RMP 15 T12 G2

FACTORS DETERMINING CONSUMER PURCHASING BEHAVIOUR OF PIRATED MEDIA

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DECLARATION

We hereby declare that:

(1) This undergraduate research project is the end result of our own work and that due acknowledgement has been given in the references to ALL sources of information be they printed, electronic, or personal.

(2) No portion of this research project has been submitted in support of any application for any other degree or qualification of this or any other university, or other institutes of learning.

(3) Equal contribution has been made by each group member in completing the research project.

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DEDICATION

We would like to dedicate this research to our family, friends and relatives for giving us support, encouragement and motivation in the progress of completing the research.

Besides, we would also like to dedicate this research to our beloved supervisor, Mr. Fong Chong Ee, who has spent a lot of time with us on providing his professional advice, opinion and guidance.

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BSA	Business Software Alliance
CD	Compact Disc
DV	Dependent Variable
GA	General Attitude
IF	Income Factor
IIPA	Intellectual Property Alliance
IV	Independent Variable
M	Moral Factor
P2P	Peer to Peer
PB	Purchasing Behavior
PF	Pricing Factor
S	Social Factor
SPSS	Statistic Package for Social Science
TRA	Theory of Reasoned Action
TPB	Theory of Planned Behaviour
USD	United States Dollars
VCD	Versatile Compact Disc/ Video Compact Disc

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PREFACE

The topic of this final year research project is 'Factors Determining Consumer Purchasing Behaviour of Pirated Media'. Piracy is one of the greatest deterrents of investments in the Asian continent, and Malaysia is one of the countries that are hit hardest by it. Actions have been taken in the past but until this day it is an everyday phenomenon that is naturally accepted by most Malaysian.

According to Business Software Alliance, losses due from copyright software arise to USD606 million in the year 2010 alone. Not only in copyright software, even in copyright movies, electronic books, videos, and even video games, the amount of money lost through copyright media as a whole is staggering.

The failure to curb this issue cannot be solely to blame on the government, neither can we put the blame on distributers and corporations who set the prices of original media, after all the Malaysian society has a responsibility in ensuring that supporting piracy is not an acceptable action under any circumstances at all. Our research is to uncover the factors that determine the consumer purchasing behaviour of pirated media, and we hope that our findings will be helpful in future actions taken against piracy. We also hope that our research will be a blueprint for future research done in this topic in other parts of Asia as well as throughout the world.

ABSTRACT

The problem of piracy has long been a major threat to the economy of a country. Rapid technological developments have helped foster the growth of this problem. In this study, relationship between consumers purchasing behavior towards pirated products and moral level, income level, general attitude of consumers, pricing and social factors will be analyzed in the context of Malaysia. The Theory of Planned Behavior by Ajzen (1985) is adapted in this study to capture how each of these factors above will create pirated media purchasing intentions which will lead to changes in behavior. Data were collected through self administered questionnaires that were distributed to 400 respondents at three states with the most piracy cases in Malaysia, which are Wilayah Persekutuan Kuala Lumpur, Selangor and Johor. This paper uses Pearson Correlation Coefficient and Multiple Linear Regression analysis to study the purchasing behavior towards pirated media. Results show that except for moral factor which shows a significant negative relationship, all other independent variables are significantly and positively related to the dependent variable. This study can help related parties such as the government and genuine media producers to understand better why consumers prefer pirated media products.

CHAPTER 1 INTRODUCTION

1.0 Introduction

This chapter serves as an introduction where it includes information concerning the research background, problem statement, research objectives and questions and the significance of this research study. These will give the reader a precise understanding towards the study.

1.1 Research Background

Piracy is a threat to the economy and the culture of a country. Pirated media products including music, software, and computer games are similar to the original products in terms of appearance and contents. These counterfeit products can cause losses in millions of dollars to the original products' retailer.

Alam, Ahmad, Ahmad, and Hashim (2011) defines software piracy as unauthorized distribution and use of software that has been copyrighted. This definition can be applied on other media as they are identical. Various academic researchers examined different definitions to pirated media yet the results have the same characteristic: duplicating the original copy of media and getting benefits without the consent of the original producer (Kay, 1990).

With the rapid technological development, consumers no longer support genuine software. Various downloading services on the internet tempt consumers to download media products illegally without spending any money. The development of copying technology induces shrewd minded businessmen to duplicate thousands of pirated optical discs without any consent by owners and make a lot of money through selling them. Consumers tend to seek cheap goods without concern about the quality, especially media goods. Thus, the magnitude of demand in the pirated media market provides the motivation for illegal suppliers (McDonald & Roberts, 1994). The large demands have led pirated CD sellers to challenge the laws.

The main purpose of this research is to investigate how five factors (moral, income, general attitude of consumers, pricing and social factor) can determine a consumer's purchasing behavior towards pirated media. It can contribute to parties such as the government and genuine media marketer to have a deeper understanding of the problem and think of ways to counter it.

1.2 Problem Statement

Unauthorized distribution of pirated media has caused copyright owners to suffer huge losses according to Alam *et al*. (2011). This figure reached USD 606 million in Malaysia due to the use of copyrighted software during 2010 according to Business Software Alliance. Looking at figures from the International Intellectual Property Alliance (IIPA) in 2005 to 2006, losses on entertainment software rose from 23.4 million USD to 28 million USD. Figures in 2008 to 2009 from IIPA saw a rise from 184 million USD to 192.1 million USD due to losses arising from piracy in business software.

Previous studies have been done to profile heavy and light buyers of pirated VCDs and how are pirated products perceived in comparison with their original counterparts (Cheung & Prendergast, 2006). Furthermore, steps on reducing the likelihood of consumers preferring original goods instead of pirated goods have been suggested in the past (Zeithaml, 1988). Researchers claim the sharing of pirated music on P2P environments is due to the concept of freeware and reciprocity (Shang, Chen, & Chen, 2008). Also, the act of purchasing pirated goods was more strongly associated as part of everyday routine than a criminal act (Rutter & Bryce, 2008).

Past limitation from prior research includes different category of products may receive different responses from consumers (Cheung *et al*., 2006). Research on change in consumer perception according to changes in personal factors, such as age, has yet to be carried out (Ergin, 2010). Behavioral models should also be used to increase clarification of factors that influence pirated software purchasing intentions (Alam *et al*., 2011). There is also a lack of research on the behavior intensions of consumers on pirated products (Haque, Tarofder, & Rahman, 2011).

1.3 Research Objectives

1.3.1 General Objectives

1. To investigate the significant factors that motivates Malaysian consumers' purchasing behaviour towards pirated media.

1.3. 2 Specific Objectives

1. To investigate the relationship between income factor and consumers' purchasing behavior towards pirated media.

2. To examine the relationship between general attitudes of consumers and consumers' purchasing behaviors towards pirated media.

3. To analyze the relationship between moral and consumers' purchasing behavior towards pirated media.

4. To investigate the relationship between pricing factor and consumers' purchasing behavior towards pirated media.

5. To investigate the relationship between social factor and consumers' purchasing behavior towards pirated media.

1.4 Research Questions

1.4.1 General Questions

1. What are the most significant factors that motivate Malaysian consumers' purchasing behaviour towards pirated media?

1.4.2 Specific Questions

1. Is there any relationship between income factor and purchasing behavior towards pirated media among Malaysian consumers?

2. Is there any relationship between general attitudes of consumers and purchasing behavior towards pirated media among Malaysian consumers?

3. Is there any relationship between moral and purchasing behavior towards pirated media among Malaysian consumers?

4. Is there any relationship between pricing factor and purchasing behavior towards pirated media among Malaysian consumers?

5. Is there any relationship between social factor and purchasing behavior towards pirated media among Malaysian consumers?

1.5 Hypotheses of the study

General Attitude

H_0: There is no relationship between general attitude and consumer behaviour of purchasing pirated media.

H_1: There is a significant relationship between general attitude and consumer behaviour of purchasing pirated media.

Income Factor

H_0: There is no relationship between income and consumer behaviour of purchasing pirated media.

H_1: There is a significant relationship between income and consumer behaviour of purchasing pirated media.

Pricing Factor

H_0: There is no relationship between pricing and consumer behaviour of purchasing pirated media.

H_1: There is a significant relationship between pricing and consumer behaviour of purchasing pirated media.

Moral Factor

H_0: There is no relationship between moral and consumer behaviour of purchasing pirated media.

H_1: There is a significant relationship between moral and consumer behaviour of purchasing pirated media.

Social Factor

H_0: There is no relationship between social factors and consumer behavior of purchasing pirated media.

H_1: There is a significant relationship between social factors and consumer behavior of purchasing pirated media.

1.6 Significance of the study

There are five major factors that are focused in this study, which are income, moral, general attitude of consumers, price of media products and social factors.

From the findings of this research, publishers of original media products can understand why consumers prefer purchasing pirated media. Thus, they can strengthen their products' marketability and develop a new strategy. It is vital for publishers to understand the consumers' perspectives.

This study can also create awareness on this issue among consumers. There are laws and regulations that apply to pirated media. As the enforcement of laws are not effective and efficient enough, government and relevant authorities should tighten the laws and impose proper penalties for pirated product purchasers.

This research will focus on areas with the most piracy cases in Malaysia. There were previous studies of similar topic conducted in Malaysia, but it was not adequate because they did not focus on consumers in areas with high piracy cases, therefore, the data collected may not clearly reflect the true picture in Malaysia (Alam *et al*., 2011). This research will study the behavior of consumers who are more frequently exposed to media piracy to increase accuracy and relevance.

1.7 Chapter Layout

Chapter 1 discusses the objectives on why this research is conducted, which is the ever-increasing piracy problem in Malaysia. In Chapter 2, related literatures will be reviewed, selected variables, proposed conceptual framework and hypotheses developed are presented. The research design, sample and the ways data are handled and used will be discussed in Chapter 3. Descriptive and inferential analysis will be interpreted in Chapter 4. Finally, findings will be discussed in Chapter 5 together with implication, limitations and recommendations of this study.

1.8 Conclusion

This chapter gives a brief introduction on the reasons why this research is conducted. After identifying the problem statements, objectives are set and the significance of the study is explained. Relevant literature will be reviewed to develop the hypotheses in the following chapter. The structure of the whole research study is briefly described in Chapter 1. Readers will be able to have a rough idea on how this research is conducted and to know what they will be reading in the following chapters.

CHAPTER 2 LITERATURE REVIEW

2.0 Introduction

In this chapter, we will conduct a review of the theoretical framework that we adapted to support our research study. Also, we will review past studies that are done by researchers in similar fields. Lastly, the proposed research model and hypotheses of this study are introduced in this chapter.

2.1 Review of the Prior Empirical Studies

2.2.1 Consumer Purchasing Behavior of Pirated Media

According to Cheng, Fu, and Tu (2011), behaviour is the result of intention, which is defined as the readiness level of an individual of performing a particular behavior. The study measures intention which will ultimately changes behavior based on attitudes towards purchasing pirated products, subjective norms, perceived behavioural control and perceived affordability. The results showed that all independent variables except for perceived affordability were positively related to counterfeits purchasing behavior.

Moores and Esichaikul (2011) treated behaviour of pirated software sharing, purchasing and using as the dependent variable that was

influenced by socialization. Socialization included age, gender and work experience. The results were that younger people and females were more likely to share, males were more likely to purchase and people with more work experience were more possible to use pirated software.

2.1.2 The Relationship between General Attitude and Consumer Purchasing Behaviour of Prated Media

Attitude refers to personal sensitivity or faith, direct or indirect, towards the target behavior of result to perform the behavior (Lai, 2007). Ajzen (2001) further assumed that the easiest way to interview people's attitude towards their behaviour is to ask them to think about and extract positive and negative sides of that behavior (as cited in Lai, 2007). A questionnaire was used in this study from a sample of 25 people taken from the population. The result shows that the more favorable individuals' attitudes towards online piracy, the higher their intention is to use pirated products through the internet.

Ajzen (2002) defined attitude as personal feelings about a specific behavior (as cited in Wang, Chen, Yang, & Farn, 2009). A set of questionnaires were distributed to 350 teenagers in Northern Taiwan via questionnaire and interviews. Most of the people treated music piracy as a benefit to themselves. Therefore, the result of the study shows that general attitude towards music piracy positively affects one's general intention to pirate music (Wang *et al.*, 2009).

According to Blackwell, Paul, and James (2006), attitude refers to one's evaluation on whether to perform a behavior involving the attitude object (as cited in Alam *et al.*, 2011). The respondent of this study was distributed to 419 Malaysian undergraduate students from the faculty of

business and management area as university students are more likely to purchase pirated software (Alam *et al.*, 2011). The result of this study states that there is a positive relationship between attitude and intention to purchase pirated software.

2.1.3 The Relationship between Income and Consumer Purchasing Behaviour of Pirated Media

According to the author, many previous researches have suggested that the purchasers of pirated goods do not necessarily fall in the lower income group (Prendergast, Chuen, & Phau, 2002), however, as most of the previous researches were from western countries and little research were carried out in Asian countries, little are known about the purchasing behavior in Asia. The research was conducted on students or blue-collar workers between the ages of 19 and 24 in Hong Kong. The survey was conducted via face-to-face interviews and utilized the structured questionnaire. The finding suggests that the condition for choice of non-deceptive pirated brands differ by product category (Prendergast *et. al.*, 2002).

Swee, Cheng, Lim and Tambyah (2001) found that members of lower income groups had more favorable attitudes towards pirated CD (as cited in Haque *et al.*, 2011). The survey was conducted via face-to-face interviews and also administered through e-mail. The research was conducted on 300 consumers in Peninsula Malaysia. The study stated that family income is more relevant that household income and that family who had higher income at their disposal will spend more on pirated goods.

The literature indicated that income also influences consumer intention to use pirated software (Funkhouser, 2006). The questionnaires were distributed to a sample of Bachelor, Master and PhD students from two major universities in southern Taiwan and 115 questionnaires were collected. Through the findings, the hypothesis that ‘‘the higher the income, the lower the intention to use pirated software’’ was not supported.

2.1.4 The Relationship between Pricing and Consumer Purchasing Behaviour of Pirated Media

Cheng, Sims, and Teegen (1997) and Weisband and Goodman (1992) found that the high cost of software as one of the vital reasons behind the use of pirated software (as cited in Siponen & Vartiainen, 2007). The research was conducted on students in a Finnish university through a questionnaire. The research concluded that poverty and the desire to save money were reasons behind unauthorized copying. The respondents stated that they were unable to afford legal software as it was too expensive or that they were poor (Siponen *et al*., 2007).

The study factored “pricing strategy adopted by software developers” as one of the reasons behind leniency towards piracy. The study was conducted through 263 observations on visitors of the Information Infrastructure Expo in 2002. The findings from the study showed that high pricing strategy of original software had a positive relationship behind leniency towards piracy (Lau, 2003).

The study by Cheng *et al*. (1997) also pointed out that pricing was a major factor. Questionnaires were used to asked participants to rank the reasons for purchasing and pirating software. The questionnaire was distributed to over 340 undergraduate and graduate business students from different backgrounds. Their findings were that "software too expensive" and "can't afford the software" ranked 1st and 3rd respectively.

2.1.5 The Relationship between Moral and Consumer Purchasing Behaviour of Pirated Media

A study suggested that moral intensity includes magnitude of consequences, social consensus and moral judgment of consumer which will affect consumer's ethical decision in purchasing pirated media. The research claimed that there is a negative relationship between moral judgment and consumer purchasing intention towards pirated software (Ratnasingam & Ponnu, 2008). A total of 230 questionnaires were distributed to residents living in Klang Valley and 203 responses were received.

Trevino, Sutton, and Woodman (1985) stated that moral judgment can be defined as an individuals' judgment for a certain action and their decision as being ethical or not (as cited in Chen, Pan, & Pan, 2009). This study reveals that moral judgment and moral intensity negatively affects consumers' intention to use pirated software. This research is conducted in Taiwan. There were 584 valid questionnaires. Its finding was that an individual with strong moral intensity moral judgment will be more reluctant to use pirated software (Chen *et. al*., 2009).

Cronan and Al-Rafee (2008) stated that moral obligation can be described as a feeling which stems from either guilt or personal obligation on whether something should be done or not (as cited in Jacobs, 2010). This research was conducted in Netherlands. This study showed that moral justification will be directly and positively related to the number of illegal downloads. The target respondent was 436 students at the University of Twente. Its finding was moral justification did not show significance in this study (Jacobs, 2010).

2.1.6 The Relationship between Social Factors and Consumer Purchasing Behaviour of Pirated Media

The study defined perceived social pressure as an individual's perception of whether most people think the behavior should be performed or not (Alam *et al.*, 2011). The respondent was 419 undergraduate students from the faculty of business and management. The result of the study showed that social pressure may reimburse high favorable behavior in creating intentions to purchase pirated software.

The study defined social acceptance of software piracy as whether a person will use pirated software on whether he or she is influenced by other people (Lau, 2003). Social pressure is a significant determinant of behavior because socially acceptable behavior has been defined as behavior producing, maintaining or enhancing positive effects for the integrator. The study used the sample of 263 observations on a 30 items survey instrument. The findings showed that social acceptance of pirated software is positively related with behavior to software piracy.

