An empirical investigation of consumer socialization and the impact of internet use on scepticism towards advertising among young adults

by

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A DISSERTATION

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I hereby certify that the work embodied in the Dissertation Project is the result of original research and has not been submitted for a higher degree to any other University or Institution.

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CHAN MAN CHI

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TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

SYNOPSIS

Consumer socialization of young people has been a popular area of academic research. Besides parental and peer influences, the effect of media, including advertising communications via the television and the internet, has also been shown to be a powerful socialization agent on young people. Thus, the aim of this research was to explore how various socialization influences impact the development of skepticism towards advertising, which is a positive outcome of consumer socialization, among young adults in Hong Kong. Yet, unlike previous research that focused mainly on the parental, peer and media influences, the purpose of this research was to examine also the role of the Internet as a new socialization agent.

A questionnaire-based survey was conducted to address the research question. University undergraduate students aged 18 to 24 were recruited as the respondents for this research by the snowball sampling method. Analysis of the data indicted that 63.55% of the respondents were females and 36.45% males. Most of them were between 18 to 21 years of age (80%). Nearly all of them (94%) had internet access at home and utilized internet services every day. The results suggest that the social structural variables under study, i.e., age, gender and income do not have significant impact on the development of skepticism to advertising among young adults. Among the three socialization agents, i.e., parents, peers and media, media normative influence was the variable with the most predictive power for the dependent variable, i.e., advertising skepticism. Internet, being a new socialization agent under study, also demonstrated significant results in the socialization process. So the findings suggest

that (1) advertising media and the internet have significant impact on the development of skepticism to advertising on young adults; and (2) parental and peer influence, which are strong during adolescence, diminish as individuals reach young adulthood.

The results supports the fact that socialization of young adults is not limited to the traditional sources of influence, such as parents, friends and media, but extends to the new source of influence from the Internet.

CHAPTER ONE

INTRODUCTION

1.1 Background

This introductory chapter provides the background to research undertaken on the impact of consumer socialization of young adults in developing scepticism to advertising.   It aims at identifying the characteristics associated with sceptical young adults in Hong Kong and how these characteristics link to various environmental factors such as the socio-structural variables and the socialization agent variables, including the internet. It outlines the framework of analysis, justification for research, research questions and approach, research objectives and the contribution made by the thesis.   This chapter also provides an introductory overview of the methodology, summary of various chapters of the thesis, and definitions of common terms used throughout the thesis.

The interest on young people's consumer socialization, understood as the process by which young people develop consumption-related skills, knowledge, and attitudes (Moschis 1981 and 1987; Moschis and Churchill 1978) can be traced back to 1945 when Prevey (cited in McNeal et al. 1998) reported that children who receive financial training from parents are better able to use financial resources later in life.   More pioneering work on the various facets of the behaviour of young people as consumer was conducted during the 1960's by adopting the consumer socialization perspective such as children's understanding of marketing and retail functions (McNeal 1964), children's influence on parents' purchasing decisions (Berey and Pollay 1968; Wells and

LoSciuto 1966), and on the relative influence of parents and peers on children's consumption patterns (Cateora 1963 cited in John 1999).

The study of the behaviour of young people as consumer has gained momentum in mid-1970's, arguably due to the concern about the consequences of marketing and advertising to children, as shown by the emergence of Action for Children's Television and Federal Trade Commission (John 1999).

"**Consumer socialization**" refers to the processes by which young people acquire skills, knowledge, and attitudes relevant to their functioning as consumers in the marketplace (Ward 1974, p.2). Recognition of young people as a group of consumers (Moschis and Moore 1979) awakened researchers' attention on the study of consumer socialization and behaviour of children and adolescents with research topics such as marketing and advertising (Moore and Rodgers 2005; Mangleburg and Bristol 1998), brand sensitivity in apparel (Lachance, Beaudoin and Robitaille 2003), use of product labeling (Mangleburg, Grewal and Bristol 1997), effect of celebrity endorsements on adolescents' attitudes and purchase intentions (Chiou, Huang and Chuang 2005), decision-making strategies and parental influence on adolescents' consumer behaviour (Chavda, Haley and Dunn 2005; Shoham and Dalakas 2003; Lee and Beatty 2002; Palan 1998; Palan and Wilkes 1997), antecedents of compulsive buying tendency among adolescents (Guo and Cai 2011) and role model influence on adolescents (Clark, Martin and Bush 2001; Martin and Bush 2000) have been explored.

Like socialization in general, consumer socialization is a continuous process and will

not come to an end at any particular age (Mergenhagen 1995). It keeps on developing throughout the lifetime of an individual (Moschis and Moore 1979; Moschis and Churchill 1978). Besides children and adolescents, researchers are getting more interested in the consumer socialization of young adults, who just pass the period of adolescence, due to their increasing spending power and their influences on the purchase and decision-making of others (Grant and Waite 2003; Parmar 2002). In general, the age range of young adults is accepted as between 18 to 24 years as found in past literature (Ling and Stanton 2002). Being a growing generation of consumers, the youth market, including young adults being an important segment within it, provides a tremendous opportunities and challenges for marketers.

With the rising importance of young adults, studies on consumer related aspects of young adults have emerged in recent years such as the impact of socialization agents on young adults' level of consumer activities (Singh, Chao and Kwon 2006) or consumer innovativeness (Xie and Singh 2007); consumer decision-making styles of young adults (Mokhlis 2009); online shopping behaviour (Mummalaneni and Meng 2009), their consumption styles (Akturan et al. 2010) and consumption habit (Penman and McNeill 2008); their compulsive buying tendency (Xu 2008) and sexual knowledge, attitudes and behaviour of young adults (Moore 2002).

