Table 5: Factor Analysis of Illegal Download Attitudes

Scale: 1= strongly disagree; 2=disagree; 3=neutral; 4=agree; 5=strongly agree (N=431)

Predictor Variables	Illegal Download Levels		
	r	β	
egal Download Attitudes			
Beneficial Returns	.35**	.26***	
Legal Interpretation	.39**	.31***	
Trendy/Excitement	n.s.	07#	
Leisure Boredom	.17**	n.s.	
Sensation Seeking	.21**	$.08^{\#}$	
Honesty	25**	n.s.	
Internet Usage	.32***	.24***	
Demographics Gender (female=0) Age Education	.12* 37*** 24***	.10 <sup>**</sup> 11 <sup>*</sup> 09 <sup>#</sup>	
<i>R<sup>2</sup></i> Adjusted <i>R<sup>2</sup></i>		.40 .39	

# Table 6: Regression of Illegal Download Attitudes, Leisure Boredom, Sensation Seeking, Honesty, Internet Usage and Demographics on Illegal Download Levels.

Notes: Figures are standardized beta coefficients.  $p \le 0.1$ ,  $p \le 0.01$ ,  $p \le 0.01$ ,  $p \le 0.01$ , n = 431

#### Table 7:

## Regression of Leisure Boredom, Sensation Seeking, Honesty, Internet Usage,

## Illegal Download Levels and Demographics on Illegal Download Attitudes

	Beneficial Returns L		Legal Inte	Legal Interpretation		xcitement
Predictor Variables	r	β	r	β	r	β
Leisure Boredom	.15**	n.s.	.15**	n.s.	.19***	.19***
Sensation Seeking	16**	n.s.	ns	n.s.	.11*	15**
Honesty	24***	16 <sup>***</sup>	27 <sup>***</sup>	17 <sup>***</sup>	15**	16***
Internet Usage	.10*	n.s.	.11*	n.s.	<b>-</b> .10 <sup>*</sup>	n.s.
'llegal Download Levels Demographics	.35***	.24***	.39***	.35***	n.s.	09#
Gender (female=0)	15***	<b>21</b> ****	n.s.	n.s.	$.10^{*}$	n.s.
Age	33***	12*	17 <sup>***</sup>	n.s.	.15**	.26***
Education	24***	10 <sup>#</sup>	n.s.	n.s.	n.s.	n.s.
$\mathbb{R}^2$		.23		.19		.13
Adjusted $R^2$		.22		.18		.10

*Notes: Figures are standardized beta coefficients.* <sup>#</sup>p<=.1, \*p<=.05, \*\*p<=.01, \*\*\*p<=.001, N=431

# 有關網上下載音樂/電影的問卷調查

問卷編號:\_\_\_\_\_

你好!我是香港中文大學新聞及傳播學院新媒體碩士課程的學生,正在準備畢業論文,題目是 有關網上下載 MP3/電影的情況。調查以不記名形式進行,所有資料絕對保密,調查結果只用 作學術分析研究,懇請抽出 10 分鐘左右時間完成以下問卷。謝謝!

1. 你有否在『未經授權』的網頁免費下載MP3 或電影?如果有,次數有多頻密?

- a. □ 從來沒有
- b. □ 有,次數甚少
- c. □ 有,偶然爲之
- d. □ 有,經常進行

# <u>以下句子是關於你對在『未經授權』網頁免費下載MP3 或電影的一些看法。</u> 請問你對下列各項有幾同意/不同意呢?

		非常 不同意 1	不同意 2	一般 3	同意 4	非常 同意 5
2.	不認爲這是侵權犯法的行爲					
3.	知道這是不應該的,但這不算甚麼大罪, 因此不要緊					
4.	覺得不會因此被捕,而且很難入罪					
5.	這樣做可以挑戰權威 (警方/版權商), 顯示自己的聰明才智					
6.	正版售價太貴,藉此抗衡版權商牟取暴利					
7.	貪便宜,因爲不用付錢					
8.	網上很多東西都是供免費下載的, 所以不認為要付錢					
9.	這樣做可以追上潮流,人有我有					
10.	因爲好奇,想嘗試新事物					
11.	想最先欣賞到新歌/新片,等不及 合法版本面世					
12.	網上下載實在太容易方便					
13.	受朋友影響,認識的人都有這樣做					
14.	爲了互相幫助,網友交換檔案分享					

請「✓」選你對以下句子的同意程度:

		不同意	不同意 2	一般 3	同意 4	同意 5
15.	我的課餘/工餘時間實在太多					
16.	課餘/工餘時間十分無聊沉悶					
17.	我在課餘/工餘時間裡十分活躍					
18.	我通常不滿意我消磨課餘/工餘時間的 方法,但我又不知道有甚麼東西可做					
19.	課餘/工餘的消閒活動提昇了我的生活質素					
20.	我對課餘/工餘時間感到興奮					
21.	我浪費了太多課餘/工餘時間睡覺					
22.	課餘/工餘時間裡我總不會閒下來					
請「、	1 選你對以下句子的同意程度:	非常 不同意 1	不同意 2	一般 3	同意 4	非常 同意 5
23.	我想試跳降落傘					
24.	我想玩 Bungee Jump,即"笨豬跳" (雙腳緊纏彈繩從高處跳下)					
25.	我想學習駕駛飛機					
26.	我享受極速滑雪下山的刺激感覺					

非常

非常

請「✓」選你對下列句子的看法。

		1
27.	即使是爲朋友,也從不做欺騙作弊的事	
28.	沒徵得同意下使用他人物品	
29.	經常說實話,即使這樣可能對自己或別人不利	
30.	從不說謊,即使這樣可以令情況好過一點	
31.	爲了幫助別人而說謊	
32.	竭盡所能要令騙徒得到合理制裁	
33.	爲了幫助好友度過難關,不惜將真相扭曲一點	
34.	拿取不屬於自己的東西	
35.	欺騙他人	
36.	無論何時何地都會維護真理	
37.	經常忠實地表達自己的所思所感	
38.	在沒有造成傷害的情況下做不誠實的事	

非常 不同意 1	不同意 2	視乎 情況 3	同意 4	非常 同意 5

# 你的個人資料

39. 性別

- 1. □ 女
  - 2. □ 男

## 40. 年齡

18 歲或以下 1. 🗆 2. 18-24 歲 3. 25-34 歲 35-44 歲 4. 5. 45-54 歲 6. 55 歲或以上 

#### 41. 教育程度

- 1. □ 小學或以下
- 2. □ 中學
- 3. □ 職業訓練/專科學校
- 4. □ 大專/大學
- 5. □ 碩士或以上

#### 42. 職業

- 1. □ 學生
- 2. □ 無業/退休人士
- 3. □ 商人
- 4. □ 行政/管理人員
- 5. □ 文職工作
- 6. □ 藍領工作
- 7. □ 服務行業/推銷員
- 8. □ 專業人士
- 43. 除了功課或工作需要之外,每星期你用多少時間上網?
  - 1. □ 少於1小時
  - □ 1-3小時
     □ 3-5小時
  - 4. □ 5-8小時
  - 5. □ 8小時以上

問卷完畢,謝謝你的合作!