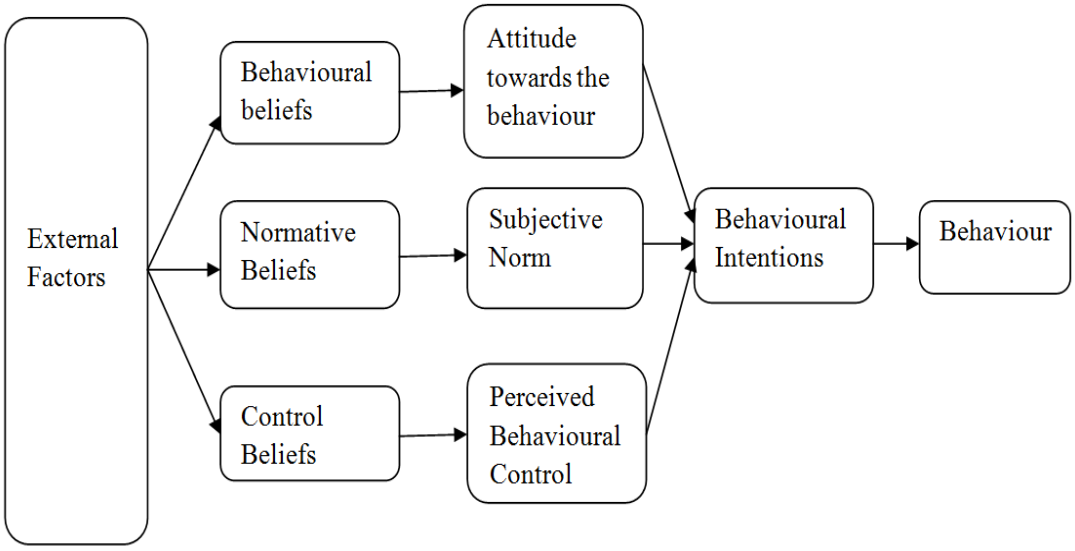
Limayem, Khalifa, and Chin (2004) viewed social factors as the roles, standards and values of the society that influences an individual's intention to pirate software. The standards and values can be conveyed from comments, suggestions or indications by friends, colleagues, and family members who are all examples of social factors. Survey questionnaires were distributed to 127 undergraduate students in a Canadian university. The result of the study showed that social factors had a significant but moderate effect on intentions to pirated software.

2.2 Review of Relevant Theoretical Models

2.2.1 Theory of Planned Behaviour

The Theory of Planned Behaviour (TPB) was first introduced by Ajzen in 1985 (Alam *et al.*, 2011). It serves as an extension of the Theory of Reasoned Action (TRA) (Azjen, 1985). Using TPB, (Azjen, 1985, 1991) a decision to be made in accordance to behavior, such as purchasing pirated media, can be predicted by an individual's intention to perform the action reflected by his behavior directly.

Figure 2.01: Theory of Planned Behaviour Model



Adapted from: Alam, S. S., Ahmad, A., Ahmad, M. S., & Hashim, N. M. H. N. (2011). An empirical study of an extended Theory of Planned Behavior model for pirated software purchase. *World Journal of Management, 3*(1), 124-133.

The above diagram shows that there are several fundamental assumptions to determine an individual's intention, including attitudes towards behaviour, subjective norm and perceived behavioural control (Ajzen, 1991).

Attitude refers to individual's perceptions on the advantages and disadvantages of turning such behaviour into an action. The perceived outcomes of performing those behaviours are known as behavioural beliefs. A behavioural belief is a perceived association between performing those behaviours and the occurrence of those consequences.

Subjective norm consists of normative beliefs. Normative beliefs mean the beliefs that are related to an individual's perception of what others think he or she should do in respect to a particular behaviour.

Perceived behavioural control is also known as self-efficacy beliefs. Control beliefs inform an individual's level of perceived behavioural control, which is mainly based on past experience and second hand information. Perceived behavioural control refers to an individual's perception that he can carry out the behaviour and overcome the barriers that stand in his way of implementing it.

Generally, behavioral beliefs, normative beliefs and control beliefs can vary as a function of various factors.

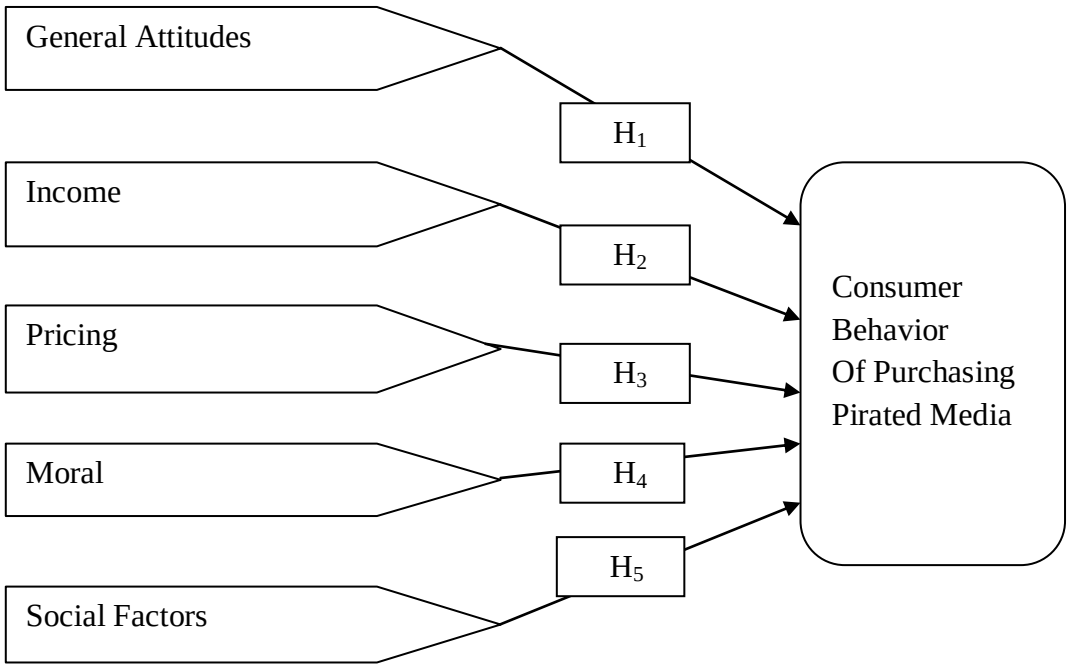
Research to investigate factors influencing knowledge sharing in professional services was conducted by Lemmetyinen (2007). This study was to find out what factors will allow management consultants to share knowledge they currently possess. There were two elements found to have influence on knowledge sharing behavior. Perceived behavioral control, which means the perceived level of control a person has in sharing knowledge that will directly influence his intention on knowledge sharing and self-efficacy, means the perception of a person's ability to contribute valuable knowledge that will also affect his attitude on knowledge sharing.

Furthermore, Alleyne and Broome (2011) measured the investment intentions among future investors using TPB. Attitudes, subjective norms, perceived behavioral control and risk propensity were treated as the independent variables of this study. Questionnaires were being distributed to measure each of the independent variable, and relating them to the intention to invest.

TPB advocates that intention is the major determinant of behavior. Using the research model above, we will examine whether the 5 factors will ultimately be converted into intention that leads consumer to purchase pirated media or to stay away from it. Thus, the purchasing tendency of consumer towards pirated media can be traced back to the roots under TPB model, which is what genuine media marketers would like to find out.

2.3 Proposed Conceptual Framework/Research Model

Figure 2.02: Theoretical framework of factors and consumer purchasing behavior of pirated media



Source: Developed for Research.

Adapted from: Syed Shah Alam, Azhar Ahmad, Mhd. Suhaimi Ahmad and Nik Mohd. Hazrul Nik Hashim (2011), ‘‘An Empirical Study of an Extended Theory of Planned Behaviour Model for Pirated Software Purchase’’.

2.4 Hypothesis Development

Hypothesis 1

H_0: There is no relationship between general attitude and consumer behaviour of purchasing pirated media.

H_1: There is a significant relationship between general attitude and consumer behaviour of purchasing pirated media.

A positive relationship means the more favourable individuals' attitude towards online piracy is, the higher the intention to purchase pirated media will be (Wang *et al.*, 2009).

Hypothesis 2

H_0: There is no relationship between income and consumer behaviour of purchasing pirated media.

H_1: There is a significant relationship between income and consumer behaviour of purchasing pirated media.

The findings showed that the smaller the household income of the consumer, the higher the possibility of consumers purchasing pirated media (Cheng *et al.*, 1997).

Hypothesis 3

H_0: There is no relationship between pricing and consumer behaviour of purchasing pirated media.

H_1: There is a significant relationship between pricing and consumer behaviour of purchasing pirated media.

Findings states that the higher the price of original media compared to pirated media, the more consumers will purchase pirated media (Siponen *et al.*, 2007).

Hypothesis 4

H_0: There is no relationship between moral and consumer behaviour of purchasing pirated media.

H_1: There is a significant relationship between moral and consumer behaviour of purchasing pirated media.

Findings states that individuals with strong moral intensity or strong moral judgment will purchase less pirated media (Chen *et al.*, 2008).

Hypothesis 5

H_0: There is no relationship between social factors and consumer behavior of purchasing pirated media.

H_1: There is a significant relationship between social factors and consumer behavior of purchasing pirated media.

Findings showed that the more influence social factors have, the higher the chance consumers will purchase pirated media. (Haque *et al.*, 2011).

2.5 Conclusion

The articles relevant to this study are reviewed and the Theory of Planned Behaviour (TPB) is the theory adapted in our study. Five hypotheses are developed based on the literature reviews which include general attitudes, pricing factor, moral, income and social factor. The following chapter covers the research methodology such as sampling design, construction of variable measurements, data collection method, data analysis techniques and data processing.

CHAPTER 3 RESEARCH METHODOLOGY

3.0 Introduction

In this chapter, readers will be taking a look at the design of our research. The research design is presented to ensure that proper procedures are followed. The population, sample size, sampling procedure as well as the data collection method for this research are also stated in this chapter. Furthermore, the variables, measurement and data analysis technique are stated in this chapter.

3.1 Research Design

Our research is a quantitative research, in which we conducted through identifying the relationship between various independent variables and a dependent variable in a population. Also, our research is a descriptive research. The major purpose of a descriptive research is to describe characteristics of a population or phenomenon (Zikmund, 2003). Most research projects undertaken for academic courses are necessarily time constrained. Thus, our group are using cross-sectional study to study particular phenomenon such as Malaysian consumers' purchasing behavior towards pirated media at a particular time (Saunders, Lewis, & Thornhill, 2009).

According to Zkimund (2003), a research design is a plan for designing the ways to gather and analyze the information needed. In accordance to this, we decided to

collect and analyze the data through survey questionnaires. 400 sets of questionnaires are prepared and distributed to respondents in 3 main states – Selangor, Wilayah Persekutuan Kuala Lumpur and Johor.

The data analysis techniques that we used are Descriptive Analysis, Pearson Correlation Coefficient Analysis, Multiple Linear Regression Analysis, Normality test and Reliability tests.

3.2 Data Collection Method

3.2.1 Primary Data

In our research, our group decided to use primary data as our data collection method. Primary data refers to data that is first used to test the working hypothesis and then used as evidence to support a researcher's claim (Booth, Colomb, & Williams, 2008). For our research, we decided to use the survey questionnaire method as it is best suited for descriptive study.

Our questionnaires were handed out through delivery and collection method which belongs to the category of self-administered questionnaires. Delivery and collection questionnaires allow us to confirm that the questionnaires are filled up completely to reduce the occurrence of missing data, also we are able to explain to participants of our research any inquiries they may have regarding the questionnaire, and this will increase the accuracy of the data that we are collecting (Sekaran, 2003).

Our questionnaires were handed out in Johor, Wilayah Persekutuan Kuala Lumpur and Selangor. The data collection phase spanned a total of three weeks. The respondents were asked to answer questions based on the 5-variables and the questionnaires were designed in closed-ended question form.

Prior to the distribution of all 400 questionnaires, we conducted a pilot test. The purpose of the pilot test is to refine the questionnaire so that respondents have no problems in answering the questions and so there will be no problems in recording data (Saunders *et al.*, 2009). According to Fink (2003), the minimum number for a pilot test is 10 (as cited in Saunders *et al.*, 2009). Thus, our group conducted a pilot test with 15 respondents who have purchased pirated media product before.

3.3 Sampling Design

According to Domestic Trade and Consumer Enforcement Division's Director Mr. Mohd Roslan, most piracy cases occurred in Selangor and Wilayah Persekutuan Kuala Lumpur in the first four months of the year 2011 (Sin Chew Daily, 2011). Furthermore, several locations in Johor Bahru, pirates still openly sell illegal products, harming all the industries' legitimate businesses (International Intellectual Property Alliance (IIPA) 2011 Special 301 Reports). Thus, our research was conducted in these three states.

The target respondents that were selected for this research were the consumers from different age groups who intended to purchase pirated media product. 400 questionnaires were distributed for this quantitative research. According to

Sekaran (2003), population size above 1,000,000 required 384 samples, and sample size larger than 30 and less than 500 are appropriate for most research.

Table 3.01: Population in Major Cities of Malaysia

Malaysia	27,565,821
Selangor	5,411,324
Wilayah Perseketuan Kuala Lumpur	1,627,172
Johor	3,233,434

(Population Distribution and Basic Demographic Characteristic Report, 2010)

The process of sampling involves any procedure using parts of the whole population to make conclusion regarding the whole population (Zikmund, 2003). In this research, we were using non-probability sampling method in which 400 peoples were chosen from three states. The type of sampling method we chose was convenience sampling where respondents were acquired as conveniently as possible. We chose this sampling technique because it was fast, inexpensive and easy to conduct (Sekaran, 2003).

3.4 Research Instrument

Our group were using self-administered questionnaire to collect the primary data. Self-administered survey is a data collection method in which the respondent completed the questionnaire without the presence of interviewer (Hair, Black, Babin, Anderson, & Tatham, 2006). The questionnaire was adopted based on past literature survey with the objective of determining the factors that influence customers' purchasing behavior towards pirated product. Respondents were required to fully understand the questionnaire and answer the questions by following the instruction. Self-administered questionnaires can establish rapport and motivate respondents and ensure a almost 100% response rate (Sekaran, 2003).

3.4.1 Purpose of Using Questionnaire

Questionnaires are efficient data collection mechanism when the researcher knows exactly what is required and how to measure the variables of interest (Sekaran, 2003). Also, questionnaires are one of the only instruments most researchers used to collect primary data for research since it is the most convenience and efficient way in collecting data (Zikmund, 2003). Later, the data collected from the questionnaires were analyzed in chapter 4.

3.4.2 Questionnaire Design

A closed-ended question would ask the respondents to make choices among a set of alternatives given by the researcher. All items in a questionnaire using a nominal, ordinal or Likert scale are considered closed questions. Our group adopted the closed-ended question method because it helps respondents make quick decisions in answering question. Also, it helps us to code the information easily for subsequent analysis (Sekaran, 2003).

The beginning of the questionnaire includes a brief introduction of our research topic, purpose of conducting the research and instruction to answer the questionnaire. The questionnaire was divided into two major sections which are Section A (demographic profile) and Section B (general opinion).

In Section A, questions were related to personal information of respondents such as gender, age, monthly household income and allowance, ethnicity, level of education and occupation. Furthermore, a general question about what kind of pirated media product was most preferred by respondents is included in this section. List questions were used in this section since it offers the respondent a list of responses, any of which they could choose (Saunders *et al.*, 2009).

In Section B, all variables were examined. All questions in this section were divided into six parts which consisted of consumer purchasing behavior of pirated media, general attitude, income factor, pricing factor, moral and social factor. Structured questions with Likert scale were used in this section. Respondents were asked to answer the questions depending on the strength of their agreement or disagreement (Sekaran, 2003).

3.5 Constructs Measurement

Nominal scale was used to obtain the demographic information about the target respondents in the questionnaires of this study. Interval scale was also used, being the Likert scale, to measure the dependent and independent variables. The Likert scale is a measure of attitudes and is designed to allow participants to indicate how strongly they agree or disagree for certain statement (Zikmund, 2003). A five-point Likert scale was used in the questionnaires and the respondents are required to choose from the five alternatives: 1: strongly disagree, 2: disagree, 3: neutral, 4: agree, and 5: strongly agree. All variables within this research were tested using the five-point Likert scale to measure.

3.5.1 Dependent Variables (DV)

3.5.1.1 Consumers' purchasing behaviour towards pirated media

Azjen (1991) stated that an individual's behavior is measured by his intention of performing the behavior. Intentions can be further measured by the willingness of an individual to perform the behavior (Wang *et al.*, 2007).