A socialization perspective provides a useful framework for conceptualizing the consumer socialization process by which young consumers acquire the consumption-related skills, knowledge and attitudes through their interaction with the socialization agents during their lifetime (Moschis 1987; Ward 1974). By

incorporating the two basic approaches for socialization research, namely, the cognitive developmental approach and the social learning approach (more comprehensive discussions on these two approaches are provided in chapter two), Moschis and Churchill (1978) develop a conceptual model of consumer socialization which postulates that social structural variables have an ongoing effect on the socialization process through socialization agents which, in turn, influence consumer learning properties, or termed as consumer socialization outcomes (Moschis and Churchill 1978). It is also identified from past research that parents, peers and media (including advertising) are the three important socialization agents influencing adolescents in the consumer socialization process (Shim 1996; Mascarenhas and Higby 1993; Moschis 1987).

Besides these two theories, there is also the theory of interpersonal susceptibility which helps to explain consumer socialization (Bearden, Netemeyer and Teel 1989). These are influences which are received from socialization agents that affect one's socialization and learning from the environment. In conclusion, consumer socialization is affected by interpersonal influences and socialization-agent influences.

Past literature shows that parents are the primary socialization agents during children's early years while peer influence becomes stronger during adolescence (Chavda, Haley and Dunn 2005). However, with the recent changes in the environment, the influences of the socialization agents in the socialization process have to be reexamined (Dotson and Hyatt 2005). More recently, young people have greater access to the internet and they are more exposed to messages from various media sources. It is anticipated that

media is becoming an increasingly important agent in the socialization process (Dotson and Hyatt 2005).

In fact, besides parental influence, the influence of media also attracts much attention from researchers, for example, the study of teens' use of traditional media and the internet (Ferle, Edwards and Lee 2000) and the use of the internet and the traditional media among young people (Chan and Fang 2007).   One of the recurring themes in the literature about media influence is the effect of advertising on adolescents because adolescence is a time of self-identification and personal growth (Ferle, Edwards and Lee 2000) and media, including advertising communications via the television and the internet, has been shown to be a powerful socialization agent (Lee and Conroy 2005; Moscardelli and Liston-Heyes 2005; Mangleburg and Bristol 1998; Arnett 1995; Moore and Moschis 1978).   Past research, as asserted by Moore et al. (2002), has shown that television viewing can have significant influence on the consumer behaviour of young people.   Though previous research has studied the impact of mass media on socialization, in particular the effect of television advertising on adolescents (for example, Schaefer, Hermans and Parker 2005; Moschis and Moore 1982; Moschis and Churchill 1978), there has been little examination on the impact of the internet on how young adults learn consumption-related attitudes.

With the advent of technology, media, including advertising communications via the internet, can have great influence on young adults' consumer socialization.   The internet, due to its ability to deliver and obtain information in a speedy and effective way at relatively low costs (Cheung 2006), has emerged as a new and important

medium in consumer socialization process of young adults which is not widely addressed in past research. This supports examining the effect of internet on consumer socialization among young adults, instead of adolescents, in Hong Kong who start gaining some autonomy and independence from their parents and this study just responds to the call for such research.

Among the topics on advertising, scepticism to advertising is a common area under study (for example, Nasir and Ozturan 2011; Moor and Rodgers 2005; Obermiller, Spangenberg and MacLachlan 2005; Schaefer et al. 2005; Mangleburg and Bristol 1998; Boush, Friestad and Rose 1994) as it is considered as a positive and important outcome of the consumer socialization process that helps young adults become better consumers (Moscardelli and Liston-Heyes 2005). However, most of the literature on scepticism towards advertising is on adolescents and teenagers. Yet, there is a gap in the literature that identifies the impact of consumer socialization on scepticism in advertising among young adults.

The study of consumer socialization focuses mainly on the acquiring of skills, knowledge and attitudes by young people, through interpersonal influences and socialization-agent influences, for their functioning and performing as a consumer in the marketplace (Ward and Wackman 1971). The literature also identifies that it is important for young consumers to obtain a reasonable degree of consumer prudence and consumption-related skills from consumer socialization process so as to effectively process and respond to marketing stimuli and thus make appropriate purchase decisions (Mangleburg and Bristol 1998; Moschis and Moore 1979). It is therefore critical to understand the consumption-related knowledge, skills and attitudes acquired through

the process of consumer socialization. Scepticism to advertising is one of the consumption-related attitudes worth for studying.

1.2 Justification and Contribution of Study

During the past decades, consumer socialization of young people, including children and adolescents, have become a popular area of academic research. This is because young people are recognized as an important group of consumers both in terms of their increasing population, their rising consumption power and their potential influence on household purchases. It is reported that 32 million teenagers aged from 12 to 19 in the United States spent a total of $170 billion in 2002 (Teen Research Unlimited 2003 cited in Schaefer, Hermans and Parker 2004) while in 1997 about 30 million adolescents spent $122 billion on consumer goods and more than $200 billion on influenced household purchases (WWD 1998 cited in Ferle Edwards and Lee 2000). It is therefore not surprising to find that a substantial body of literature focuses on the dynamic consumer learning process among young people.

However, besides children and adolescents, young adults also constitute an important segment within this expanding youth market which is dissected into specific groups on the basis of age range (Spero and Stone 2004). Each of these groups has its own potentialities and represents a time of life which is affected by different kinds of influences. Thus, young adults, in the youth market, are categorized as a specific segment between childhood and adulthood.

There are several reasons why consumer socialization of young-adult consumers is an

important and interesting topic for consumer research (Grant and Waite 2003). According to Moore and Moschis (1978), adolescence is a crucial period for socialization because it is during this period that much of consumer learning seems to take place with the main socialization agents, namely, the mass media, parents and peer from which significant consumer information for the shaping of the person's consumer thinking and behaviour are obtained. However, this socialization process does not stop and continues after adolescence. During the transitional period from adolescence to early adulthood, young adults seek to establish their own individual persona. They tend to develop their own behaviour patterns, attitudes and values, and they also form their own consumption patterns (Fannin 1984). By making purchases to define themselves, they also create their own identity (Holbrook and Schindler 1989). Many of these patterns and attitudes developed during this period such as brand loyalty last well into adulthood (Moschis 1987) and therefore they themselves constitute a potential market.

