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AN EXPLORATORY RESEARCH ON ONLINE MUSIC PIRACY AND CONSUMER BEHAVIOR

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ABSTRACT

This paper explores consumer behaviour associated with the possibility of online music piracy. A research model has been systematically developed to examine a number of variables in relation to consumer attitudes towards online music piracy. The model has also been tested using empirical data collected from individual consumers. The results show that music content, Internet skill, convenience and potential penalty are major factors of individual attitudes towards online music piracy. In addition, these factors together with subjective norms have significant impacts on individual intentions to obtain music products through unjustified online channels. The findings have practical implications for managing online digital music products and services.

Keywords: Consumer behaviour, online music, piracy, attitudes and intentions

INTRODUCTION

With the advancement of Internet technology and the popularity of digital music products and music players, online music has become very popular in recent years. However, it results in not only considerable challenges to the music products and services, but also unpleasant and unethical behaviours. The music industry is one of the most impacted industries facing the challenges of piracy, unauthorised copying and dissemination [4]. It was reported that the worldwide annual sales of music CD have dropped over ten percent since 2001 [8]. Actually, piracy covers wide activities, such as counterfeiting, pirating, bootlegging, tape trading and files sharing. It is a non-commercial file sharing or sharing of music without exchange for money [6]. As far as the above is concerned, the present paper aims to explore (i) the key factors that make music piracy become prevalent, (ii) the impacts of these factors on individual intentions to pirate music through online music file sharing, and (iii) the strategies of the music industry in response to the challenge of piracy behaviour.

LITERATURE AND RESEARCH MODEL

The theory of reasoned action and the theory of planned behaviour [1] are the theoretical underpinnings of this study. The existing studies show that individual attitudes are influenced by personal integrity, past experience in behaving specific action. In addition, the perception of social punishment to unethical behaviour influences individual attitudes to pirate unlawful properties [2] [3] [7] [8]. Individual behaviour may be under control if one is psychological and mental strong enough. However, social surroundings often influence individual attitudes and intentions. Therefore, a research model is suggested to explore the issues being concerned (Figure 1). In addition, a number of hypotheses are proposed to examine the extent to which the variables influence individual intentions to pirate music through file sharing (Table 1).

Figure 1 Research Model

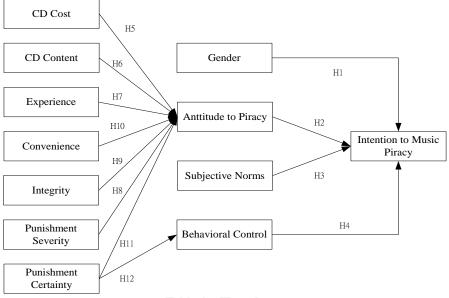


Table 1 Hypotheses

| H1 | Males have higher piracy intentions than females do. |
|-----|--|
| H2 | Attitudes towards music piracy are positively associated with piracy intentions. |
| H3 | Subjective norms are negatively associated with piracy intentions. |
| H4 | Perceived behavioural control is negatively related to piracy intentions. |
| H5 | CD cost is positively related to the attitudes towards music piracy. |
| H6 | Favourable CD content is negatively related to the attitudes towards music piracy. |
| H7 | Experience in listening a pirated music file is positively associated with music piracy. |
| H8 | Punishment severity is negatively related the attitudes towards music piracy. |
| H9 | Personal integrity is negatively related to the attitudes towards music piracy. |
| H10 | Convenience is positively related to the attitudes towards music piracy. |
| H11 | Punishment certainty is negatively related to the attitudes towards music piracy. |
| H12 | Punishment certainty is negatively related towards behaviour control. |

RESEARCH METHODS

The research methods include literature review, design of questionnaire, survey and data analysis. Survey questions were generated in the light of the existing literatures. Due to the sensitivity of the issues, we developed the scenarios to clarify the situations of online music piracy. Respondents to the questionnaire were assumed in some scenarios and were asked how and what they were going to do. Selected scenarios are as follows:

A year-two student works as a part-time technician in a company and earns HK\$3,000 monthly. He is very enthusiastic and likes to listen to classical, rock and pop music. His appreciation is very high, and he usually one listens to a few songs in one CD.

By possessing professional computing skills, he knows how to download music from the Internet and break any Internet protection. However, being a reasonable person, he knows it is improper to download music from the Internet, as he heard reports and consequences about downloading music illegally. Therefore, he always buy CD package when there are songs that he wants to listen to.

Yet, most of his friends like to download free music and songs through the Internet because they cannot afford the huge expense as they said. Usually, a classic CD package prices around HK\$100 – 300, which could cost a lot to a student, his friends used to persuade him to download music from the Internet, but he still persist in buying CD even though the expenditure on purchasing CD really costs him a lot.

One day, while he was surfing Internet, he find a song on accidentally. It was an old song in 1950's, and he loved it very much and had looked for it for a long time. The rare CD costs HK\$500 from a shop, and it was really difficult to find that music piece in today's CD shops in Hong Kong.

After a deep thinking and struggle, he changed his mind and downloaded the music from the Internet shop without payment. He believes that it would be safe to download this time, because his friends also download music pieces through the Internet, and they have not been caught or detected so far. In addition, it is first time to download music illegally, and he thinks it might not be very serious when compared with other people.

Now, please stand on your role, complete the following questions or give comments on his behaviour in the questionnaire.