3.5.2 Independent Variables (IV)

3.5.2.4 General Attitude

Azjen (2001) found that to measure an individual's attitude towards a particular behaviour is to ask them to think about and evaluate whether the outcomes of performing the said behaviour is favourable or unfavourable (as cited in Lai, 2007).

3.5.2.1 Income Factor

The income towards the consumer behaviour of purchasing pirated media is measured by product-specifics (Haque *et al.*, 2011). Different income level individuals will consume different category of products.

3.5.2.2 Pricing Factor

Lau *et al.* (2006) found that the measurement scale for pricing towards consumer behaviour of purchasing pirated media is the counterfeit-buying behaviour of consumer (as cited in Haque *et al.*, 2011).

3.5.2.5 Moral Factor

Lai (2007) stated that an individual's moral judgement could be measured by whether he or she will or will not feel guilty after performing an unethical action.

3.5.2.3 Social Factor

Haque *et al.* (2011) found that the social factor towards the consumer behaviour of purchasing pirated media is measured by the susceptibility pressure of consumers. There are two forms of susceptibility, which are informational susceptibility and normatively susceptibility.

3.6 Data Processing

3.6.1 Data Checking

After the first set of questionnaire was returned, we checked for completeness and validity to avoid serious problems from occurring. Those problems included part of the questionnaire being incomplete and missing pages in some of the questionnaires. Some corrective actions were taken before distributing all the questionnaires (Malhotra & Peterson, 2006).

3.6.2 Data Editing

Data editing is a process whereby the raw data are checked for mistakes made by either the interviewer or respondent. It involved examining the questionnaires by identifying incompleteness, inconsistency and illegible responses to enhance the accuracy of the data collected (Hair *et al*, 2006).

3.6.3 Data Coding

Data coding is a process to assign a code to each possible response to each question. All data types should be recorded using numerical codes. This enables researcher to enter data quickly using the numeric keypad on the keyboard without making errors (Saunders *et al.*, 2009). In the questionnaires, there were several different codes being assigned such as

code 1 for male and code 2 for female. SPSS version 16.0 was used for data coding.

3.6.4 Data Transcribing

Transcribing data is the process to transfer the coded data from questionnaires collected into Statistic Package for Social Science (SPSS) program correctly. Information of relevant variables was inserted into the "variable view". These included the variable name, data type, measurement scale, decimals and others. When entering data into "data view" of SPSS, data were arranged and categorized into different rows and columns respectively following the variables assigned.

3.7 Data Analysis Technique

Data analysis is a process of cleaning, inspecting, modeling and transforming data with the objective to highlight the useful information to support a reliable conclusion.

3.7.1 Statistical Analysis

In this research, we have tested our research questions by using computer Software Package for Social Science (SPSS) version 16.0. This software was used to analyze the collected data from the questionnaire survey result completed by our respondent.

3.7.2 Descriptive Analysis

Descriptive Analysis is used to describe the phenomena of investigatory interest which involves transformation of raw data into a form that would provide information to describe a set of factors in a situation (Sekaran, 2003). The summarization of data is commonly done by calculating average, frequency distribution and percentage distribution. In our research, we have analyzed the characteristic of our respondents base on the result of the questionnaires in term of their purchasing behavior of pirated media by descriptive analysis. The descriptive analysis of demographic data was done using SPSS version 16.0.

3.7.3 Scale Measurement

3.7.3.1 Normality Test

Normality test is used to test if the data is normally distributed. When the assumption that normality test is violated, interpretation and inference may not be reliable or valid (Park, 2008). We used the Kolmogorov-Smirnov test to test for normality. If the value is above 0.5, we can assume that the data is normally distributed.

3.7.3.2 Reliability test

The purpose of reliability test is to measure the stability and consistency of the variables (Sekaran & Bougie, 2010). Cronbach's Alpha was used to measure the reliability of the constructs within the questionnaire. The closer Cronbach's alpha is to 1, the higher the internal consistency and reliability (Sekaran, 2003).

Table 3.02: Rule of Thumb (Reliability Test)

Cronbach Alpha	Value, x
x>0.9	Excellent
0.9>x>0.8	Good
0.8>x>0.7	Acceptable
0.5>x	Poor

(George and Mallery, 2003)

3.7.4 Inferential Analysis

3.7.4.1 Pearson Correlation Coefficient Analysis

The Pearson correlation coefficient is appropriate for interval and ratio scaled variables (Sekaran, 2003). Pearson Correlation Coefficient is to measure the strength of a relationship between two ranked or numerical variables. This coefficient can take on any value between -1 and +1. A value of +1 represents a perfect positive correlation and vice versa. The closer its absolute value is to 1, the stronger the indication that a linear relationship exists between variables. Furthermore, a value of 0 means the variables is perfectly independent, a value of -0.7 means a strong negative relationship and 0.7 is a strong positive relationship (Saunders *et al.*, 2009).

3.7.4.2 Multiple Regressions Analysis

Multiple regression analysis is an extension of bivariate regression analysis, which allows for simultaneous investigation of the effect of two or more numerical independent variables on a single interval scaled dependent variable (Zikmund, 2003). Multiple Linear Regression analysis refers to the degree to which change in the dependent variable is related to the change in the independent variables (Sekaran, 2003). Low significance values (usually less than 0.05) mean that the coefficient is unlikely to have occurred by chance alone. A value larger than 0.05 means the coefficient could have occurred by chance alone (Saunders *et al.*, 2009, p.462). The regression equation:

$Y = \beta_0 + \beta_1 x_1 + \beta_2 x_2 + \ldots \beta_p x_p$

Where:

Y = Dependent variable

X = Independent variable

Generally, the greater the X value, the higher the Y value.

3.8 Conclusion

This chapter includes the research methodology used to collect relevant information from respondents. Besides that, it also includes the measurement of each of the variables by using the data generated from questionnaires collected. Then, those collected data were analyzed. The outputs of the analysis which includes both descriptive and inferential outputs are explained in details in the next chapter.

CHAPTER 4 DATA ANALYSIS

4.0 Introduction

In this chapter, we analyzed the results of the data collected from questionnaires which were distributed to the respondents. A total of 400 questionnaires were distributed but only 397 questionnaires were received, the remaining 3 sets were with incomplete information. While performing the analysis, SPSS software, Pearson Correlation Analysis and Multiple Regression Analysis were used.

4.1 Descriptive Analysis

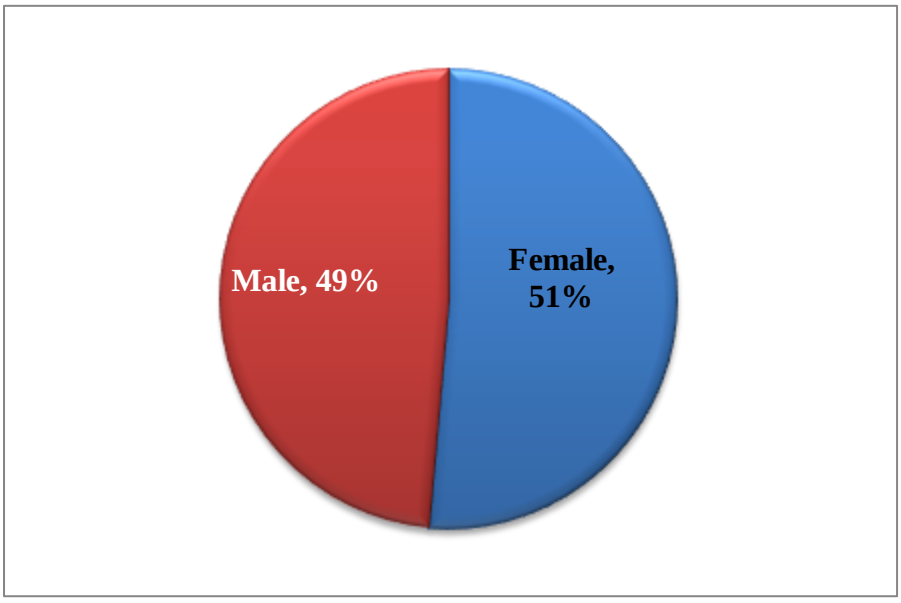
4.1.1 Demographic Profile of the Respondents

SPSS version 16.0 was used for the descriptive analysis of the demographic data. Descriptive analysis is a method that transforms the raw data into a form that provides information that enables us to analyze the results based on the questionnaires received. The survey conducted has received a 99.25 percent response rate.

4.1.1.1 Gender

Table 4.01 shows the gender distribution in this survey. The respondents consist of 204 female with percentage of 51.4% whereas the balances of 193 respondents are male with the percentage of 48.6%. There are a total 397 respondents that completed the questionnaires.

Figure 4.01: Gender



Source: Developed for the research

Table 4.01: Frequency of Gender

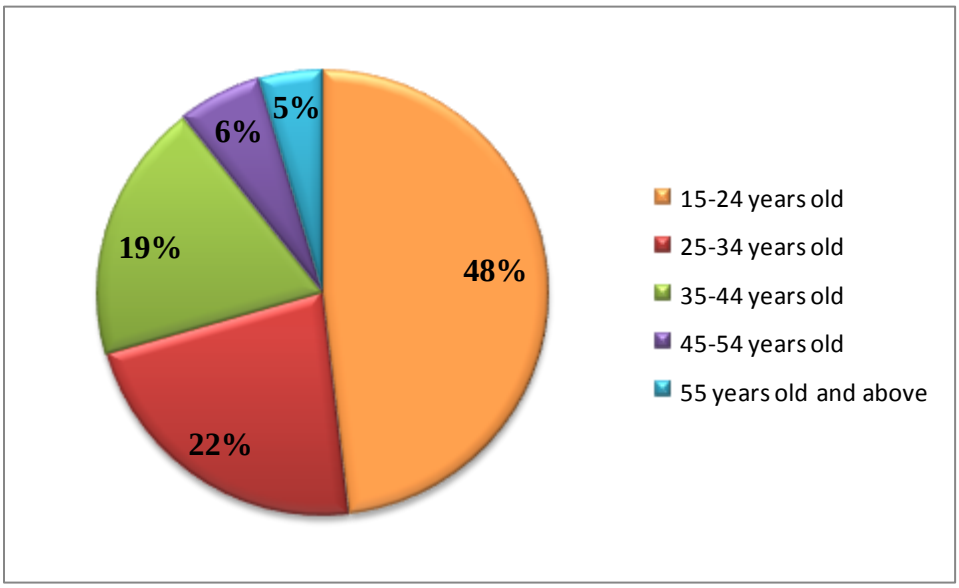
Gender	Frequency	Percentage
Female	204	51.4
Male	193	48.6
Total	397	100.0

Source: Developed for the research

4.1.1.2 Age

Based on Table 4.02, majority of the respondents are in the range between 15 to 24 years old which is 48.1%. There is total respondent of 22.4% that is in the range of 25-34 years old, followed by 18.9% of respondents range from 35 to 44 years old. 6% of the respondents are in the range between 45 to 54 years old and the remaining 4.5% is the respondents that 55 years old and above.

Figure 4.02: Age



Source: Developed for the research

Table 4.02: Frequency of Age

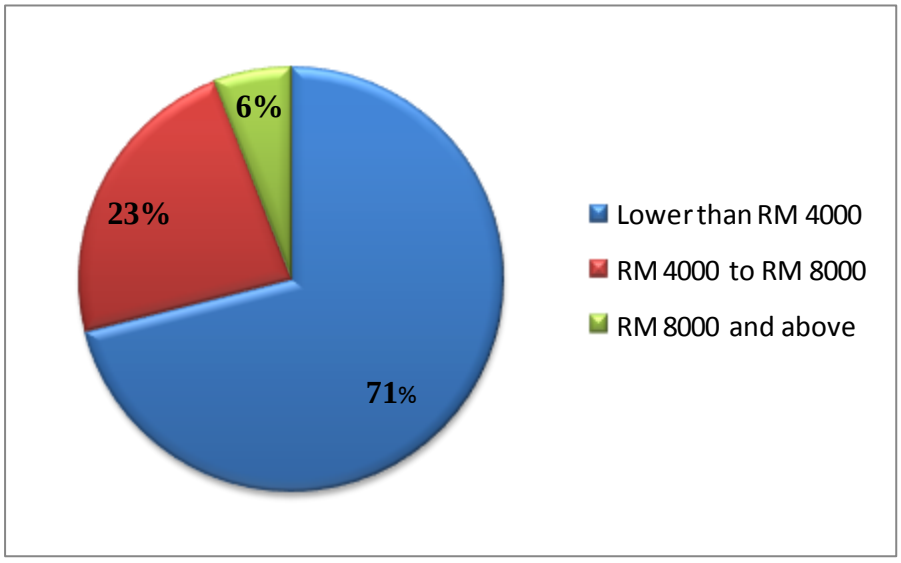
Age	Percentage	Frequency
15 – 24 years old	48.1	191
25 – 34 years old	22.4	89
35 – 44 years old	18.9	75
45 – 54 years old	6.0	24
55 years old and above	4.5	18
Total	100.0	397

Source: Developed for the research

4.1.1.3 Monthly Household Income and Allowance

According to Table 4.03, 71% of the respondents' monthly incomes are below RM4000, followed by the monthly incomes between RM4000 to RM8000 which consist of 92 respondents that constitute 23.2% of the total respondents. The remaining 5.8% of the respondents' monthly incomes are RM8000 and above.

Figure 4.03: Monthly Income



Source: Developed for the research

Table 4.03: Frequency of Monthly Income

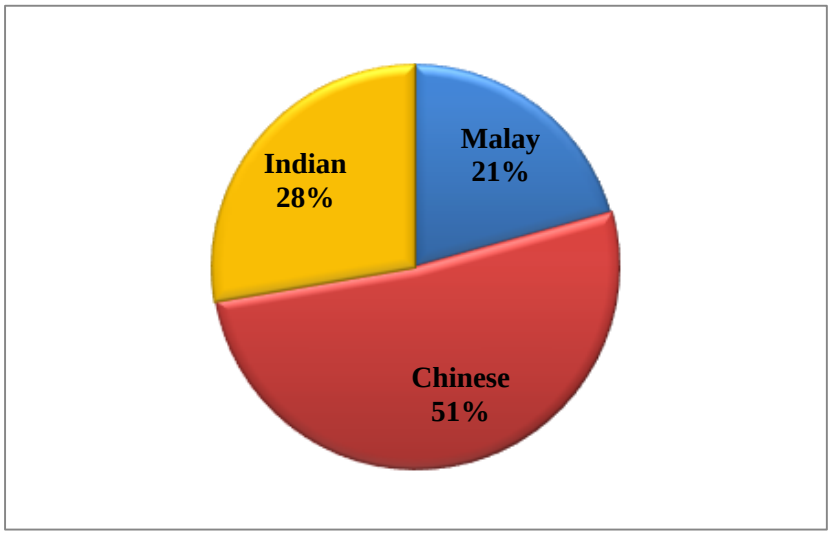
Monthly Income	Frequency	Percentage
Lower than RM4000	282	71.0
RM4000 to RM8000	92	23.2
RM8000 and above	23	5.8
Total	397	100.0

Source: Developed for the research

4.1.1.4 Ethnicity

Table 4.04 shows the race distribution in this survey. 20.7% of the total respondents are Malay and 27.7% are Indian. Most of the respondents are Chinese with the percentage of 51.6%.

Figure 4.04: Ethnicity



Source: Developed for the research

Table 4.04: Frequency of Ethnicity

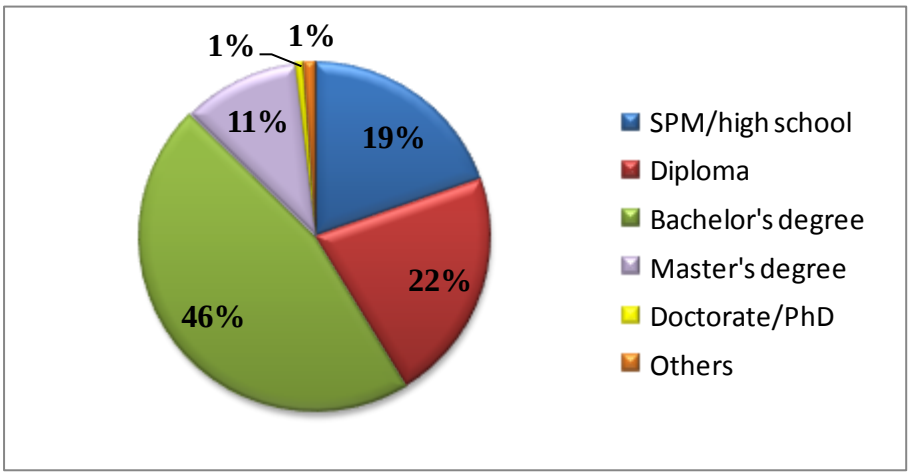
Ethnicity	Frequency	Percentage
Malay	82	20.7
Chinese	205	51.6
Indian	110	27.7
Total	397	100.0

Source: Developed for the research

4.1.1.5 Highest Level of Education

The table 4.05 shows the highest education level of our respondents. The majority of our respondents are bachelor's degree holder. It consists of 46.1%. Besides that, diploma holder consists of 21.7% and SPM/high school consists of 19.6%. Respondents who are Doctorate/PhD consisted of 0.8% out of 100%. Moreover, minority of respondents which consists of 1% have chosen the other level of education.