Young-adult consumers are identified as a specialized and important market segment due to their own powerful consumer spending power (Moschis 1987) and high disposable expenditure (Grant and White 2003). By 1960s, young-adult consumers accounted only for $2 billion spending a year in America alone. However, the amount of spending of this generation has gone up to $6 billion by the end of 1980s and $200 billion in 2000s (Gardyn 2002; Gunter and Furnham 1998). This supports the fact that their purchasing power increases over time. From a marketing perspective, given the high spending power of young adults, it is worthwhile for researchers to get a deeper understanding of the consumer socialization of young adults.

Moreover, young adults are able to affect the purchases and decision-making of others (Grant and Waite 2003). They, aligning with peers, create their own rules of engagement and social behaviour and thus they have the ability to be a change agent by influencing society and culture (Leslie, Sparling and Owen 2001).

The rapid development of the digital world also provides young adults with the environment which enables them to transmit and access information without boundaries (Cheung 2006). Thus young-adult consumers serve as an ideal group for investigating the effects of media on consumer socialization. It is during this period that young adults, on one hand, learn to use media to satisfy their various individual needs and on the other hand, develop independent thinking which leads to scepticism towards advertising.

Besides the traditional socialization agents which include parents, peer and media (Moschis and Churchill 1979), with the widespread use of internet services, marketers become more aware of the effect of internet as a new consumer socialization factor (Ferle, Edwards and Lee 2000; Lee and Conroy 2005; Moscardelli and Liston-Heyes 2005). However, due to the limited research on the effect of internet on consumer socialization when compared to the substantial body of literature for other socialization agents, and given the growing significance and position of internet in the daily life of young adults, either for playing online games, shopping or surfing the net, it is worthwhile to conduct a study on this topic and to find out the characteristics of sceptical young adults through the linkage with various environmental factors, in

particular on internet usage.

According to NUA Internet Survey 2002, the internet has already overtaken the television as the preferred medium among young people in Hong Kong (Lee and Conroy 2005). So to achieve a more current understanding on factors affecting consumer socialization of Hong Kong young adults, the examination on the effect of internet is justified.

Hong Kong can be regarded as an economically advanced society with high penetration of personal computer usage and internet. According to the Thematic Household Survey Report No.32 (2007) from the Hong Kong Census and Statistic Department, the percentage of household owning a personal computer rose from 49.7% in 2000 to 74.2% in 2007 while Internet connection increased from 36.4% in 2000 to 70.1% in 2007. From the key telecommunications statistics provided by the Hong Kong Government, up to April 2011, there are all together 186 Internet service providers in Hong Kong with the household broadband penetration rate as high as 85.2%. From the internet world statistics, there are more than 4.87 million internet users in Hong Kong up to June 2011, giving a penetration rate of 68.5% to the total population of Hong Kong.

Though the topic on adolescents' scepticism towards advertising has been covered in past research (Bailey 2007; Moore and Rodgers 2005; Schaefer et. al 2005; Manglebury and Bristol 1998; Moore and Moschis 1978), few have included the effect of internet as a consumer socialization agent. Lee and Conroy (2005) found that the internet

promoted active, instead of passive, socialization processes to adolescents by allowing active interaction while the study of Moscardelli and Liston-Heyes (2005) discovered that internet use was negatively related to development of scepticism towards advertising among adolescents.   Thus there is no conclusive evidence on the effect of internet on consumer socialization.

This study also contributes academically to the knowledge of consumer knowledge that rely mainly on Western subjects, in particular, the Americans (Lachance, Beaudoin and Robitaille 2003; Shim 1996) and concentrate mainly on the established socialization agents (parents, peers and television) (Mangleburg and Bristol 1998; Palan 1998). With the advent of technology, it is expected that the internet will play a more dominant role in shaping young adults' scepticism towards advertising than the influences from parents and peers.   The findings will examine characteristics associated with sceptical young adults in Hong Kong that can be identified with reference to the social structural variables and the socialization agents including the impact of internet as the new socialization agent on young adults' consumer socialization.   This study thus serves the purpose of extending the current knowledge on consumer socialization on Asian subjects (Hong Kong young adults) by examining the effect of the consumer socialization agents (including Internet) on the development of advertising scepticism (a positive socialization outcome).

The findings of this study will be of interest to the practitioners because it helps them to reach this group of consumers more effectively.   The findings also provide marketers with important insights and indicators of consumer socialization status of this particular

group of consumers and thus may help marketers with guidelines for more appropriate marketing strategies which aim at targeting these young consumers.

1.3 Research Objectives

The above introduction provides a brief overview of the research on consumer socialization that substantiates the need to go further into the research about the impact of consumer socialization on the development of scepticism towards advertising among young adults in Hong Kong.

Scepticism towards advertising, which is defined as the negative attitudes positioned by consumers towards the motives or claims made by advertisers or marketers (Boush, Friedstad, and Rose 1994), is regarded as a positive and crucial outcome for young adults to become better consumers in the marketplace.   It is because this attitude can help them to learn how to filter puffery in advertisements and how to select marketplace knowledge for purchase decisions (Moscardelli and Liston-Heyes 2005).   Several social-structural variables: age, gender, education level and income level; and socialization-agent variables: parental communication, peer influence and mass media influence, have been identified to have effects on young adults' development of scepticism towardss advertising (Moscardelli and Liston-Heyes 2005; Mangleburg and Bristol 1998; Moschis and Moore 1979).   As the role of the internet as a socialization agent is not widely addressed in the past research, it is of interest to find out the relationship between various environmental factors, in particular the use of internet, and the development of scepticism towards advertising by young adults.   This study serves two functions: on one hand, the role of internet in consumer socialization process can be

explored and on the other hand, the results can provide updated information, as past studies are mainly focused on limited selection of mass media, such as television viewing and newspaper readership.

Previous research has also explored how socialization influences impact the development of scepticism towards advertising among children and adolescents (Moscardelli and Liston-Heyes 2005; Mangleburg and Bristol 1998), but has not investigated how development of scepticism towards advertising among young adults takes place, even though the literature suggests that consumer socialization is a process that continues to develop throughout the life-cycle of an individual (Smith and Moschis 1985; Moschis and Moore 1979; Moschis and Churchill 1978). Thus this study specifically explores how socialization influences impact the development of scepticism towards advertising, a specific consumption-related attitude, of young adults in Hong Kong.