The questionnaire included two sections. The first section composed questions in relation to the variables in the research model, while the second section collected respondents' demographic data. It was randomly distributed to different students, which resulted in 188 useful responses.

ANALYSIS AND RESULTS

All respondents are Internet users with certain computer knowledge. The sample includes 52% female and 48% male. Over 80% of the respondents range from 18 to 25 years old. 75% of them are undergraduate students. 45% of them earn average monthly income from HK\$1,000 to HK\$3,000. We test the sample data using the Statistical Packages for Social Science (SPSS). Firstly, the reliability analysis is conducted to reveal the relationships assumed among the selected factors. Table 2 shows that the selected factors achieve the acceptable level of a Cronbach's alpha value. Secondly, the multiple regression analysis is conducted to reveal the relationships assumed among the selected 3.

The results indicate that Gender and Perceived Behavioural Control have insignificant impact on Piracy Intentions. The findings are consistent with research of [3] [4]. It may imply that some may have intentions to pirate music files rather than buy the CDs, the behaviour like the student in the scenario is rare. It is not uncommon that a student may download music online and share the music with friends. The perceived behavioural control is also insignificant to piracy intentions, and this may show the ethical behaviour is low. Since some students are not aware that online download of music files and sharing of such music files with friends are illegal and unethical, they pay little attention to social and economic implications behind a piece of music file.

However, CD Cost is insignificant in influencing students' attitudes towards music piracy. This result is inconsistent with findings of [7] [8]. Basically, music CD in Hong Kong is relatively inexpensive, comparing to that in some cities in the world. Most students should have enough money to purchase music CD. In addition, Integrity is insignificant to Attitudes towards Music Piracy. This finding seems inconsistent with other studies. In this study, Integrity is represented by three variables: honesty, responsibility and self-control. Obviously, it is beyond to say that some students think themselves as responsible, the personal value and indicators of maturity seem not suitable to measure them, and we would suggest for further study that it should not consider them as suitable variables related to students' attitudes.

| Factors | Number of Items | Cronbach's alpha | |
|--------------------------------|-----------------|------------------|--|
| CD Cost | 3 | 0.703 | |
| CD Content | 4 | 0.738 | |
| Attitudes towards Music Piracy | 5 | 0.721 | |
| Experience | 4 | 0.714 | |
| Punishment Severity | 2 | 0.783 | |
| Integrity | 3 | 0.776 | |
| Convenience | 6 | 0.818 | |
| Punishment Certainty | 3 | 0.705 | |
| Subjective Norms | 4 | 0.731 | |
| Perceived Behavioural Control | 2 | 0.705 | |
| Piracy Intentions | 3 | 0.764 | |

Table 2 Results of Reliability Analysis

| Table 3 Results of Multiple Regression Analysi | Fable 3 | sults of Multiple Regression A | Analysis |
|--|---------|--------------------------------|----------|
|--|---------|--------------------------------|----------|

| Models | Variables | β | t-value | Sig. |
|----------------------------|--------------------------------|--------|---------|-------|
| Model 1: Attitudes towards | CD Cost | 0.092 | 1.42 | 0.156 |
| Music Piracy | CD Content | -0.170 | -2.44 | 0.016 |
| $(R^2 = 0.30)$ | Experience | 0.147 | 2.13 | 0.034 |
| | Punishment Severity | -0.214 | -3.30 | 0.001 |
| | Integrity | -0.030 | -0.47 | 0.635 |
| | Convenience | 0.241 | 3.66 | 0.000 |
| | Punishment Certainty | -0.154 | -2.24 | 0.026 |
| Model 2: Perceived | Punishment Certainty | -0.273 | 4.86 | 0.000 |
| Behavioural Control | | | | |
| $(R^2 = 0.45)$ | | | | |
| Model 3: Piracy Intentions | Attitudes towards Music Piracy | 0.286 | 3.70 | 0.000 |
| $(R^2 = 0.38)$ | Subjective Norms | 0.212 | 2.972 | 0.003 |
| | Perceived Behavioural Control | 0.050 | 0.667 | 0.500 |
| | Gender | 0.027 | 0.391 | 0.696 |

The analysis shows that Experience and Convenience are positively associated with Attitudes towards Piracy. The findings are consistent with previous outcomes, and justify that experience and convenience encourage students' intentions to piracy, especially students' computer and Internet skills, easy to access to music websites, and rareness of music and songs. In order to discourage online music piracy, the service providers are suggested to make online music products at limited costs. They should also reward consumers based on past purchasing records and memberships to encourage moral behaviour. Lastly, Punishment Certainty and Severity negatively significantly affect individual attitudes towards piracy. It has been proved that legal actions are useful to discourage immoral behaviour and make individuals to be careful about illegal deals. Therefore, Punishment is still necessary and effective, although it seems to be a negative means. However, it would be more important to educate people to behave with respect to intellectual property.

CONCLUSION

Our empirical research suggests that Attitudes towards Music Piracy and Subject Norms are significantly associated with students' intentions to music piracy. The present findings are consistent with those in some existing studies. In general, attitudes behave actions. Appropriate attitudes and behaviours are ultimately important. Therefore, education should aim to develop students' mentality and morality. Today, the Internet has been extensively used in different contexts. However, individuals should appreciate the implications, because abuse of advanced technology may lead to social problems.

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