Figure 4.05: Highest Level of Education



Source: Developed for the research

Table 4.05: Frequency of Highest Level of Education

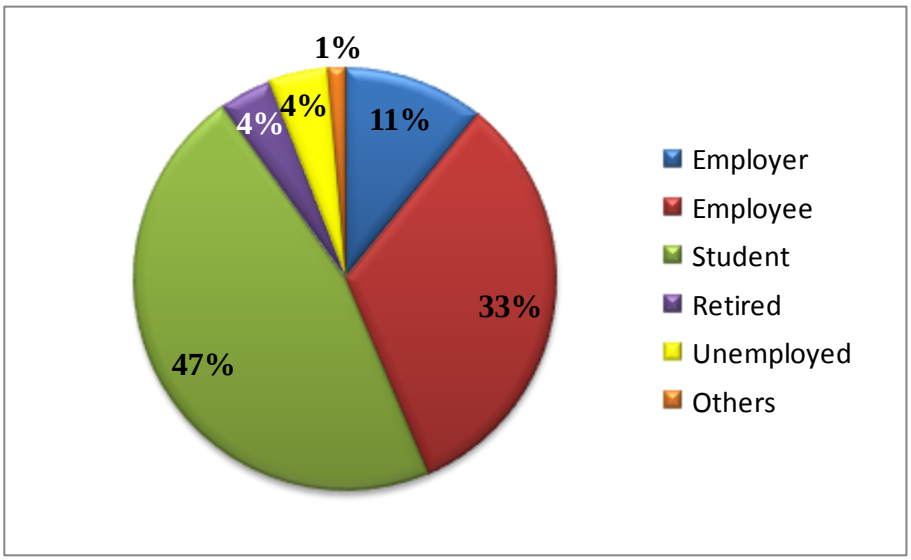
Highest Level of Education	Frequency	Percentage
SPM / High School	78	19.6
Diploma	86	21.7
Bachelor's Degree	183	46.1
Master's Degree	43	10.8
Doctorate / PHD	3	0.8
Others	4	1.0
Total	397	100.0

Source: Developed for the research

4.1.1.6 Occupation

Table 4.06 shows the majority of respondents are students with total of 46.6% followed by 32.7% of respondents are working as employees. The minority consists of respondents who are employers with a total of 10.8% followed by unemployed with a total of 4.5% and retired employees with a total of 4%.

Figure 4.06: Occupation



Source: Developed for the research

Table 4.06: Frequency of Occupation

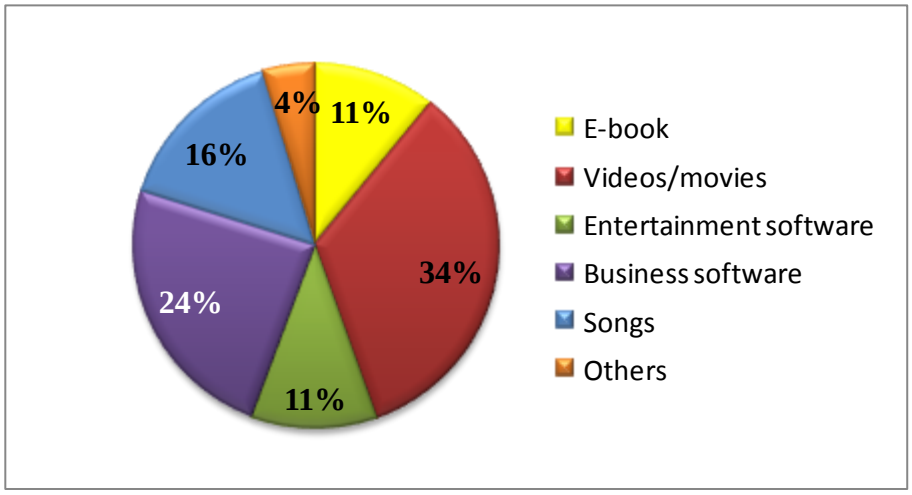
Occupation	Frequency	Percentage
Employer	43	10.8
Employee	130	32.7
Student	185	46.6
Retired	16	4.0
Unemployed	18	4.5
Others	5	1.3
Total	397	100.0

Source: Developed for the research

4.1.1.7 Preferred Choices of Pirated Media Product

Table 4.07 describes that if the respondents have bought pirated media, 33.8% of the respondents would buy videos/movies and 24.2% of them would buy business software. 15.6% of the respondents would buy songs media and 11.1% would buy entertainment software. On the other hand, only 10.8% of the respondents would buy e-books and 4.5% of the respondents would buy others pirated media software.

Figure 4.07: Preferred Choices of Pirated Media Product



Source: Developed for the research

Table 4.07: Frequency of Preferred Choices of Pirated Media Product

	Frequency	Percentage
E-book	43	10.8
Videos / Movie	134	33.8
Entertainment software	44	11.1
Business software	96	24.2
Songs	62	15.6
Others	18	4.5
Total	397	100.0

Source: Developed for the research

4.1.2 Central Tendencies Measurement of Constructs

Measurement of Central Tendencies is used to discover the mean scores for the interval scaled constructs. There are 20 items measured by using SPSS version 16.0. All of the constructs were tapped on a 5-point Likert scale (1=strongly disagree, 2=disagree, 3=neutral, 4=agree, 5=strongly agree).

4.1.2.1 Purchasing Behaviour

The Table 4.08 shows the descriptive statistic of purchasing behavior. From the table above, PB1 has the highest mean of 3.4987 and the lowest standard deviation of 0.88370. The second highest means is PB2 with the mean of 3.1612 and standard deviation of 0.90966, whereas PB3 has the lowest mean of 3.0403 and the highest standard deviation of 0.94995.

Table 4.08: Descriptive Statistics of Purchasing Behaviour

Statement	N	Minimum	Maximum	Mean	Std. Deviation
PB1: I may use/purchase pirated media product in the future.	397	1.00	5.00	3.4987	.88370
PB2: If I had the opportunity, I would commit software piracy.	397	1.00	5.00	3.1612	.90966
PB3: If given the opportunity, I will recommend a friend to purchase pirated media product.	397	1.00	5.00	3.0403	.94995

Source: Developed for the research

4.1.2.2 General Attitude

Table 4.09 shows the descriptive statistic of general attitude. It shows that the highest mean is GA2 with 3.1008 and a standard deviation of 0.94009. Secondly, the mean of 2.8086 belongs to GA3 with the standard deviation of 0.91211. Next, GA1 has the mean of 2.7783 with the standard deviation of 0.95939. GA4 has the lowest mean of 2.7154 and the lowest standard deviation of 0.89448.

Table 4.09: Descriptive Statistics of General Attitude

Statement	N	Minimum	Maximum	Mean	Std. Deviation
GA1: I feel that using pirated media product is a good idea.	397	1.00	5.00	2.7783	.95939
GA2: I feel that committing software piracy is beneficial.	397	1.00	5.00	3.1008	.94009
GA3: I feel that committing software piracy is attractive.	397	1.00	5.00	2.8086	.91211
GA4: I feel that committing software piracy is pleasant.	397	1.00	5.00	2.7154	.89448

Source: Developed for the research

4.1.2.3 Income Factor

Table 4.10 shows the descriptive statistic of income factor. From the table above, IF2 has the highest mean of 4.0453 with lowest standard deviation of 0.83965. The second highest means is IF3 with the mean of 3.5768 and with the highest standard deviation of 1.08352, whereas IF1 has the lowest mean of 3.4887 with the standard deviation of 1.05792.

Table 4.10: Descriptive Statistics of Income Factor

Statement	N	Minimum	Maximum	Mean	Std. Deviation
IF1: I will consider not to purchase pirated media product if more money available.	397	1.00	5.00	3.4887	1.05792
IF2: With my household income, I can't afford to purchase original media product.	397	1.00	5.00	4.0453	.83965
IF3: If I wanted to buy original media product today, it would cost me a lot of money.	397	1.00	5.00	3.5768	1.08352

Source: Developed for the research

4.1.2.4 Pricing Factor

Table 4.11 shows the descriptive statistic of pricing factor. PF2 has the highest mean of 3.8136 but with the lowest standard deviation of 0.79170. The second highest mean is PF3 with the mean of 3.7708 and the highest standard deviation of 0.97201. PF1 has the lowest mean of 3.6625 with standard deviation of 0.88872.

Table 4.11: Descriptive Statistics of Pricing Factor

Statement	N	Minimum	Maximum	Mean	Std. Deviation
PF1: I believe that original works are overpriced.	397	1.00	5.00	3.6625	.88872
PF2: Software developers could charge lower prices and still be profitable.	397	2.00	5.00	3.8136	.79170
PF3: I think that pirated media products are cheap and affordable.	397	1.00	5.00	3.7708	.97201

Source: Developed for the research

4.1.2.5 Moral

Table 4.12 shows the descriptive statistic of moral. The highest mean from the table above is M1 with 3.4005 and the highest standard deviation of 0.95785. Secondly, M2 has a mean of 3.1612 with standard deviation of 0.92344. Next, M3 has a mean of 2.7985 with the lowest standard deviation of 0.80698. M4 has the lowest mean of 2.7406 with standard deviation of 0.95383.

Table 4.12: Descriptive Statistics of Moral

Statement	N	Minimum	Maximum	Mean	Std. Deviation
M1: In my opinion, the act of purchasing pirated software rather than the original one is morally wrong.	397	1.00	5.00	3.4005	.95785
M2: One should always consider the moral implications before purchasing pirated media product.	397	1.00	5.00	3.1612	.92344
M3: Engaging in software piracy goes against my principles.	397	1.00	5.00	2.7985	.80698
M4: In my opinion, people who used pirated media product should be punished.	397	1.00	5.00	2.7406	.95383

Source: Developed for the research

4.1.2.6 Social Factor

Table 4.13 shows the descriptive statistic of social factor. S3 has the highest mean which is 3.0353 but with the lowest standard deviation of 0.92865. S1 and S2 have the same mean which is 2.4836. S2 that the highest standard deviation with 1.02881 followed by S1 with standard deviation of 1.00396.

Table 4.13: Descriptive Statistics of Social Factor

Statement	N	Minimum	Maximum	Mean	Std. Deviation
S1: If my relatives were aware that I used pirated media product, they would look down on me because they think that I cannot afford legal media product.	397	1.00	5.00	2.4836	1.00396
S2: If my friends were aware that I used pirated media product, they would look down on me because they think I cannot afford legal media product.	397	1.00	5.00	2.4836	1.02881
S3: I will purchase pirated media product if I encouraged by others.	397	1.00	5.00	3.0353	.92865

Source: Developed for the research

4.2 Scale Measurement

4.2.1 Normality test

The dependent variable, purchasing behavior is examined using normality test to determine whether the data is normally distributed. Table 4.14 shows the result of the normality test.

The most common statistical tests for normality are Kolmogorov-Smirnov test and Shapiro-Wilk test. Kolmogorov-Smirnov test is recommended for large samples (more than 100) while Shapiro-Wilk is recommended for small data sets (e.g., n<50) (Buckingham & Saunders, 2008). As the sample size obtained for this research is 397, thus the groups' decision is to use the Kolmogorov-Smimov test. However, the result for this survey shows data is not normally distributed because p-value is 0.00 (P<0.05).

Table 4.14: Normality Test

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
PB_Average	.117	397	.000	.961	397	.000

a. Lilliefors Significance Correction

Source: Developed for the research

Skewness and Kurtosis

Based on Principles of Statistics by Bulmer in year 1979, if the value of Skewness is less than -1 or greater than +1, the distribution is highly skewed. Also, if the Skewness is between -1/2 and +1/2, the distribution is approximately symmetric. It is moderately skewed if the value of Skewness is between -1 and -1/2 or between +1/2 and +1.

Based on Table 4.15, for the dependent variable, purchasing behavior of consumer towards pirated media (PB), the distribution is approximately symmetric. The value of the Skewness for this variable is between -0.5 and +0.5. The independent variable, general attitude (GA) is under the category of approximately symmetric. The values of Skewness of income factor (IF) are under different categories. For IF1 and IF3, the values are between -0.5 and +0.5, so it is under approximately symmetric. IF2 with the figure of -0.523 is under the category of moderately skewed. The price factor (PF), PF1 and PF2 are between -1/2 and +1/2. Thus, the distribution is approximately symmetric. PF3 with the value of less than negative 0.5 is distributed moderately. The distribution of moral factor (M), mostly are approximately symmetric with the figures of -0.287, 0.063 and 0.030. However M1 is less than negative 0.5, so it is skewed moderately. The distribution for social factor is mostly moderately skewed, except for S3 with the value of -0.070 is approximately symmetric.

Based on the rule of thumb, the value of Kurtosis that is more than 3 is called Leptokurtic distribution. This type of distribution means that there is a high probability of extreme values. If the value of Kurtosis is less than 3, it is called as Platykurtic distribution. The values of this distribution are widely spread around the mean. Mesokurtic distribution with value equal to 3 is a normal distribution.

From the figure based on Table 4.15, all the values of Kurtosis for all variables are less than 3. This research is under Platykurtic distribution that flatters than normal distribution and the values are wider spread around the mean.

Jun, Cai, and Shin (2006) found that as long as the Skewness and Kurtosis of all the variables do not go beyond the absolute value of ±1, the multivariate model will show no significant violations, and thus we can conclude that the data is normally distributed (Jun, Cai, & Shin, 2006). Based on the Table 4.15, all of the values of Skewness and Kurtosis are between ±1. Due to this, although the normality test did not show a normal distribution, we can still proceed with parametric testing.

Table 4.15: Descriptive Statistics of Skewness and Kurtosis

	Skewness		Kurtosis	
	Statistic	Std. Error	Statistic	Std. Error
PB1	-.426	.122	-.209	.244
PB2	-.324	.122	-.549	.244
PB3	.168	.122	-.424	.244
GA1	.266	.122	-.524	.244
GA2	.036	.122	-.804	.244
GA3	.268	.122	-.636	.244
GA4	.357	.122	-.207	.244
IF1	-.266	.122	-.880	.244
IF2	-.523	.122	-.182	.244
IF3	-.498	.122	-.796	.244
PF1	-.304	.122	-.205	.244
PF2	-.269	.122	-.344	.244
PF3	-.655	.122	-.166	.244
M1	-.615	.122	-.354	.244
M2	-.287	.122	-.511	.244
M3	.063	.122	.273	.244
M4	.030	.122	-.649	.244
S1	.527	.122	-.489	.244
S2	.674	.122	-.160	.244
S3	-.070	.122	-.601	.244
Valid N (listwise)				

Source: Developed for the research

4.2.2 Reliability test

Reliability test is used to compute the stability and the consistency of the variables, while Cronbach's Alpha is used to measure the reliability of the constructs within the questionnaires. Derived from the founding of George and Mallery (2003), the Cronbach's Alpha that is more than 0.9 means that the internal consistency is excellent, in a range that is more than 0.8 and less than 0.9 is good, more than 0.7 is considered as acceptable and less than 0.5 is poor. From the Table 4.16, the Cronbach's Alpha of purchasing behavior is 0.703. According to the findings of George and Mallery (2003), this value is acceptable and reliable.

The Cronbach's Alpha value of general attitude is high, with the figure of 0.818. Cronbach's Alpha of 0.644 of income factor and 0.682 of pricing factor are defined as poor results based on the rule of thumb. However, according to the research of Hair, Black, Babin, Anderson, and Tatham (2006), the Cronbach's Alpha value must show more than 0.6 in order to be acceptable. This means that the income factor and pricing factor are also considered as reliable. Social factor with Cronbach's Alpha of 0.772 is acceptable based on the rule of thumb. The moral factor generated the highest Cronbach's Alpha of 0.833. It is a good result based on the rule of thumb. Based on the reliability test, all of the variables are reliable and acceptable.

Table 4.16 Reliability Statistics Results

Variables	Numbers of Items	Cronbach's Alpha
Purchasing Behavior	3	0.703
General Attitude	4	0.818
Income Factor	3	0.644
Pricing Factor	3	0.682
Moral	4	0.833
Social Factor	3	0.772

Source: Developed for the research

4.3 Inferential Analysis

4.3.1 Pearson Correlation Coefficient

The strength of a relationship between variables can be measured by Pearson Correlation Coefficient. A value of +1 represents a perfect positive correlation while a value of -1 represents a perfect negative correlation.

Table 4.17: Rule of Thumb (Pearson Correlation Coefficient)

Coefficient Range	Strength of Association
±0.5 to ± 1.0	Strong
± 0.3 to ± 0.5	Moderate
± 0.1 to ± 0.3	Weak

("Pearson Product-Moment Correlation," n.d., para. 4)

As for significant value, if the P-value (2-tailed) observed is lower than 0.01, this represents that the correlation between two interval variables is statistically significant. In other words, the increase and decrease in variables do have a significant influence on another variable. The table below shows the results of our research.