So the broad objective of this study is to explore how various socialization influences impact the development of scepticism towards advertising among young adults in Hong Kong with the consumer socialization framework being used as the major research foundation.

The key research question is as follows: ***How a combination of age; and the more relevant social structural variables including gender and spending power; and the socialization agents such as parents, peers, media (television) and Internet; can help to explain why a given young adult is more sceptical than another towards***

advertising?

The hypothesis will be drawn on the following research questions:

1. To what extent does scepticism towards advertising relates to age, gender and spending power?

2. How do normative and informative parental influence and peer influence relate to young adults' scepticism to advertising?

3. To what extent do the media (including advertising) and the internet lead to the development of scepticism to advertising in young adults?

Based on past literature from consumer socialization on young adults, the impact of socialization process on the development of young adults' scepticism towardss advertising is explored as proposed in Figure 1.1 (based on Moschis and Churchill's model).

Figure 1.1   Conceptual Model of Consumer Socialization and Young Adults'

Advertising Scepticism

From the model, it is hypothesized that young adults' scepticism towards advertising is influenced by their age, gender, income (from employment and allowance), and socialization processes with socialization agents such as parents, peer, media (television) and internet as follows:

H1 :   Scepticism to advertising is positively related to age.

H2 :   Female young adults are more sceptical to advertising than their male

counterparts.

H3 :   Employment is positively related to the development of scepticism to

advertising.

15

H4 : Earning an allowance is positively related to the formation of scepticism to advertising.

H5(a) : Normative parental influence is negatively related to the formation of sceptical attitude towards advertising in young adults.

H5(b) : Informative parental influence is positively related to the formation of sceptical attitude towards advertising in young adults.

H6(a) : Normative peer influence is negatively related to the formation of sceptical attitude towards advertising in young adults.

H6(b) : Informative peer influence is positively related to the formation of sceptical attitude towards advertising in young adults.

H7(a) : Normative media influence has negative impact on the formation of sceptical attitude towards advertising in young adults.

H7(b) : Informative peer influence has positive impact on the formation of sceptical attitude towards advertising in young adults.

H8 : The effect of television is related positively to the development of scepticism to advertising in young adults.

H9 : The effect of internet is positively related to young adults' scepticism towards advertising.

H10 : Simultaneous television and Internet use is positively related to young adults' scepticism towards advertising.

In summary, this conceptual model depicts the influence of life-cycle position (age), gender, employment, allowance, and the socialization processes variables on the development of young adults' scepticism towards advertising. The research findings

from this study should not only contribute to the consumer socialization literature, but also to the marketers in understanding and designing effective advertising strategies to this particular market.

1.4 Research Design and Method

Since it is the aim of this study to find out the relationships among the social structure variables, the socialization agents and the development of advertising scepticism, it is a descriptive-explanation study showing the relationship between the components in the conceptual model for the explanation of the development of scepticism towards advertising among Hong Kong young adults.

The research methodology for the study is based on quantitative techniques, through the adoption and administration of a survey questionnaire for measuring the adolescents' attitudes and perceptions towards advertising in relation to the socio-structural variables and the socialization agents.   This data collection method is chosen because a survey, according to Fine (1995 cited in Moore and Rodgers 2005), is an excellent means of measuring attitudes and characteristics of a large population and collecting descriptive information.   Moreover, due to the number of constructs involved, a survey is less time-consuming than the method of in-depth interviews for collecting information. This method has also been used in previous studies on this area of interest (Schaefer, Hermans and Parker 2005; Moscardelli and Liton-Heyes 2005; Mangleburg and Bristol 1998).

The target population of this study is young adults in Hong Kong.   The potential

respondents are young adults who are aged from 18 to 24, receiving education from universities in Hong Kong. They should also be users of the internet service either at home or at the universities. Undergraduate students from the universities in Hong Kong are chosen as the subjects for data collection because previous research on young adults' consumer behaviour also use students as subjects and it is found that they are fairly representative of young adults in general (Singh et al. 2003a; Feltham 1998).

The potential respondents are recruited by the initial prospective undergraduate university students, who are the acquaintances of the researcher, through their personal network. The potential respondents are then asked to identify and refer other potential respondents to be included in the study. This process continues until the designed sample size is reached. Non-probability snowball sampling method is used in recruiting the potential respondents because they are friends or classmates of the snowball recruiters who are most readily available to participate in the study by completing the questionnaire and to provide the required information.

So this quantitative study is based on primary data obtained by a questionnaire conducted among the undergraduate university students in Hong Kong and the data is collected by the non-probability snowballing sampling method

The questionnaire consists of three main sections. The first part of the questionnaire focuses on participants' perceptions as a consumer. Participants are asked about their attitudes towards parental influence, peer influence, media influence (including television and internet influences) and their attitudes towards advertising. The second

part is on the usage of television and internet of the participants while the last part is about the participants' personal and family background. The scales used for the measures of the constructs in this study are valid and reliable scales previously established in the consumer socialization literature.

The questionnaire is self-administered by the respondents. To ensure that the questionnaire can obtain the relevant information, a small scale pilot test is conducted to get some insight into the young adults' understanding of the terminology used in the questionnaire and whether they are clear about the purpose of the study. A final version of the questionnaire is distributed to the potential respondents by the researcher through face-to-face interactions because this is the most direct and effective way for potential participants to get hold of the questionnaire and any questions relating to the survey are attended instantly by the researcher. Data collected from the questionnaire are stored in computer disk and computer hardware for future analysis. Incomplete questionnaires with missing entries or non-response items are omitted from the final database.

The collected data is then analyzed by using the stepwise regression to test the hypothesized effects. By using this analysis technique, each independent variable under examination is considered for inclusion in the regression before the development of the equation (Hair, Jr. et al. 2003). Thus the independent variables with significant predictive power of the stepwise regression equation can be identified. So the socio-structural variables, the socialization agents, the influence of television and the internet which are independent variables instrumental in explaining scepticism towards

advertising in young adults are to be brought into the model. Scepticism, on the other hand, is the dependent variable in the regression analysis with scepticism being a function of these three sets of variables: socio-structural variables, socialization-agent influence (parents, peers and media), and the influence of television and internet.