Table 4.18 Pearson Correlation Coefficient

		PB_Ave	GA_Ave	IF_Ave	PF_Ave	M_Ave	S_Ave
PB_Ave	Pearson Correlation	1	.583**	.555**	.521**	-.435**	.288**
	Sig. (2-tailed)		.000	.000	.000	.000	.000
	N	397	397	397	397	397	397
GA_Ave	Pearson Correlation	.583**	1	.271**	.253**	-.277**	.220**
	Sig. (2-tailed)	.000		.000	.000	.000	.000
	N	397	397	397	397	397	397
IF_Ave	Pearson Correlation	.555**	.271**	1	.538**	-.312**	.178**
	Sig. (2-tailed)	.000	.000		.000	.000	.000
	N	397	397	397	397	397	397
PF_Ave	Pearson Correlation	.521**	.253**	.538**	1	-.346**	.220**
	Sig. (2-tailed)	.000	.000	.000		.000	.000
	N	397	397	397	397	397	397
M_Ave	Pearson Correlation	-.435**	-.277**	-.312**	-.346**	1	-.176**
	Sig. (2-tailed)	.000	.000	.000	.000		.000
	N	397	397	397	397	397	397
S_Ave	Pearson Correlation	.288**	.220**	.178**	.220**	-.176**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	
	N	397	397	397	397	397	397

** Correlation is significant at the 0.01 level (2-tailed).

PB = Purchasing Behaviour

GA = General Attitude

IF = Income Factor

PF = Pricing Factor

M = Moral

S = Social

Source: Developed for Research

4.3.2 Correlation between General Attitude and Purchasing Behavior towards pirated media

4.3.2.1 Hypothesis One

H0: There is no relationship between general attitude and consumer purchasing behavior towards pirated media.
H1: There is a significant relationship between general attitude and consumer purchasing behavior towards pirated media.

From Table 4.19, the correlation between general attitude and consumer purchasing behavior towards pirated media is 0.583. This coefficient shows that there is a positive and strong relationship between the two variables. The p-value is less than 0.01. This shows that the correlation coefficient is statistically significant. From the result shown, we can conclude 34% (0.583^2) of the variation in consumer purchasing behavior towards pirated media can be explained by general attitude. Therefore, we reject the null hypothesis (H0) and accept the alternate hypothesis (H1).

Table 4.19: Correlation between GA and PB

		PB_Average	GA_Average
PB_Average	Pearson Correlation	1	.583**
	Sig. (2-tailed)		.000
	N	397	397
GA_Average	Pearson Correlation	.583**	1
	Sig. (2-tailed)	.000	
	N	397	397

**. Correlation is significant at the 0.01 level (2-tailed).

Source: Developed for Research

4.3.3 Correlation between Income Factor and Purchasing Behavior towards pirated media

4.3.3.1 Hypothesis Two

H0: There is no relationship between income factor and consumer purchasing behavior towards pirated media.
H1: There is a significant relationship between income factor and consumer purchasing behavior towards pirated media.

Based on Table 4.20, the p-value between the two variables is 0.000 and the r-value is 0.555. Hence, there is positive and strong relationship between income factor and consumer purchasing behavior towards the pirated media. From the result shown, we can conclude that 30.8% (0.555^2) of the variation in consumer purchasing behavior towards pirated media can be explained by income factor. Therefore, we reject the null hypothesis (H0) and accept the alternate hypothesis (H1) as the p-value is less than 0.05.

Table 4.20: Correlation between IF and PB

		PB_Average	IF_Average
PB_Average	Pearson Correlation	1	.555**
	Sig. (2-tailed)		.000
	N	397	397
IF_Average	Pearson Correlation	.555**	1
	Sig. (2-tailed)	.000	
	N	397	397

**. Correlation is significant at the 0.01 level (2-tailed).

Source: Developed for Research

4.3.4 Correlation between Pricing Factor and Purchasing Behavior towards pirated media

4.3.4.1 Hypothesis Three

H0: There is no relationship between pricing factor and consumer purchasing behavior towards pirated media.
H1: There is a significant relationship between pricing factor and consumer purchasing behavior towards pirated media.

Table 4.21 shows the relationship between pricing factor and consumer purchasing behavior towards pirated media. Based on the results provided, it indicates that the value of Pearson Correlation is 0.521. This shows that there is a strong relationship between these two variables. The p-value is 0.000 ($p<0.01$), which indicates that there is a significant relationship. From the result shown, we can conclude 27.14% (0.521^2) of the variation in consumer purchasing behavior towards pirated media can be explained by pricing factor. Therefore, we reject the null hypothesis and accept the alternate hypothesis.

Table 4.21: Correlation between PF and PB

		PB_Average	PF_Average
PB_Average	Pearson Correlation	1	.521**
	Sig. (2-tailed)		.000
	N	397	397
PF_Average	Pearson Correlation	.521**	1
	Sig. (2-tailed)	.000	
	N	397	397

**. Correlation is significant at the 0.01 level (2-tailed).

Source: Developed for Research

4.3.5 Correlation between Moral Factor and Purchasing Behavior towards pirated media

4.3.5.1 Hypothesis Four

H0: There is no relationship between moral factor and consumer purchasing behavior towards pirated media.
H1: There is a significant relationship between moral factor and consumer purchasing behavior towards pirated media.

Table 4.22 shows that, there is a negative and significant relationship between moral factor and consumer purchasing behavior towards pirated media as the r-value is -0.435 and p-value is 0.000. From the result shown, we can conclude 18.92% (-0.435^2) of the variation in consumer purchasing behavior towards pirated media can be explained by moral factor. Thus, we reject the null hypothesis and accept the alternate hypothesis.

Table 4.22: Correlation between M and PB

		PB_Average	M_Average
PB_Average	Pearson Correlation	1	-.435**
	Sig. (2-tailed)		.000
	N	397	397
M_Average	Pearson Correlation	-.435**	1
	Sig. (2-tailed)	.000	
	N	397	397

**. Correlation is significant at the 0.01 level (2-tailed).

Source: Developed for Research

4.3.6 Correlation between Social Factor and Purchasing Behavior towards pirated media

4.3.6.1 Hypothesis Five

H0: There is no relationship between social factor and consumer purchasing behavior towards pirated media.
H1: There is a significant relationship between social factor and consumer purchasing behavior towards pirated media.

Table 4.23 depicts whether there is a significant relationship between social factor and the consumer purchasing behavior towards pirated media. The value of Pearson Correlation is 0.288, which means that there is a weak positive relationship between the two variables. However, the p-value is 0.000 ($p<0.01$), which shows that there is a significant relationship. From the result shown, we can conclude 8.3% (0.288^2) of the variation in consumer purchasing behavior towards pirated media can be explained by social factor. Therefore, we reject the null hypothesis and accept the alternative hypothesis.

Table 4.23: Correlation between S and PB

		PB_Average	S_Average
PB_Average	Pearson Correlation	1	.288**
	Sig. (2-tailed)		.000
	N	397	397
S_Average	Pearson Correlation	.288**	1
	Sig. (2-tailed)	.000	
	N	397	397

**. Correlation is significant at the 0.01 level (2-tailed).

Source: Developed for Research

4.3.7 Multiple Linear Regression Analysis

From the multiple linear regression analysis, we established a set of proportion of independent variables which are able to explain the dependent variables through a significance test of R Square. If the R Square value is 1.0, the model of research completely explains the variance of dependent variable and so it will produce perfect predictive accuracy. Also, it is able to establish the relative predictive importance of the independent variables by comparing data weights.

Model Summary

Coefficient of multiple determinations (R Square) in Multiple Linear Regression indicates the proportion of the variability in the dependent variable (DV) that can be explained by the independent variable (IV). Based on the above SPSS output, adjusted R square is 0.574, 57.4% of the variation in purchasing behaviour has been significantly explained by the social, price, moral, income factor and general attitude. This means that the model is adequate to be chosen by the researchers.

Table 4.24: Model of Summary

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.761[a]	.580	.574	.47273

a. Predictors: (Constant), S_Ave, M_Ave, GA_Ave, IF_Ave, PF_Ave

b. Dependent Variable: PB_Ave

Source: Developed for the research

ANOVA

According to table 4.25, the F-value of model 1 is 107.883 associated with a significance level of 0.01. The result presented that the significance level is 0.000 which was lesser than 0.01. Thus, we can conclude that the model was considered good and fit in order to predict the dependent variable using the independent variables, as purchasing behaviour do have significant effects on social, price, moral, general attitude and income factors.

Table 4.25: ANOVA[b]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	120.546	5	24.109	107.883	.000[a]
	Residual	87.379	391	.223		
	Total	207.926	396			

a. Predictors: (Constant), S_Ave, PF_Ave, M_Ave, GA_Ave,IF_Ave

b. Dependent Variable:PB_Ave

Source: Developed for the research

Unstandardized coefficients

To produce an equation that will predict a dependent variable using one or more independent variable, unstandardized or regression coefficient constant or slope was used. The unstandardized coefficient (B) is the regression coefficients. Based on the table 4.26, the regression equation developed for this research is:

Y = 0.641 + 0.385 X1 + 0.264 X2 + 0.209 X3 - 0.150 X4 + 0.071X5
where:
Y = Dependent variable = Purchasing Behaviour
X1 = Independent variable IV1 = General Attitude
X2 = Independent variable IV2 = Income Factor
X3 = Independent variable IV3 = Price Factor
X4 = Independent variable IV4 = Moral Factor
X5 = Independent variable IV5 = Social Factor

The formula indicated a positive relationship exists between the general attitude, income factor, price factor, social factor and purchasing behavior but negative relationship between moral factor and purchasing behavior. This equation determined that purchasing behavior was predicted to increase by 0.385 when general attitude went up by 1; increased by 0.264 when income factor went up by 1; increased by 0.209 when price factor went up by 1; increased by 0.071 when social factor went up by 1; However, decreased by 0.150 when moral factor went up by 1 and was predicted to be 0.641 when there was no factors affecting the consumer purchasing behaviour of pirated media (all Independent Variables are zero).

This equation implied that the factors of general attitude and price have the greatest influence on purchasing behaviour and followed by the factors of income, social, and the least impact was moral factor.

Standardized Coefficients

From table 4.26, the Beta in fourth column showed that all the independent variables were lower than 1. General attitude was the highest with beta value of 0.396 ($p<0.05$). Second highest independent variable is ‘‘income factor’’ with beta value of 0.278 ($p<0.05$), followed by ‘‘pricing factor ’’with beta value of 0.200 ($p<0.05$), ‘‘social factor’’ with beta value

of -0.155 ($p<0.05$) and lastly ‘‘social factor’’ was the lowest with beta value of 0.080 ($p<0.05$).

Table 4.26: Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	.641	.236		2.721	.007
GA_Ave	.385	.034	.396	11.199	.000
IF_Ave	.264	.038	.278	6.993	.000
PF_Ave	.209	.042	.200	4.968	.000
M_Ave	-.150	.035	-.155	-4.277	.000
S_Ave	.071	.030	.080	2.327	.020

a. Dependent Variable: PB_Ave

Source: Developed for the research

Test of Significance

H1: General Attitude is positively related to purchasing behaviour of pirated media

Based on the analysis, the hypothesis was accepted. The general attitude is related with purchasing behaviour as p-value is less than 0.05. The Beta-value is positive 0.396. Therefore, it shows a positive relationship between these two variables.

H2: Income Factor is positively related to purchasing behaviour of pirated media

Based on the analysis, the hypothesis was accepted. The income factor is related with purchasing behaviour as p-value was less than 0.05. The Beta-value is positive 0.278. Therefore, it shows a positive relationship between these two variables.

H3: Price Factor is positively related to purchasing behaviour of pirated media

Based on analysis, the hypothesis was accepted. The price factor is related with purchasing behaviour as p-value was less than 0.05. The Beta-value is positive 0.200. Therefore, it shows a positive relationship between these two variables.

H4: Moral Factor is negatively related to purchasing behaviour of pirated media

Based on analysis, the hypothesis was accepted. The moral factor is related with purchasing behaviour as p-value was less than 0.01. However, Beta-value is negative 0.155. Therefore, it shows a negative relationship between these two variables.

H5: Social Factor is positively related to purchasing behaviour of pirated media

Based on the analysis, the hypothesis was accepted. The social factor is positively related with purchasing behaviour as p-value is less than 0.05. The Beta-value is positive 0.080. Therefore, it shows a positive relationship between these two variables.

Table 4.27: Test of Significance

Independent Variables	P-value	Significant / Not Significant
General Attitude	0.000 (<0.05)	Significant
Income Factor	0.000 (<0.05)	Significant
Pricing Factor	0.000 (<0.05)	Significant
Moral Factor	0.000 (<0.05)	Significant
Social Factor	0.000 (<0.05)	Significant

Source: Developed for the Research.

4.4 Conclusion

In this chapter, our group had run the Reliability Test, Pearson Correlation Coefficient and Multiple Linear Regression Analysis. The factors of general attitude, income and price are positively related with purchasing behaviour however moral factor is negatively related with purchasing behaviour. Moreover, general attitude and price factor have the strongest influence on purchasing behaviour of pirated media. We will discuss the implication, limitation and recommendation for future research in next chapter.

CHAPTER 5 DISCUSSION, CONCLUSION AND IMPLICATIONS

5.0 Introduction

In this chapter, we include a summary of all the data tested on chapter 4. Discussions on the data are then carried out in the later part. Interpretation on each of the tested data is provided on the discussion part. Limitations we faced during conducting this research are discussed later on. It is then followed by the recommendations we provide to future researchers who research this topic. We end the chapter as well as the research with a conclusion.

5.1 Summary of Statistical Analysis

5.1.1 Descriptive Analysis

5.1.1.1 Demographic Profile of the Respondents

Out of 400 copies of questionnaires sent out, 397 copies have been returned. The percentages of male and female respondents are close to equal being 51.6% and 48.6% respectively. Most of the respondents

(48.1%) fall in the age range of 15 - 24 years old. 71% of the respondents earn an income of lower than RM4,000 every month. As for ethnicity, most of the respondents are Chinese which occupied 51.6% of the chart. Bachelor's degrees are what most of by our respondents currently hold, being 46.1% in total. Our respondents are mostly students, which has taken up 46.6% of space in the pie chart. Lastly, pirated videos or movies, being the highest choice of 33.8%, are the respondents' favorite kind of pirated media products.

5.1.2 Scale Measurement

5.1.2.1 Normality test

As for the Normality test, the result shows that data is not normally distributed because p-value is 0.00 ($P<0.05$). However, Jun, Cai, and Shin (2006) found that as long as the Skewness and Kurtosis of all the variables do not go beyond the absolute value of ±1, the multivariate model will show no significant violations, and thus we can conclude that the data is normally distributed and we can continue with parametric testing.

5.1.2.2 Reliability Test

In the Reliability test, the test result of the dependent variable, purchasing behavior and the independent variables, general attitude, income factor, pricing factor, moral and social factor are 0.703, 0.818, 0.644, 0.682, 0.833 and 0.772 respectively. All of the above tested results show more than 0.6, which are considered reliable and acceptable (Hair *et al*., 2006).

5.1.3 Inferential Analysis

5.1.3.1 Pearson Correlation Coefficient

The Pearson Correlation Coefficient test results between the dependent variable, purchasing behaviour and each independent variable, general attitude, income factor, pricing factor, moral and social factor are 0.583, 0.555, 0.521, -0.435 and 0.288 respectively. Through the study, all independent variables' r value is more than 0.3 except social factor, it indicates that the existence of moderate and strong association between independent variables and dependent variable. However social factor has a weak association with the dependent variable. Furthermore, all variables have a significance level of 0.000, thus we can conclude that the independent variables are highly significant to the dependent variable. Based on these tested results, all of the null hypotheses (H0s) are rejected and all the alternate hypotheses (H1s) are accepted.

5.1.3.2 Multiple Linear Regression Analysis

The adjusted R^2 of 0.574 indicates that all the independent variables can explain the dependent variable, pirated media purchasing behavior, to the extent of 57.4%. Also, the 'F' value of 107.883 being $p < 0.05$ indicates that the independent variables can explain a very large variance of purchasing behavior towards pirated media. The conclusion is that the model is good and adequate in predicting the dependent variable using the independent variables.

Data in the Unstandardized Coefficients (B) shows an equation that when the independent variables, general attitude, income factor, price factor and social factor increase by 1, purchasing behavior is predicted to go up by 0.385, 0.264, 0.209 and 0.071 accordingly; while when moral factor increases by 1, purchasing behavior is expected to decrease by -0.150.

Beta under the Standardized Coefficients column shows that all the independent variables are significant at the 0.05 level, while only social factor is insignificant at the 0.01 level.

5.2 Discussion on major findings

Each hypothesis was tested in Chapter 4 and to show whether or not there are relationships between each independent variable – general attitudes, income factors, pricing factors, moral and the dependent variable purchasing behavior towards pirated media. Results show that there are significant relationships between the independent variables and the dependent variable.

Table 5.01: Summary of the Results of Hypotheses Testing

	Hypotheses	Result	Significant Level
H1:	There is a significant relationship between general attitude and consumer behaviour of purchasing pirated media.	Accepted	0.000
H2:	There is a significant relationship between income and consumer behaviour of purchasing pirated media.	Accepted	0.000
H3:	There is a significant relationship between pricing and consumer behaviour of purchasing pirated media.	Accepted	0.000
H4:	There is a significant relationship between moral and consumer behaviour of purchasing pirated media.	Accepted	0.000
H5:	There is a significant relationship between social factor and consumer behaviour of purchasing pirated media.	Accepted	0.020

Source: Developed for the Research.

5.2.1 Hypothesis 1

Through the Pearson Correlation test of Hypothesis 1, it is shown that there is a significant relationship between general attitudes and purchasing behavior towards pirated media. Based on the tested correlation data ($r = 0.583$, $p = 0.000$), it is proven that the relationship between both the independent and dependent variables are of strong positive ("Pearson Product-Moment Correlation," n.d., para. 4). This means the more favorable an individual's attitude on pirated media, the higher his or her purchasing intention would be.

A person with positive perception towards media piracy tends to have higher intention on conducting pirated media purchase, or vice versa. Alam *et al*. (2011) stresses that attitude has a direct relationship with purchase intention, which ultimately affect purchase behavior. This statement is backed by Icek Ajzen's Theory of Planned Behavior which has been widely used to explain behavior. Therefore, it is fair to say that attitude is one of the major determinants of whether one will purchase pirated media. Our result is consistent with the ones in Lai (2007), Wang *et al*. (2009), and Alam *et al*. (2011).

5.2.2 Hypothesis 2

Tested result on Hypothesis 2 shows that there is a significant strong positive relationship ($r = 0.555$, $p = 0.000$) between income factors and purchasing behavior towards pirated media ("Pearson Product-Moment Correlation," n.d., para. 4). This, in general, means that the higher the income of an individual, the more likely this individual would conduct pirated media purchase. This finding indicates that contrary to what most

people think, people with lower income do not necessarily spend more on pirated media products.

This phenomenon might be due to the mindset of Asians. According to Haque *et al*. (2009), Asia is affected by piracy issue the most. Thus, Malaysians, being part of Asia, have great tendency to conduct piracy. The more income they have, the more pirated media they would purchase. Our result is generally consistent with the result in Funkhouser (2006). However, the study of Cheng *et al*. (1997) concluded this aspect with an opposite result. This could be due to differences in race, culture, religion as well as tradition (Haque *et al*., 2009).

5.2.3 Hypothesis 3

The Pearson Correlation test on Hypothesis 3 shows a significant strong positive relationship ($r = 0.521$, $p = 0.000$) between pricing factors and pirated media purchasing behavior ("Pearson Product-Moment Correlation," n.d., para. 4). This shows an indication that the higher the price of genuine copies of media, the higher the tendency of consumers to purchase pirated media products.

High prices of original copy of media have long been one of the main reasons that turn consumers off whenever they have demand on a particular media product. Hence, consumers tend to resort to purchasing pirated copy as there are always huge differences in terms of prices. Consumers can enjoy the same product with extremely lower prices; this is what being termed as the price advantage of pirated products in Haque *et al*. (2009). The findings in Siponen *et al*. (2007), Lau (2003) and Cheng *et al*. (1997) share the same view as ours in general.

5.2.4 Hypothesis 4

As for Hypothesis 4, the Pearson Correlation test shows a significant moderate negative relationship (r = -0.435, p = 0.000) between moral and purchasing behavior towards pirated media ("Pearson Product-Moment Correlation," n.d., para. 4). This indicates that strong moral judgment would lead to lower tendency of conducting media piracy.

A person with strong moral judgment would rather spend more money on original media products than to conduct something that is deemed immoral. They perceive media piracy as something unethical. The results in the studies of Ratnasingam *et al*. (2008) and Trevino *et al*. (1985) consistently align with ours. However, Jacobs (2010) found little significance between moral justification and media piracy conducts. It is due to the imperfection of the proposed model.

5.2.5 Hypothesis 5

Through the Pearson Correlation analysis, the relationship between social factor and purchasing behavior towards pirated media is of significant weak positive (r = 0.288, p = 0.000) ("Pearson Product-Moment Correlation," n.d., para. 4). This explains that social influence can cast a positive effect on one's purchasing behavior towards pirated media.

Although not as strong an impact as other factors, social factor can be one of the reasons of conducting media piracy. People tend to keep up with the Joneses and do what is currently trending, especially if it is a trend among friends or family members (Haque *et al*., 2009). Sometimes, social

pressure can even urge one to break rules (Haque *et al*., 2011). Therefore, it is not strange to say social factor can be a determinant for purchasing behavior towards pirated media. Our results are generally consistent with the results of Haque *et al*. (2009), Haque *et al*. (2011), and Alam *et al*., (2011).

5.3 Implications of the Study

The aim of this study is to contribute towards the understanding of factors resulting in the use of pirated media in Malaysia. As the increase in import from the US entertainment has required Malaysia to raise the bar of its standards in terms of regulating piracy (Haque *et. al.*, 2011), this study provides relevant and up-to-date information regarding the factors which results in the large demand of pirated media in Malaysia. This study is one of the few studies conducted in Malaysia on this topic, thus it contributes greatly towards the current literature on the local market.

A quote from a paper entitled Media Piracy in Emerging Economies by the Social Science Research Council in 2011 states that "lower piracy will lead to greater investment in legal markets, and greater investment will lead to economic growth, jobs, innovation, and expanded access". By understanding the current situation in Malaysia, and the factors outlined in our research, we are able to lower the level of piracy in Malaysia which will lead us to a stronger growth in a better economy.

For the distributers of original media, the research shows areas which can be tailored in order to meet the local expectations of original media in the Malaysian market, such as through looking at how pricing factor plays a significant role in Malaysia, distributers can set the price to an optimal level so that higher demand

for original media can be obtained and at the same time not in complete contradiction of the profit making motives that most companies emphasize.

From the government point of view, Asian countries have been notoriously known for the high level of piracy throughout the continent, and Malaysia is one of the countries experiencing the highest level of piracy in Asia. Our survey showed that pricing factors as well as income factors play a significant role in determining consumer purchasing behavior, however so does general attitude, social and moral factors. These are things that the government has to act strongly to rectify and correct the mindset of Malaysians on how piracy is bad for individuals and the country as a whole as it will deter foreign investments and subsequently cause a lack of jobs and a weaker economy. In order to curb this, the government will have to look at education policies, campaigns and other methods to create awareness. Enforcing a requirement for schools to give talks on intellectual rights would be one of a possibility to go about this. Providing tax benefits to foreign investors on media would also be a short term solution to the piracy problem, but would be expensive to maintain on a long term basis.

From an individuals' point of view, we found that the general attitude, social and moral factors of Malaysians promote and encourage piracy in our everyday life. This implies that there is very much that needs to be done in order to change the cultural norms of Malaysians that piracy is good or even acceptable. In reality, piracy destroys an economy and does not benefit anybody in the long term. Therefore we can clearly say that there is a need to change the perception of individuals in order to deter such thinking. Parents should educate their child at an early age and should seek to avoid promote piracy in the household as children look to them as role models. Individuals should also look to purchasing second hand original media or sharing original media between friends to reduce cost.

5.3.1 Managerial Implications

This study contributes to the literature on purchasing behavior of pirated media by studying factors including general attitude, income level, price and moral factor. A significant relationship could be established between the purchasing behavior and these factors, allowing managerial implications to be easily tailored to manage these factors.

For managers, the main two factors that are associated with corporation are pricing factors and income factors. For income factor, as there is no clear and fair way to require managers to alter the income levels of all employees we will focus more on pricing factors instead. It is more suitable to leave income factor to the government to handle as no one firm can alter the average income level of an entire country under normal circumstances.

When distributers bring in original media, they have to bear the cost of developing and marketing, and thus the prices will always be lower than the price of pirated media. (Lee, 2003) However according to our findings, the higher the price of original media the higher the purchasing intention of pirated media is. Although it is impossible to beat the low prices of pirated media, it would be more beneficial to set them at a level that is more affordable in a Malaysian setting than in the usual price levels set in other countries. Differentiation strategy is a seldom explored strategy that is quite affective at increasing the perceive value of original media that consumers purchase. Managers can contact singers, writers, actors and other people who have more reputation and popularity to sign on the products or hold more autograph signing session so that consumers will be more willing to purchase original media regardless of the price.

5.4 Limitations of the Study

5.4.1 Sample Bias

The first limitation of our research is the distribution of our questionnaire. Our sample size may be bias towards certain criteria, and thus our research may reflect more accurately towards some groups than the others. An example would be there are more respondents that are 15-24 years old, have less than RM4000 income, are Chinese, have a bachelor's degree and so on. We do not discount our findings in any way; however such factors have to be taken into consideration as they may affect the outcome of our research marginally. The findings would also describe these groubs more accurately than the others.

5.4.2 Time and Financial Constraint

The next limitation is time constraint and financial constraint. As our research is conducted with such constraint in place, this may limit the outcome of our study. If given more time and a bigger budget, our research may show more conclusive and useful information. As we have to speed up the process of our research, we were unable to look at more factors that may have an influence on the purchasing behavior of pirated media. Our research shows that the factors explain only 57.4% of the purchasing intention of pirated media.

5.4.3 Inaccuracy of Primary Data

As our research is on primary data instead of secondary data, having data from trusted and reliable source and conducting a research on such sources may have a different outcome to what our research has uncovered. This method will show hard facts and accurate figures that may have a stronger persuasive power to different people.

5.4.4 Honesty of the Respondents

Lastly, out of 400 questionnaires collected, 397 were incomplete. We attribute this to being unable to find willing participants who are genuinely interested in the topic we were researching in to fill up our survey. It is also possible that the respondents were unable to understand the questionnaire or felt uncomfortable filling up the questionnaire as piracy is an illegal act. Therefore we were unable to enter the unfinished data into our research.

5.5 Recommendations for Future Research

This study could be further improved by adding more factors into determining the exact factors influencing purchasing behavior of pirated media. The scope can be enlarged to include more parts of Malaysia. Doing research on the other demographic groups may yield more findings. Research on the neighboring countries around Malaysia may also be useful as they have an influence in the entire south-east Asian continent. There is still 64.1% of purchasing intention of pirated media not explained by our research; this is another area that can be targeted for further research.

Future research should also be allowed a longer time frame and thus a longitudinal study could perhaps be conducted to take the effects of government and corporations actions into consideration. By lifting the financial constraint, more manpower can be used in the research, and more data can be collected too.

Future research could be conducted on secondary data on the same topic. This will improve the current literature on pirated media. Such study could also be compared to our research to see the significance of the factor highlighted in our study.

Furthermore, future research can be done on other pirated products. This includes pirated branded bags, shoes and many others which are easily found in the Malaysian market. For different products, there may be other factors which affect the purchasing decision.

5.6 Conclusion

This study aims to examine several factors and their influence on the purchasing behavior of pirated media. In this chapter we completed a summary of all the data tested on chapter 4, and the results are that weak moral values, stronger social factors that encourage pirated media, a more positive attitude towards pirated media and a higher price of original media will increase the chances of purchasing pirated media, and that people with lower income level may not necessarily have a higher intention of purchasing pirated media. We discussed the implications of our studies and also provide some recommendations based on these limitations. We also pointed out the limitation of our studies which include constrains and sample biased that may have an effect on our study. Lastly we provided recommendations for various related parties to consider making further research on and investigate about in future research.

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Appendix A

Summary of Past Empirical Studies on factors determining consumer purchasing behavior of pirated media

Study	*Country*	*Data*	*Major Findings*
Alam, Ahmad, Ahmad, & Hashim, 2011	Malaysia	Survey questionnaires were personally distributed to 419 undergraduate students from the faculty of business and management.	The results indicate that all factors (attitude, subjective norm, social factors and habit) except perceived behavioral control have positive and significant impact on pirated software purchasing behavior of Malaysian students.
Chen, Pan, & Pan, 2009	Taiwan	Internet questionnaire survey of 593 of Taiwan respondents and 584 questionnaires were valid after excluding those with omissions.	The results reveal that if an individual has strong moral judgment, he or she will be less willing to use pirated software. Therefore, when moral judgment is introduced in the TPB as a moderator, the positive relationship between attitudes toward consumers' use intention of pirated software diminishes.

Cheng, Fu, & Tu, 2011	Vietnam	400 questionnaires were distributed to university students in Vietnam, 328 were returned and 318 of them were valid.	The results showed that out of the four independent variables, attitude towards counterfeit products, subjective norms and perceived behavioural control are positively related with the counterfeits purchasing behaviour, while perceived financial control is negatively related to pirated products purchasing behaviour.
Cheng, Sims, & Teegen, 1997	USA	Questionnaire survey of 340 undergraduate and graduate business students.	The findings showed that top reason to pirate software purchase relate mainly to software pricing: "software is too expensive", "want to try out the software" and "cannot afford the software". For lower-income households the reason of "cannot afford the software" is especially important. The authors recommend that software should be priced according to a potential buyer's household income.
Funkhouser, 2006	Taiwan	The questionnaires were distributed to total of 115 Bachelor, Master and PhD students from two major universities in southern Taiwan.	Through the finding, the hypothesis of the higher the income, the lower the intention to use pirated software was not supported.

Haque, Khatibi, & Rahman, 2009	Malaysia	The survey of 300 consumers was conducted mainly via face-to-face interviews also administered through e-mail.	The finding is lower income groups have more favorable attitudes towards pirated CDs among consumers in Peninsula Malaysia.
Jacobs, 2010	Nederland	Online questionnaire survey of 436 students at the University of Twente.	This study showed that moral justification is directly and positively related to the number of illegal downloads.
Lai, 2007	Hong Kong	Computer-assisted telephone interviewing 25 internet users.	Overall unfavorable attitude towards Internet piracy behavior and relatively lower intention of individuals to perform such action like pirating on the internet.
Lau, 2003	Hong Kong	The research was conducted on 263 visitors to the Information Infrastructure Expo held in March 2002 through observation.	This study concluded that social acceptance of software piracy is positively correlated with lenient attitudes to software piracy. Also, the result showed that high price strategy of original software is positively related to software piracy.

Limayem, Khalifa, & Chin, 2004	Canada	Survey questionnaires were distributed to 127 students doing a Bachelor of Business in a Canadian university.	Social factors were found to significantly influence intentions to pirate software. Specifically, only friends affected the respondents' intentions.
Moores & Esichaikul, 2011	Thailand	Questionnaires were distributed to students taking Master course in information management, engineering and business administration in a Thailand university, 213 responses were valid.	The findings in this study showed that older people were less likely to share pirated software, males were more likely to purchase pirated software while females with a higher possibility of sharing pirated software, and people with more work experience were more possible to use pirated software.
Prendergast, Chuen & Phau, 2002	Hong Kong	The survey was conducted via face to face interviews and utilized the structured questionnaire on students or blue-collar workers between the ages of 19 and 24.	The purchasers of pirated goods do not necessarily always come from the lower income group. The findings also suggest that the condition for choice of non-deceptive pirated brands differ by product category.

Ratnasingam & Ponnu, 2008	Malaysia	Primary data was collected by distributing questionnaires to 230 respondents living in the Klang Valley, Malaysia.	This study showed that when consumers are confronted with ethical dilemma, they rely on cognitive judgment to make an ethical decision. It also demonstrates the consumers' level of moral reasoning affects their perception as to why certain actions are perceived as morally just or preferred.
Siponen & Vartiainen, 2007	Finland	The research was conducted on 249 computing students in a Finnish university through a questionnaire.	The research concluded that poverty and a desire to save money were the reasons behind unauthorized copying. The respondents stated they were unable to afford legal software as it was too expensive or that they were poor.
Wang, Chen, Yang, & Farn, 2009	Taiwan	A set of questionnaires were administered to 350 teenagers in Northern Taiwan through questionnaire interviews conducted in city centers.	The findings indicate that TPB is suitable to be used to explain why young people prefer pirated music. Teenagers believe it is beneficial to them and not harmful to anybody.