1.5 Thesis Outline

The structure of the thesis has been adapted from Perry's (1998 cited in Debra Grace 2002) five-chapter structured approach which consists of only five chapters.

Chapter One : Introduction

It provides a brief background on the growing concern of consumer socialization, in particular of young adults, and advertising scepticism and identifies the topics to be addressed. It outlines the framework of analysis, states the research objectives, provides justification for the study, gives an overview of the methodology and analytical approaches adopted and explains the structure of the dissertation of the study.

Chapter Two : Literature Review

It covers a critical review of past literature and shows how the present study can be related to the previous studies. The theoretical conceptual framework on consumer socialization used in the study will be explained. The principles underlying the conceptual model will also be stated. Hypotheses for testing will be developed by utilizing the concepts from the model including the socio-structural variables and the socialization influence variables.

Chapter Three : Methodology

It presents the methodologies and the research design of this study. Various methodologies will be described. Research design in terms of research approach and research methods will be discussed. The steps leading to the design of the questionnaire will be stated. Development of measures on the variables in the survey will be discussed. Since the survey is to be administered to young adults, general information about the sampling methods for the recruitment of the target sample will be illustrated. The cost and time requirements for the survey and data collection procedures will be discussed in details.

Chapter Four : Analysis and Results

Analysis techniques for the data are discussed. General characteristics of the sample will be analyzed and described. Measurement of each construct in the survey is discussed. How the data to be analyzed will be explained. Hypotheses will be tested and results of the analysis will be illustrated.

Chapter Five : Discussion

Findings from Chapter 4 will be discussed. With the results from hypotheses testing, relationships among the variables will be explained and implications, both theoretical and managerial, will be derived. Limitations of the study will be discussed and future research opportunities will be explored.

1.6 Conclusion

This chapter has provided a brief introduction of this study by identifying the key issues in the relevant literature that are related to the topic on consumer socialization process, in particular for young adults. Moreover, the research objectives are introduced by presenting the proposed conceptual model of the impact of consumer socialization process on the development of young adults' scepticism towards advertising, which is the theoretical basis for the development of hypotheses. The importance and justification for the study from both the theoretical and practical perspectives are illustrated which are then followed by an overview of the research objectives, methodology and design. The structure of the thesis is then mentioned. Chapter two will present the conceptual overview of consumer socialization and a detailed literature review on consumer socialization and its associated concepts in relation to the topic of this study. Social structural variables and the consumer socialization agents will be discussed in great details from which hypotheses will be developed to address the research problems of this study.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter on literature review and the development of research hypotheses is organized as follows. First, the conceptual overview of consumer socialization is illustrated. This is followed by a discussion of the impact of social structural variables and the consumer socialization agents on young adults' formation of scepticism towards advertising. Development of hypotheses regarding the nature of the relationship between each social structural variables and consumer socialization agents is then explained.

2.2 Background

Due to the limited financial resources of young people, their consumer behaviour was not a common topic for examination in the past as they did not represent a target for marketing and promotional strategies. Yet, some studies on children's consumer behaviour can be traced back to the 1950's on topics such as brand loyalty (Guest 1955) (cited in John 1999) and conspicuous consumption (Reisman and Roseborough 1955) (cited in John 1999). Since 1960's, the recognition of children as a group of consumers drew research attention to the study of children's consumer behaviour and this trend has gained its momentum in mid-1970's. There have however been concerns about the consequences of marketing and advertising to children, as shown by the emergence of Action for Children's Television and Federal Trade Commission (John

1999). With the introduction of the concept of "consumer socialization" by Ward (1974), a new era of research focusing on the study of children as consumers began. During these three decades, substantial number of studies has been conducted on consumer socialization and a wide range of topics relating to the marketing aspects such as advertising, pricing, product labeling, decision-making strategies and parental influence on children's consumer behaviours have been explored (Shield and Cheng 2007; Chiou, Huang and Chuang 2005; Chavda, Haley and Dunn 2005; Shoham and Dalakas 2003; Lee and Beatty 2002; Darley 1999; Palan and Wilkes 1997).

The topic on behaviour of young people as consumers draws significant attention on the effect of advertising on them. This is reflected in the public policy concern of the Federal Trade Commission which voiced out their criticisms of advertising to young children as early as in the mid-1970's (John 1999). The main reason for this concern is that young children are relatively more susceptible to the influence of advertising by whatever media as shown by previous research (John 1999). Thus this study aims at exploring the factors that affect the attitude of young adults (being a segment in the youth market) towards advertising or what contributes to the development of scepticism among them, by adopting the consumer socialization perspective. It is hoped that a better understanding of their attitudes towards advertising may help policy makers to develop more effective and appropriate policies to help young consumers evaluate marketing information and communications (Mangleburg and Bristol 1998).

2.3 Consumer Socialization Perspective

The consumer socialization perspective is a broad framework employed for the study of consumer behaviour.   Before proceeding to later discussion, the basis of the concept of consumer socialization required to be stated and the theories on consumer socialization will be investigated in the following section.

As stated by Ward (1974), one must first understand the meaning of "socialization" before trying to define the specific subspecies, "consumer socialization".   Various definitions have been put forward.   By specifically referring to the content of learning, Brim (1966 cited in Ward 1974, p.2) gives the definition as follows:

> [Socialization is] the process by which individuals acquire the knowledge, skills, and disposition that enable them to participate as more or less effective members of groups and the society.

Goslin (1969 cited in Moschis and Moore 1979, p.1) also defined the term "socialization" as the process by which individuals acquire various patterns of cognitions and behaviours, while Zigler and Child (1969 cited in Ward 1974, p.2) defines it as the process by which individuals learn to participate effectively in social transactions so as to develop specific social behavioural patterns.