Appendix B

The table of variables and measurement

Dependent Variable: Consumer purchasing behaviour of pirated media

Variable	Code	Description	References
Consumer purchasing behaviour of pirated media (PB)	PB 1	I may use/ purchase pirated media product in the future.	Liao, Lin, & Liu, 2009
	PB 2	If I had the opportunity, I would commit software piracy.	Chen, Pan, & Pan, 2009
	PB 3	If given the opportunity, I will recommend a friend to purchase pirated media product.	Lai, 2007

Independent Variables 1: General attitudes

Variable	Code	Description	References
General attitudes (GA)	GA 1	I feel that using pirated media product is a good idea.	Liao, Lin, & Liu, 2009
	GA 2	I feel that committing software piracy is beneficial.	Chen, Pan, & Pan, 2009
	GA 3	I feel that committing software piracy is attractive.	Chen, Pan, & Pan, 2009
	GA 4	I feel that committing software piracy is pleasant.	Chen, Pan, & Pan, 2009

Independent Variables 2: Income factor

Variable	Code	Description	References
Income factor (IF)	IF 1	I will consider not to purchase pirated media product if more money available.	Haque, Tarofder, & Rahman, 2011
	IF 2	With my household income, I can't afford to purchase original media product.	Cheng, Sims, & Teegen, 1997
	IF 3	If I wanted to buy original media product today, it would cost me a lot of money.	Funkhouser, 2006

Independent Variables 3: Pricing factor

Variable	Code	Description	References
Pricing factor (PF)	PF 1	I believe that original works are overpriced	Lai, 2007
	PF 2	Software developers could charge lower prices and still be profitable.	Lau, 2003
	PF 3	I think that pirated media product is cheap and affordable.	Haque, Tarofder, & Rahman, 2011

Independent Variables 4: Moral

Variable	Code	Description	References
Moral (M)	M 1	In my opinion, the act of purchasing pirated software rather than the original one is morally wrong.	Chen, Pan, & Pan, 2009
	M 2	One should always consider the moral implications before using pirated media product.	Chen, Pan, & Pan, 2009
	M 3	Engaging in software piracy goes against my principles.	Hashim, 2011
	M 4	In my opinion, people who use pirated media product should be punished.	Funkhouser, 2006

Independent Variables 5: Social factor

Variable	Code	Description	References
Social Factor (S)	SC 1	If my relatives were aware that I used pirated media product, they would look down on me because they think that I cannot afford legal media product.	Funkhouser, 2006
	SC 2	If my friends were aware that I used pirated media product, they would look down on me because they think that I cannot afford legal media product.	Funkhouser, 2006
	SC 3	I will purchase pirated media product If I encouraged by others.	Haque, Khatibi, & Rahman, 2009

Appendix C Sample of Questionnaire

UNIVERSITI TUNKU ABDUL RAHMAN

Faculty of Business and Finance

BACHELOR OF COMMERCE (HONS) ACCOUNTING

FINAL YEAR PROJECT

TOPIC: FACTORS DETERMINING CONSUMER PURCHSING BEHAVIOUR OF PIRATED MEDIA

Survey Questionnaire

Dear respondent,

We are final year undergraduate student of Bachelor of Commerce (Hons) Accounting in Faculty of Business and Finance, from University Tunku Abdul Rahman (UTAR). We are conducting a research project which attempt to study

Factors determining consumer purchasing behaviour of pirated media

…….

Thank you for your participation.

Instructions:

1) There are **TWO** (2) sections in this questionnaire. Please answer ALL questions in ALL sections.

2) Completion of this form will take you approximately 10 to 20 minutes.

3) Please feel free to share your comment in the space provided. The contents of this questionnaire will be kept **strictly confidential**.

Instruction: This questionnaire is not a test, so there will be no right or wrong answer. Please answer each question carefully and accurately. Your answer should be based on your opinion and do not influence by others.

SECTION A: DEMOGRAPHIC SECTION

Guideline: Please tick on the box that is relevant to you.

1. Gender:

☐ Male ☐ Female

2. Age:

☐ 15 to 24 years old
☐ 25 to 34 years old
☐ 35 to 44 years old
☐ 45 to 54 years old
☐ 55 years old and above

3. Monthly household income and allowance

☐ Lower than RM4000
☐ RM4000 – RM8000
☐ RM8000 and above

4. Ethnicity

☐ Malay ☐ Chinese ☐ India

5. Highest level of education

☐ SPM/ High School
☐ Bachelor's Degree
☐ Doctorate/ PhD
☐ Diploma
☐ Master's Degree
☐ Others:_____(Please specify)

6. Occupation

- [ ] Employer
- [ ] Employee
- [ ] Student
- [ ] Retired
- [ ] Unemployed
- [ ] Others_____(Please specify)

7. If you do purchase pirated media product, what kind of media products you like to purchase?

- [ ] E-Book
- [ ] Videos/ Movies
- [ ] Entertainment Software
- [ ] Business Software
- [ ] Songs
- [ ] Others

SECTION B

DETERMINANTS OF INDEPENDENT VARIABLES AND DEPENDENT VARIABLE

In this part, we would like to measure the factors that determining consumers purchasing behaviour towards pirated media. Please indicate how strongly you agree or disagree with each statement. Please put your score by circling in the appropriate numbers below:

1. SD- Strongly Disagree
2. D- Disagree
3. N- Neutral
4. A- Agree
5. SA- Strongly Agree

DEPENDENT VARIABLE:

CONSUMER PURCHASING BEHAVIOR OF PIRATED MEDIA

No.	Questions	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	I may use/ purchase pirated media product in the future.	1	2	3	4	5
2	If I had the opportunity, I would commit software piracy.	1	2	3	4	5
3	If given the opportunity, I will recommend a friend to purchase pirated media product.	1	2	3	4	5

INDEPENDENT VARIABLE 1: GENERAL ATTITUDE

No.	Questions	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	I feel that using pirated media product is a good idea.	1	2	3	4	5
2	I feel that committing software piracy is beneficial.	1	2	3	4	5
3	I feel that committing software piracy is attractive.	1	2	3	4	5
4	I feel that committing software piracy is pleasant.	1	2	3	4	5

INDEPENDENT VARIABLE 2: INCOMES

No.	Questions	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	I will consider not to purchase pirated media product if more money available.	1	2	3	4	5
2	With my household income, I can't afford to purchase original media product.	1	2	3	4	5
3	If I want to original media product today, it would cost me a lot of money	1	2	3	4	5

INDEPENDENT VARIABLE 3: PRICE

No.	Questions	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	I believe that original works are overpriced.	1	2	3	4	5
2	Software developers could charge lower prices and still be profitable.	1	2	3	4	5
3	I think that pirated media product is cheap and affordable.	1	2	3	4	5

INDEPENDENT VARIABLE 4: MORAL

No.	Questions	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	In my opinion, the act of purchasing pirated software rather than the original one is morally wrong.	1	2	3	4	5
2	One should always consider the moral implications before using pirated media product.	1	2	3	4	5
3	Engaging in software piracy goes against my principles.	1	2	3	4	5
4	In my opinion, people who use pirated media product should be punished.	1	2	3	4	5

INDEPENDENT VARIABLE 5: SOCIAL

No.	Questions	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	If my relatives were aware that I used pirated media product, they would look down on me because they think that I cannot afford legal media product.	1	2	3	4	5
2	If my friends were aware that I used pirated media product, they would look down on me because they think that I cannot afford legal media product.	1	2	3	4	5
3	I will purchase pirated media product If I encouraged by others	1	2	3	4	5

Thank you for your time, opinion and comments.

~ The End ~

Appendix D

2010 "SPECIAL 301" USTR DECISIONS

2008 and 2009 ESTIMATED TRADE LOSSES DUE TO COPYRIGHT PIRACY (in millions of U.S. dollars)

and 2008-2009 ESTIMATED LEVELS OF COPYRIGHT PIRACY

	Business Software [1]				Records & Music [2]			
	Losses		Levels		Losses		Levels	
	2009	2008	2009	2008	2009	2008	2009	2008
PRIORITY WATCH LIST								
Algeria	30.0	53.0	84%	84%	NA	NA	NA	NA
Argentina	387.0	203.0	71%	73%	63.4	75.1	60%	60%
Canada	613.0	794.0	29%	32%	NA	NA	NA	NA
Chile	173.0	111.0	64%	67%	NA	21.0	NA	66%
India	1001.5	1384.0	65%	68%	17.7	36.2	60%	55%
Indonesia	487.3	299.0	86%	85%	24.7	20.0	95%	95%
Pakistan	83.0	80.0	84%	86%	NA	NA	NA	NA
People's Republic of China	3412.4	3005.0	79%	80%	466.3	564.0	90%	90%
Russian Federation (GSP)	1437.0	2318.0	67%	68%	NA	NA	NA	NA
Thailand	381.7	335.0	75%	76%	15.1	17.8	50%	65%
Venezuela	377.0	266.0	87%	86%	NA	NA	NA	NA
WATCH LIST								
Belarus	30.0	NA	87%	NA	NA	NA	NA	NA
Bolivia	24.0	12.0	80%	81%	NA	NA	NA	NA
Brazil	1240.0	905.0	56%	58%	147.0	117.1	48%	48%
Brunei	7.7	10.0	67%	68%	NA	2.4	NA	100%
Colombia	134.0	75.0	55%	56%	NA	NA	NA	NA
Costa Rica	20.0	14.0	59%	60%	NA	14.8	NA	60%

Czech Republic	**104.0**	**101.0**	**37%**	**38%**	**NA**	**NA**	**NA**	**NA**
Dominican Republic	**36.0**	**24.0**	**77%**	**79%**	**NA**	**NA**	**NA**	**NA**
Ecuador	**36.0**	**20.0**	**67%**	**66%**	**NA**	**NA**	**NA**	**NA**
Egypt	**80.0**	**87.0**	**59%**	**59%**	**NA**	**NA**	**NA**	**NA**
Finland	**105.0**	**116.0**	**25%**	**26%**	**NA**	**NA**	**NA**	**NA**
Greece	**136.0**	**131.0**	**58%**	**57%**	**NA**	**NA**	**NA**	**60%**
Guatemala	**41.0**	**27.0**	**80%**	**81%**	**NA**	**NA**	**NA**	**NA**
Italy	**1040.0**	**1137.0**	**49%**	**48%**	**NA**	**350.0**	**NA**	**25%**
Jamaica	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
Kuwait	**37.0**	**41.0**	**60%**	**61%**	**NA**	**NA**	**NA**	**NA**
Lebanon (GSP)	**25.0**	**27.0**	**72%**	**74%**	**NA**	**3.0**	**NA**	**70%**
Malaysia	**226.5**	**184.0**	**58%**	**59%**	**23.5**	**26.2**	**60%**	**60%**
Mexico	**581.0**	**453.0**	**60%**	**59%**	**436.4**	**419.7**	**82%**	**80%**
Norway	**117.0**	**137.0**	**29%**	**28%**	**NA**	**NA**	**NA**	**NA**
Peru	**68.0**	**46.0**	**70%**	**71%**	**NA**	**57.2**	**NA**	**98%**
Philippines	**130.2**	**121.0**	**69%**	**69%**	**112.1**	**117.0**	**83%**	**83%**
Romania	**110.0**	**149.0**	**65%**	**66%**	**NA**	**10.0**	**NA**	**40%**
Spain	**608.0**	**617.0**	**42%**	**42%**	**NA**	**13.4**	**NA**	**20%**
Tajikistan	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
Turkey	**228.0**	**257.0**	**63%**	**64%**	**NA**	**NA**	**NA**	**NA**
Turkmenistan	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
Ukraine	**150.0**	**294.0**	**85%**	**84%**	**NA**	**NA**	**NA**	**NA**
Uzbekistan (GSP)	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
Vietnam	**211.8**	**154.0**	**85%**	**85%**	**NA**	**NA**	**NA**	**95%**

	Business Software [1]				Records & Music [2]			
	Losses		Levels		Losses		Levels	
	2009	2008	2009	2008	2009	2008	2009	2008
SPECIAL 306 MONITORING								
Paraguay [2]	**16.0**	**9.0**	**82%**	**83%**	**NA**	**NA**	**NA**	**NA**
Status Pending								
Israel (OCR)	**70.0**	**81.0**	**33%**	**32%**	**55.0**	**NA**	**55.0**	**NA**
TOTALS	**13995.1**	**14077.0**			**1361.2**	**1864.9**		

Endnotes:

1 BSA's 2009 statistics are now final. They represent the U.S. software publishers' share of software piracy losses in each country, and follow the methodology compiled in the Sixth Annual BSA and IDC Global Software Piracy Study (May 2010 available at http://www.bsa.org. These figures cover, in addition to business applications software, computer applications such as operating systems, consumer applications such as PC gaming, personal finance, and reference software. In IIPA's 2010 Special 301 filing, BSA's 2009 piracy statistics were stated as preliminary, noting that finalized statistics would be forthcoming later in 2010.

2 RIAA reports that its estimated losses to the music industry in 2007 in Paraguay include both domestic piracy and estimated losses caused by transshipment.

3 ESA does not have 2008 data available. ESA's reported dollar figures for 2007 reflect the value of pirate product present in the marketplace as distinguished from definitive industry "losses." The value of pirate product in the market in Poland reflects only the value of pirate product for personal computers.

"GSP" means that the U.S. government is reviewing this country's IPR practices under the Generalized System of "OCR" means that an out-of-cycle review be conducted by USTR later in 2010
IIPA's members' methodology is described in Appendix B of IIPA's submission, see http://www.iipa.com/2009_SP

Appendix E

IIPA 2007 "SPECIAL 301" RECOMMENDATIONS

2005 and 2006 ESTIMATED TRADE LOSSES DUE TO COPYRIGHT PIRACY (in millions of U.S. dollars)

and 2005-2006 ESTIMATED LEVELS OF COPYRIGHT PIRACY

	Business Software[1]				Records & Music[2]				Motion Pictures[3]				Entertainment Software[4]				Books		Totals	
	Losses		Levels		Losses		Levels		Losses		Levels		Losses		Levels		Loss	Loss	Loss	Loss
	2006	2005	2006	2005	2006	2005	2006	2005	2006	2005	2006	2005	2006	2005	2006	2005	2006	2005	2006	2005
PRIORITY WATCH LIST																				
Argentina	**215.0**	109.0	**76%**	77%	**82.0**	69.5	**60%**	60%	**NA**	318.0	**NA**	90%	**NA**	NA	**65%**	NA	**4.0**	4.0	**301.0**	500.5
Canada	**551.0**	491.0	**34%**	33%	**NA**	NA	**NA**	NA	**NA**	118.0	**NA**	8%	**NA**	NA	**NA**	NA	**NA**	NA	**551.0**	609.0
Chile[4]	**65.0**	55.0	**64%**	66%	**29.6**	22.7	**44%**	51%	**NA**	10.0	**NA**	35%	**NA**	NA	**20%**	NA	**1.0**	1.0	**95.6**	88.7
Costa Rica	**12.0**	10.0	**65%**	66%	**15.1**	18.3	**60%**	60%	**NA**	2.0	**NA**	100%	**NA**	NA	**NA**	NA	**NA**	NA	**27.1**	30.3
Dominican Republic	**10.0**	5.0	**77%**	77%	**9.9**	10.8	**65%**	75%	**NA**	3.0	**NA**	89%	**NA**	NA	**NA**	NA	**1.0**	1.0	**20.9**	19.8
Egypt	**47.0**	45.0	**63%**	64%	**12.0**	9.0	**70%**	60%	**NA**	NA	**NA**	NA	**NA**	14.3	**NA**	85%	**31.0**	30.0	**90.0**	98.3
India	**318.0**	255.0	**70%**	72%	**52.7**	56.4	**55%**	57%	**NA**	NA	**NA**	29%	**85.6**	65.2	**82%**	86%	**40.0**	42.0	**496.3**	418.6
Israel	**41.0**	39.0	**32%**	32%	**45.0**	28.0	**50%**	35%	**NA**	61.0	**NA**	61%	**11.4**	NA	**84%**	95%	**1.0**	1.0	**98.4**	129.0
Mexico	**296.0**	263.0	**63%**	65%	**486.6**	376.5	**67%**	65%	**NA**	483.0	**NA**	62%	**182.0**	137.7	**85%**	75%	**41.0**	42.0	**1005.6**	1302.2
People's Republic of China	**1949.0**	1554.0	**82%**	86%	**206.0**	204.0	**85%**	85%	**NA**	244.0	**NA**	93%	**NA**	589.9	**NA**	92%	**52.0**	52.0	**2207.0**	2643.9
Russian Federation (OCR+GSP)	**1433.0**	894.0	**83%**	83%	**423.0**	475.9	**65%**	67%	**NA**	266.0	**NA**	81%	**282.1**	223.9	**72%**	82%	**42.0**	42.0	**2180.1**	1901.8
Saudi Arabia	**112.0**	105.0	**51%**	52%	**20.0**	20.0	**50%**	50%	**NA**	95.0	**NA**	95%	**NA**	NA	**NA**	95%	**8.0**	10.0	**140.0**	230.0
Thailand	**164.0**	155.0	**80%**	80%	**20.7**	21.9	**50%**	45%	**NA**	149.0	**NA**	62%	**NA**	NA	**82%**	75%	**35.0**	30.0	**219.7**	355.9
Turkey	**203.0**	157.0	**66%**	65%	**20.0**	18.0	**80%**	80%	**NA**	29.0	**NA**	NA	**NA**	NA	**NA**	NA	**20.0**	23.0	**243.0**	227.0
Ukraine	**290.0**	131.0	**85%**	85%	**30.0**	30.0	**60%**	60%	**NA**	38.0	**NA**	NA	**NA**	NA	**NA**	NA	**NA**	NA	**320.0**	199.0