In general, "socialization" is understood as the process by which individuals learn to perform a particular social role in a given social environment through the interaction with each other.   Past researches have studied socialization of different social roles such as new employees (Moore 1971) and newly-married couples (Hill and Aldous

1971).   These studies show that socialization does take place whenever a new environment sets in throughout the life stages of an individual.

Given the general meaning of the word "socialization", Ward (1974) defined consumer socialization as "the processes by which young people acquire skills, knowledge, and attitudes relevant to their functioning as consumers in the marketplace" (Ward 1974, p.2).   This definition shows that the focus is on the learning and acquiring of *consumption-relevant* skills, knowledge, and attitudes by young people, children and adolescents alike, which differentiates the interest in consumer socialization from the interest in other aspect of socialization (Ward 1974).

Moschis and Churchill (1978) further defined consumer socialization as the process by which individuals develop consumer-related skills, knowledge, and attitudes throughout their life-cycle (Moschis 1981).

By consolidating these definitions, it shows that *socialization* refers to the performance of social roles and the related behaviour under certain social circumstances and *consumer socialization* refers to a particular type of socialization related to how individuals learn to become consumers.   Moreover, consumer socialization does not restrict to children and adolescents only or to any particular age group.   In principle, it continues to develop throughout the lifetime of an individual (Moschis and Churchill 1978).

2.3.1 Theoretical framework on consumer socialization

After deriving the definition of consumer socialization, it is time to look into the theoretical framework for the analysis of consumer socialization.

Most research studies on the acquisition of cognitive and behavioural patterns are based on two socialization approaches --- the cognitive developmental approach and the social learning approach (Bush et al. 1999; Mascarenhas and Higby 1993; Moschis 1981). According to the theories of cognitive developmental, learning is basically a cognitive psychological process in which individuals adjust to the dynamic social environment throughout their lifetime (Moschis and Churchill 1978). Based on these theories, socialization is a life long process that continues to develop throughout different life stages and the emphasis is on developmental process or change of cognitive organization of an individual from infancy to adolescence and well into adulthood (Moschis and Churchill 1978).

The social learning approach, on the other hand, takes the view that learning occurs through individual's constant interaction with the socialization agents in various social settings (Bush, Smith and Martin 1999; Moschis and Churchill 1978). The focus is on the sources of influence, i.e., socialization agents, from which attitudes, motivations, and values are transmitted to the individuals (Moschis and Moore 1982). As different from cognitive developmental theories which focus on the interaction of personal and environmental factors, the social learning theory basically views behaviour as a function of forces applied to an individual (Ward 1974).

After discussing the two general approaches of socialization, it comes to the conclusion that social learning approach offers a better approach to examine consumer socialization than cognitive development approach because the interaction with consumer socialization agents can provide a better explanation to the variations in the consumer learning properties of the learners.

Since consumer socialization is regarded as a particular type of socialization related to how individuals learn to become consumers, the general theoretical and conceptual notions of socialization can then be adopted for use in this specific area. By doing so, Moschis and Churchill (1978) developed a general conceptual model for the analysis of consumer socialization, taking into account these two socialization approaches. Their research findings support the fact that consumer socialization is closer to a social learning process, though cognitive-psychological process also plays a role in consumer learning. The results also suggest that cognitive developmental approach is useful in predicting the development of knowledge and ability of an individual and the ability to function as an effective consumer in marketplace whereas social learning approach is better for explaining the development of individual's attitudes and values (Moschis and Churchill 1978).

This conceptual model of consumer socialization (Moschis and Churchill 1978) is made up of three components: antecedents, socialization processes and outcomes. The social structural variables such as socio-demographic factors and age or life cycle position are the antecedents which help to locate the learner within his or her social environment in which socialization takes place (Moschis and Moore 1979). Socialization processes

refer to socialization agent-learner relationships which include the interaction and the learning processes between the socialization agents (or the source of influence) and the learner. The last component is the learning outcomes which are the results of consumer socialization processes, such as the development of knowledge, attitudes, norms, and behaviour which are consumption-related. These are the dependent variables of any study which use the consumer socialization perspective.   Many of the previous consumer socialization studies have also adopted this conceptual framework of consumer socialization for the examination of their topics-of-interest (Lueg and Finney 2007; Moscardelli and Liston-Heyes 2005; Mangleburg and Bristol 1998; Mangleburg, Grewal and Bristol 1997; Shim 1996).

This study will adopt the consumer socialization model as the basis for this study. Besides, it is proposed to use the theory of interpersonal susceptibility (Bearden, Netemeyer and Teel 1989) so as to capture the effect of socialization agents by examining the interpersonal influence between the socialization agents and young adults on the development of scepticism towards advertising.

Theory of Interpersonal susceptibility

According to the theory of interpersonal susceptibility, there are normative and informative interpersonal influences which are received from socialization agents that exert considerable effect on consumer socialization and learning from the environment (Bearden, Netemeyer and Teel 1989). This theory aims to measure the need for individuals to identify themselves with or to conform to the norms in their groups by purchasing products (Moscardelli and Liston-Heyes 2005).

By normative influences, they are defined as an individual's tendency to conform to the expectations of the people in a group through purchase decisions in order to gain rewards or avoid punishments (Burnkrant and Cousineau 1975) whereas informative influences is referred as the tendency to learn about products and brands by observing others and seeking information from others (Bearden, Netemeyer and Teel 1989). Thus an individual, either by observing or by conformation to the agent's behaviour, receives interpersonal influences from socialization agents (Bearden, Netemeyer and Teel 1989). By shaping one's attitudes, norms and values (Stafford and Cocanougher 1977), interpersonal influence can affect an individual's consumption behaviour in various social situations (Bearden, Netemeyer and Teel 1989). In conclusion, there are two types of social influences that affect an individual's consumer socialization: interpersonal influences (normative and informative) which are viewed in the context of the type of influence while the influences from socialization agents (family, peers and media) are viewed in the context of source of influence (Kim and Kang 2001a).

Based on the consumer socialization model and the theory of interpersonal susceptibility, we propose to study consumer socialization and scepticism towards advertising of young adults in Hong Kong on three main sets of variables which follows the causal sequence of consumer socialization process. The first set is social-structural variables which includes age, gender and income of young adults. The second set is the variables on the influence of socialization agents which under examination in this study include parent, peer and media normative and informative influences, the influence of television and the influence of the internet. The last set is outcome variable, i.e., scepticism to advertising, which is the dependent variable. Thus, we explore the impact of

socialization process including the effect of the internet on formation of scepticism to advertising of young adults as proposed in Figure 1.1 in Chapter One and reproduced here for easy reference:

Social Structural Variables
* age
* gender
* employment
* allowance

Socialisation Agents
* parent normative
* parent informative
* peer normative
* peer informative
* media normative
* media informative
* television
* internet
* simultaneious television & internet

Outcome variable
* advertising skepticism

2.4 Consumer Socialization of Young Adults and Hypotheses Development

For practical purposes, the focus of this study is on gathering information about the social structural variables and the variables on the influences of socialization agents in the consumer socialization process so as to provide explanation to only one of the potential learning outcomes associated with the consumer socialization process, i.e., scepticism or the ability to evaluate the motives and intention of advertisements.   The following discusses the outcome variable.

2.4.1   Scepticism towards advertising

Past research shows that there is a positive correlation between attitudes towards advertising and attitudes towards brands and purchase intentions (Prendergast and Ho 2006).   Attitude towards advertising is defined as "a general disposition in the processing of advertising messages" (Boush, Friestad and Rose 1994, p.168).   We are particularly interested in the attitudes reflecting skepticism towards advertising, i.e., whether individuals are predisposed to disbelieve or to trust the contents shown on advertisements (Boush, Friestad and Rose 1994, p.168).   Thus, the outcome variable we investigate in this study is scepticism to advertising, which is one of the most common attitudes when talking about advertising (Friestand and Wright 1995). Advertising scepticism is defined as the tendency to disbelief or doubt advertising claims (Obermiller and Spangenberg 1998) or as a negative attitude towards the claims made by advertisers (Boush, Friedstad and Rose 1994).   It is worth studying because advertising scepticism is a construct of beliefs and affective reactions towards advertising and is also a consumer skill which influences the purchasing and consumption decision of individuals (Bush, Smith and Martin 1999).

In order to attract consumers' attention, it is not uncommon to find exaggerations in advertising.   Empirical evidence also suggests that most adult consumers distrust the advertising claims (Calfee and Ringold 1994; Mittal 1994) and consumers are socialized to be sceptical towards advertising (Obermiller and Spangenberg 1998).   Obermiller and Spangenberg (2000) further propose that advertising scepticism is a marketplace belief which can affect marketplace experiences and consumer socialization of individuals.

In this study, following the findings of Moschis and Moore (1978) and Mangleburg and Bristol (1998), we assume that besides the social structural variables such as age, gender, and income, socialization agents such as parents, peers, media (including television) and the internet have the greatest potential to influence young adults' ability to assess advertisements, thus making scepticism being the dependent variable in this study. In the following sections, social structural variables and the influence of socialization agents on young adults' consumer socialization will be discussed in great details.

2.4.2   Social-structural variables

The social setting within which learning takes place is defined in terms of social structural variables. These variables, such as age, sex, ethnicity, social class, income, family structure and gender, may impact learning of consumer learning properties through their impact on socialization processes (Moschis and Churchill 1978; Moore and Stephens 1975). Thus it is worthwhile to study socio-structural variables in socialization research.

For example, Lee and Beatty (2002) found that adolescents had more influence on family purchase decisions if their mothers did not work outside and had a more liberal orientation. It is also found that the greater the number of siblings and the later in birth order the adolescents in the family, the more likely they were associated with a confused-by-overchoice consumer decision-making style (Shim 1996). This may be due to the fact that these adolescents are less likely to acquire consumer-related skills with such a large family structure (Moschis 1987 cited in Shim 1996, p.564). Thus family structure may be regarded as one of the social structural variables, which has

influence on consumer socialization of adolescents.

In the study of Moschis and Churchill (1978), it is also found that there is a positive relationship between social class and the acquisition of consumer skills. Social class may reflect how the children or adolescents are brought up by their parents. So adolescents with higher socioeconomic status may enjoy more opportunities for consumption and thus be better trained for being consumers. Findings from Kuhlmann (1983) support the fact that consumption-related attitudes such as brand preferences, patterns of shopping and media use, are greatly affected by familial socialization.

Based on experience from past research on consumer socialization (Singh, Chao and Kwon 2006; Moscardelli and Liston-Heyes 2005; Moschis and Moore 1982; Churchill and Moschis 1979), age, gender and income are determined to be socio-structural variables that are included in this study.

2.4.2.1 Age or life-cycle position

The life-cycle position or age refers to the lifetime span of an individual when learning takes place. Though the life-cycle position on consumer socialization is not widely examined, many of research studies have analyzed the effect of age on various consumer skills. For example, the findings from the study of Chaplin and John (2005) confirm that as adolescents getting older, they tend to have more experience with brands which in turn lead to deeper understanding of the relationships among brand's personality, user group or personal qualities. Shim (1996) found that older adolescents were also found to be more willing to interact with parents thus driving them to

utilitarian decision-making styles. Moschis and Churchill (1979, p.45) proposed that "with increasing age, adolescents tend to develop greater resistance to persuasive advertising, understanding better marketing strategies relating to the pricing of products, and generally become more sophisticated consumers" because older adolescents possessed more marketplace knowledge and ability to scrutinize product information from advertisements. Younger adolescents, on the other hand, were more receptive to advertising and pricing than older adolescents (Moschis and Churchill 1979).

This is supported by Kuhlmann's (1983) findings on the review on consumer socialization of children and adolescents. He found that with increasing age, children and adolescents perceived more attributes of products and used more dimensions in forming their judgements. When children get older, there will be a shift from the perceptual attributes (e.g., colour or shape) to functional attributes when it comes to product evaluations and attitude formation. Another interesting finding with increasing age is that older children seem to have less trust on commercials than younger ones because they have better understanding on the motives behind the mass media. On the whole, with increasing age, children and adolescents are interacting more efficiently with socialization agents and thus adapting better to any social setting.