Venezuela	**124.0**	95.0	**84%**	82%	**50.6**	33.0	**80%**	83%	**NA**	30.0	**NA**	63%	**NA**	NA	**NA**	NA	**NA**	NA	**174.6**	158.0
WATCH LIST																				
Bangladesh	**NA**	NA	**NA**	NA	**40.0**	NA	**70%**	NA	**NA**	NA	**NA**	NA	**NA**	NA	**NA**	NA	**8.0**	6.0	**48.0**	6.0
Belarus	**NA**	NA	**NA**	NA	**NA**	25.0	**NA**	70%	**NA**	NA	**NA**	NA	**NA**	NA	**NA**	NA	**NA**	NA	**0.0**	25.0
Brazil	**497.0**	383.0	**62%**	64%	**176.5**	334.5	**40%**	52%	**NA**	101.0	**NA**	22%	**159.3**	120.8	**88%**	77.0	**18.0**	18.0	**850.8**	957.3
Bulgaria	**24.0**	21.0	**69%**	71%	**7.0**	7.0	**75%**	80%	**NA**	8.0	**NA**	NA	**NA**	21.0	**NA**	81%	**NA**	NA	**31.0**	57.0
Colombia[4]	**48.0**	45.0	**56%**	57%	**62.5**	47.7	**71%**	71%	**NA**	41.0	**NA**	75%	**NA**	NA	**35%**	NA	**6.0**	6.0	**116.5**	139.7
Ecuador	**16.0**	9.0	**68%**	69%	**33.0**	26.3	**98%**	90%	**NA**	NA	**NA**	NA	**NA**	NA	**NA**	NA	**2.0**	2.5	**51.0**	37.8
Greece	**106.0**	88.0	**65%**	64%	**30.0**	26.0	**60%**	60%	**NA**	72.0	**NA**	NA	**30.2**	NA	**68%**	NA	**NA**	NA	**166.2**	186.0
Hungary[4]	**67.0**	55.0	**44%**	42%	**20.0**	12.0	**35%**	30%	**NA**	102.0	**NA**	73%	**NA**	NA	**40%**	30%	**NA**	4.0	**87.0**	173.0
Indonesia (OCR)	**156.0**	153.0	**85%**	87%	**17.2**	13.8	**91%**	88%	**NA**	NA	**NA**	87%	**NA**	NA	**NA**	NA	**32.0**	32.0	**205.2**	198.8
Italy	**716.0**	812.0	**50%**	53%	**48.0**	40.0	**27%**	20%	**NA**	161.0	**NA**	22%	**647.7**	639.2	**40%**	30%	**20.0**	20.0	**1431.7**	1672.2
Kazakhstan	**61.0**	38.0	**86%**	85%	**NA**	20.0	**NA**	66%	**NA**	NA	**NA**	NA	**NA**	NA	**NA**	NA	**NA**	NA	**61.0**	58.0
Kuwait	**49.0**	35.0	**71%**	66%	**9.0**	8.5	**70%**	70%	**NA**	NA	**NA**	NA	**NA**	1.3	**NA**	82%	**0.5**	0.5	**58.5**	45.3
Lebanon (GSP)	**20.0**	20.0	**72%**	73%	**2.6**	3.2	**60%**	75%	**NA**	1.0	**NA**	1%	**NA**	NA	**NA**	NA	**NA**	4.0	**22.6**	28.2
Lithuania	**20.0**	14.0	**59%**	57%	**13.0**	12.0	**85%**	85%	**NA**	NA	**NA**	NA	**NA**	1.7	**NA**	88%	**NA**	NA	**33.0**	27.7
Malaysia	**NA**	82.0	**61%**	60%	**22.0**	38.8	**45%**	49%	**NA**	NA	**NA**	91%	**28.0**	23.4	**90%**	91%	**9.0**	10.0	**59.0**	154.2
Nigeria	**59.0**	46.0	**82%**	82%	**52.0**	52.0	**95%**	95%	**NA**	NA	**NA**	NA	**NA**	NA	**NA**	NA	**8.0**	6.0	**119.0**	104.0
Pakistan (OCR)	**20.0**	26.0	**84%**	86%	**25.0**	25.0	**100%**	100	**NA**	NA	**NA**	NA	**NA**	NA	**NA**	NA	**55.0**	55.0	**100.0**	106.0
Peru	**27.0**	22.0	**70%**	73%	**53.5**	66.0	**98%**	98%	**NA**	12.0	**NA**	63%	**NA**	NA	**NA**	NA	**NA**	9.0	**80.5**	109.0
Philippines (OCR)[4]	**35.0**	46.0	**72%**	71%	**50.3**	21.0	**62%**	40%	**NA**	NA	**NA**	78%	**NA**	11.3	**NA**	85%	**49.0**	48.0	**134.3**	126.3
Poland	**264.0**	202.0	**58%**	58%	**24.0**	25.0	**35%**	31%	**NA**	102.0	**NA**	66%	**NA**	NA	**75%**	60%	**NA**	5.0	**288.0**	334.0
Romania	**66.0**	61.0	**69%**	72%	**12.0**	17.0	**60%**	80%	**NA**	12.0	**NA**	NA	**NA**	NA	**77%**	75%	**NA**	2.0	**78.0**	92.0
South Korea (OCR)	**NA**	200.0	**45%**	46%	**0.3**	1.3	**7%**	13%	**NA**	NA	**NA**	7%	**353.5**	415.1	**68%**	55%	**45.0**	43.0	**398.8**	659.4
Spain [2]	**501.0**	417.0	**46%**	46%	**25.0**	27.0	**22%**	22%	**NA**	253.0	**NA**	32%	**111.5**	NA	**48%**	NA	**NA**	NA	**637.5**	697.0

	Business Software[1]				Records & Music[2]				Motion Pictures[3]				Entertainment Software[4]				Books		Totals	
	Losses		Levels		Losses		Levels		Losses		Levels		Losses		Levels		Loss	Loss	Loss	Loss
	2006	2005	2006	2005	2006	2005	2006	2005	2006	2005	2006	2005	2006	2005	2006	2005	2006	2005	2006	2005
Taiwan (OCR)	**90.0**	56.0	**41%**	43%	**16.2**	21.5	**28%**	26%	**NA**	98.0	**NA**	51%	**NA**	161.9	**NA**	42%	**18.0**	18.0	**124.2**	355.4
Tajikistan	**NA**	NA	**NA**	NA	**NA**	5.0	**NA**	80%	**NA**	NA	**NA**	NA	**NA**	NA	**NA**	NA	**NA**	NA	**0.0**	5.0
Turkmenistan	**NA**	NA	**NA**	NA	**NA**	7.0	**NA**	85%	**NA**	NA	**NA**	NA	**NA**	NA	**NA**	NA	**NA**	NA	**0.0**	7.0
Uzbekistan (GSP)	**NA**	NA	**NA**	NA	**NA**	30.0	**NA**	80%	**NA**	NA	**NA**	NA	**NA**	NA	**NA**	NA	**NA**	NA	**0.0**	30.0
Vietnam	**40.0**	21.0	**88%**	90%	**NA**	NA	**95%**	95%	**NA**	NA	**NA**	NA	**NA**	NA	**NA**	NA	**18.0**	16.0	**58.0**	37.0
SPECIAL 306 MONITORING																				
Paraguay[2;4]	**7.0**	6.0	**81%**	83%	**128.0**	128.0	**99%**	99%	**NA**	2.0	**NA**	86%	**NA**	NA	**98%**	NA	**NA**	2.0	**135.0**	138.0
FTA DISPUTE SETTLEMENT																				
Bahrain	**12.0**	12.0	**60%**	60%	**NA**	NA	**NA**	NA	**NA**	NA	**NA**	NA	**NA**	NA	**NA**	NA	**NA**	**NA**	**12.0**	12.0
Jordan	**11.0**	11.0	**64%**	63%	**NA**	NA	**NA**	NA	**NA**	NA	**NA**	NA	**NA**	NA	**NA**	NA	**NA**	**NA**	**11.0**	11.0
Morocco	**30.0**	31.0	**66%**	68%	**NA**	NA	**NA**	NA	**NA**	NA	**NA**	NA	**NA**	NA	**NA**	NA	**NA**	**NA**	**30.0**	31.0
Singapore	**NA**	43.0	**NA**	40%	**1.2**	2.4	**5%**	5%	**NA**	NA	**NA**	57%	**NA**	NA	**NA**	NA	**2.0**	**NA**	**3.2**	45.4
SPECIAL MENTION																				
Azerbaijan	**NA**	NA	**NA**	NA	**NA**	15.0	**NA**	80%	**NA**	NA	**NA**	NA	**NA**	NA	**NA**	NA	**NA**	NA	**0.0**	15.0
Cambodia	**NA**	NA	**NA**	NA	**NA**	NA	**NA**	NA	**NA**	NA	**NA**	NA	**NA**	NA	**NA**	NA	**5.0**	4.5	**5.0**	4.5
Hong Kong	**91.0**	56.0	**54%**	54%	**2.9**	4.3	**17%**	18%	**NA**	NA	**NA**	9%	**59.9**	90.8	**60%**	71%	**5.0**	6.0	**158.8**	157.1
Japan	**909.0**	811.0	**27%**	28%	**NA**	NA	**NA**	NA	**NA**	NA	**NA**	NA	**NA**	NA	**NA**	NA	**NA**	NA	**909.0**	811.0
Lao People's Democratic Republic	**NA**	NA	**NA**	NA	**NA**	NA	**NA**	NA	**NA**	102.0	**NA**	15%	**NA**	NA	**NA**	NA	**3.0**	3.0	**3.0**	105.0
Latvia	**NA**	NA	**NA**	NA	**NA**	NA	**NA**	**NA**	**NA**	NA	**NA**	NA	**NA**	NA	**NA**	NA	**NA**	NA	**NA**	NA

New Zealand	**105.0**	18.0	**23%**	23%	**NA**	NA	**NA**	NA	**NA**	NA	**NA**	NA	**NA**	NA	**NA**	28%	**NA**	NA	**105.0**	18.0
Oman	**14.0**	12.0	**62%**	63%	**NA**	NA	NA	NA	**NA**	NA	**NA**	NA	**NA**	NA	**NA**	NA	**NA**	NA	**14.0**	12.0
Singapore	**NA**	43.0	**NA**	40%	**1.2**	2.4	**5%**	5%	**NA**	NA	**NA**	NA	**NA**	NA	**27%**	NA	**2.0**	NA	**3.2**	45.4
South Africa	**119.0**	116.0	**35%**	36%	**NA**	NA	**NA**	NA	**NA**	NA	**NA**	NA	**NA**	NA	**NA**	NA	**3.0**	2.0	**122.0**	118.0
Sweden	**170.0**	185.0	**26%**	27%	**NA**	NA	**NA**	NA	**NA**	NA	**NA**	NA	**NA**	135.3	**NA**	43%	**NA**	NA	**170.0**	320.3
Switzerland (OCR)	**165.0**	168.4	**25%**	27%	**NA**	NA	**NA**	NA	**NA**	NA	**NA**	NA	**NA**	NA	**NA**	NA	**NA**	NA	**165.0**	168.4
TOTALS	**10345**	8684.4			**2374**	2456			**NA**	2913			**1951.0**	2652.8			**582.5**	600.5	**15252.9**	17307.0

Endnotes:

1 BSA's 2006 statistics are preliminary. They represent the U.S. publishers' share of software piracy losses in each country, and follow the methodology compiled in the Third Annual BSA/IDC Global Software Piracy Study (May 2006), available at http://www.bsa.org/globalstudy/. These figures cover, in addition to business applications software, computer applications such as operating systems, consumer applications such as PC gaming, personal finance, and reference software. BSA's 2006 piracy statistics will be updated later in 2007 and will be made available on the IIPA website at such time.

2 Paraguay: RIAA reports that its estimated losses to the records and music industry include both domestic piracy in Paraguay and estimated losses caused by transshipment.

Spain: RIAA's 2005 estimated losses in the $75 million range reflect U.S.-only estimates; all-industry (local plus international repertoire) are in the $75 million range.

3 MPAA's trade loss estimates and piracy levels for 2006 are not yet available. However, such numbers will become available later in the year and, as for 2005, will be based on a methodology that analyzes physical or "hard" goods and Internet piracy. For a description of the new methodology, please see Appendix B of this report. As the 2006 loss numbers and piracy levels become available, they will be posted on the IIPA website, http://www.iipa.com.

4 ESA's reported dollar figures reflect the value of pirate product present in the marketplace as distinguished from definitive industry "losses." ESA's methodology is described in Appendix B of IIPA's submission. Several piracy rate estimates included for 2006 in this report (for Chile, Colombia, Hungary and Paraguay) reflect only the piracy rate for handheld products -- which may differ from and often underestimate overall piracy levels in a given country.

"GSP" means that the U.S. government is reviewing this country's IPR practices under the Generalized System of Preferences trade program.

"OCR" means out-of-cycle review to be conducted by USTR.

Appendix F Population by States, Malaysia

DISTRIBUTION OF POPULATION (NUMBER & PERCENTAGE) AND AVERAGE ANNUAL POPULATION GROWTH RATE BY STATE, 1980-2010

State	Population				Per cent				Average annual population growth rate (%)		
	1980 [a]	1991 [a]	2000 [a]	2010	1980	1991	2000	2010	1980-	1991-	2000-
MALAYSIA	**13,136,109**	**17,563,420**	**22,198,276**	**27,565,821**	**100.00**	**100.00**	**100.00**	**100.00**	**2.64**	**2.60**	**2.17**
Johor	1,580,423	2,069,740	2,584,997	3,233,434	12.03	11.78	11.65	11.73	2.45	2.47	2.24
Kedah	1,077,815	1,302,241	1,571,077	1,890,098	8.20	7.41	7.08	6.86	1.72	2.09	1.85
Kelantan	859,270	1,181,315	1,287,367	1,459,994	6.54	6.73	5.80	5.30	2.89	0.96	1.26
Melaka	446,769	506,321	605,239	788,706	3.40	2.88	2.73	2.86	1.14	1.98	2.65
Negeri Sembilan	551,442	692,897	829,774	997,071	4.20	3.95	3.74	3.62	2.08	2.00	1.84
Pahang	768,801	1,045,003	1,229,104	1,443,365	5.85	5.95	5.54	5.24	2.79	1.80	1.61
Perak	1,743,655	1,877,471	1,973,368	2,258,428	13.27	10.69	8.89	8.19	0.67	0.55	1.35
Perlis	144,782	183,824	198,288	227,025	1.10	1.05	0.89	0.82	2.17	0.84	1.35
Pulau Pinang	900,772	1,064,166	1,231,209	1,520,143	6.86	6.06	5.55	5.51	1.52	1.62	2.11
Sabah	929,299	1,734,685	2,468,246	3,120,040	7.07	9.88	11.12	11.32	5.67	3.92	2.34
Sarawak	1,235,553	1,642,771	2,009,893	2,420,009	9.41	9.35	9.05	8.78	2.59	2.24	1.86
Selangor	1,426,250	2,291,429	3,941,316	5,411,324	10.86	13.05	17.76	19.63	4.31	6.03	3.17
Terengganu	525,255	766,244	880,234	1,015,776	4.00	4.36	3.97	3.68	3.43	1.54	1.43
W.P. Kuala Lumpur	919,610	1,145,342	1,305,792	1,627,172	7.00	6.52	5.88	5.90	2.00	1.46	2.20
W.P. Labuan	26,413	54,241	70,871	85,272	0.20	0.31	0.32	0.31	6.54	2.97	1.85
W.P. Putrajaya	(b)	5,730	11,501	67,964	(b)	0.03	0.05	0.25	(b)	7.74	17.77

Appendix G Permission Letter to Conduct Survey

UNIVERSITI TUNKU ABDUL RAHMAN

29th August 2011

To Whom It May Concern

Dear Sir/Madam

Permission to Conduct Survey

This is to confirm that the following students are currently pursuing their *Bachelor of Commerce (HONS) Accounting* program at the Faculty of Business and Finance, Universiti Tunku Abdul Rahman (UTAR) Perak Campus.

I would be most grateful if you could assist them by allowing them to conduct their research at your institution. All information collected will be kept confidential and used only for academic purposes.

The students are as follows:

Name of Student	**Student ID**
Foong Yik Tat	09ABB03411
Goh Siew Boon	09ABB03433
Kho Yee Luan	09ABB02794
Ng Xin Yi	09ABB03805
Yau Yann Chuan	09ABB04436

If you need further verification, please do not hesitate to contact me.

Thank you.

Yours sincerely

Leong Lai Ying
Head of Department,
Faculty of Business and Finance
Email: leongly@utar.edu.my

Fong Choong Ee
Supervisor,
Faculty of Business and Finance
Email: fongce@utar.edu.my

Address: 13, Jalan 13/6, 46200 Petaling Jaya, Selangor Darul Ehsan, Malaysia **Postal Address:** P O Box 11384, 50744 Kuala Lumpur, Malaysia.
Tel: (603) 7958 2628 **Fax:** (603) 7956 1923 **Homepage:** http://www.utar.edu.my