Moreover, Churchill and Moschis (1979) found that older adolescents spent less time on watching television than their younger counterparts. Instead, they communicated more with peer about consumption-related matters.

As socialization is a life long process and continues throughout the lifetime, young

adults, who have just passed the stage of adolescence, are still going through the socialization process. Thus, it is reasonable to assume that the older the young adult, the more experienced he or she is in the marketplace which leads to the development of scepticism to advertising (Boush, Friedstad, and Rose 1994). Based on this assumption, we come to the first hypothesis:

H1 : Scepticism to advertising is positively related to age.

2.4.2.2 Gender

Socialization processes may be influenced by gender as there are gender differences found in adolescent-parent communication patterns. Moschis and Moore (1978) discovered that female adolescents tended to communicate more frequently with their parents regarding consumption issues than male adolescents. This is supported by Mangleburg, Grewal, and Bristol (1997) who found that female adolescents exposed more to consumption-related and marketplace-related communications from parents and peers than did male adolescents. Thus female adolescents tended to have greater use of product labels than male adolescents and retained product attribute information to a greater extent (Moschis and Churchill 1979). Shim (1996) also found that adolescents' consumer decision-making styles were affected by gender as one of the social structural variables. For instance, it is found that girls were more associated with 'price-conscious and value-for-money', 'recreational and hedonistic' and 'novelty and fashion-conscious' consumer styles while boys were more closer to 'perfectionistic and high-quality-conscious' and 'habitual and brand-loyal' consumer decision-making styles (Shim 1996). The findings from Moschis and Churchill (1979) also support the fact

that male adolescents show stronger materialistic attitudes when compared to female adolescents.

As regard to attitudes towards advertising, females are found to be more susceptible to the influence of advertising than their male counterparts and thus possess more favourable attitudes towards advertising (Bush, Smith, and Martin 1999). However, Mangleburg and Bristol (1998) also found that there was a positive relationship between marketplace knowledge and the development of scepticism to advertising. Marketplace knowledge is referred as the level of knowledge in connection to consumer related factors such as price, stores and shopping. That means possessing more knowledge in marketplace will lead to a higher level of scepticism to advertising. As females tend to communicate more with parents and peers on marketplace-related or consumption-related issues than their male counterparts, by following the simple logic, it is not unreasonable to suggest that females are more sceptical than their male counterparts.

H2 : Female young adults are more sceptical to advertising than their male counterparts.

2.4.2.3 Income

Besides age and gender, we also want to capture the effects of young adults' economic position on consumer socialization processes. Nowadays, young adults and teens together are a particular segment of the consumer market that has enormous spending power and influences (Parmar 2002). For instance, teenagers in the U.S. spent an average of $264 per month from sources including allowance from parents and other

family members and from their own employment (Texas Banking 2004). According to the study on the youths in Hong Kong by Lingnan University, teenagers and young adults from the age of 15 to 24 in Hong Kong also spent an average of HK$3,000 per month in 2010. Moreover, young consumers were spending about $200 billion in 2000s in the U.S. alone (Gardyn 2002). Following Mangleburg and Bristol's (1998) finding, young adults who earn money from employment and/or receive allowances from family will have more experience in the marketplace because they have money to spend, and thus leading to the development of scepticism to advertising.

H3 : Employment is positively related to the development of scepticism to advertising.

H4 : Earning an allowance is positively related to the formation of scepticism to advertising.

2.4.3   Socialization processes

The model of consumer socialization (Moschis and Churchill 1978) postulates that antecedent variables, through socialization agents, affect socialization processes which in turn influence the learning of consumer properties (Shim 1966). Though socialization processes in terms of mechanism of learning are not the emphasis of this study, a discussion of the same is worthwhile in order to understand how the socialization agents affect learners which finally lead to the social learning. It is through these mechanisms of learning that information, social mores, and values of the socialization agents are conveyed and transmitted to the learners (Moschis and Churchill 1978). In the conceptual model, socialization processes involves the influences of socializing agents exerted on the learners through the mechanism of

learning which finally lead to the obtaining of consumer learning properties, such as marketplace knowledge, attitudes and skills.

2.4.3.1 Mechanism of learning

For mechanisms of learning, it refers to the ways in which learners acquire the consumer learning properties through the interactions with the socialization agents. As proposed by Moschis and Churchill (1978), these include role modeling, reinforcement and social interaction between the socialization agents and the learners.

Role modeling, also known as observational learning, is the imitation of the acts or behaviours of the role models by the individuals. Reinforcement involves the positive (social approval) or negative (punishment) practices, usually from significant socialization agents for teaching individuals to develop acceptable values and attitudes in society. Social interaction refers to the interactions between socialization agents and the individuals which directly or indirectly influence the development of attitudes and skills of individual in the particular social setting. It is always used to examine how individuals acquire attitudes and skills through the influence of significant others. Since the latter two mechanisms of learning usually come together with role modeling, only the role modeling mechanism is addressed here.

Role modeling

Just like Moschis and Churchill (1978) developed their model based on the social learning approach, many of the research studies utilize social learning theory to examine and explain the effect of role modeling on consumer behaviour. Social learning theory

suggests that individual develop attitudes and behaviour through learning experiences. Applying this theory to the effect of role modeling on consumer socialization, the theory proposes that individual consumers learn consumption-related attitudes and behaviour by modeling or imitating the behaviours of others, i.e., the socialization agents in the consumer socialization model (Martin and Bush 2000).

As defined by Bandura (1977 cited in Martin and Bush 2000), a role model for adolescents can be anyone the individual consumer comes in contact with, either directly or indirectly, who potentially can influence the adolescent's decisions or actions. From this conceptual definition of role models, parents, peers, teachers and relatives can be regarded as direct role models for adolescents. Moreover, it is suggested from past research that both parents and peers have crucial impact on adolescents' consumption-relation behaviour (Martin and Bush 2000; Bush, Smith and Martin 1999).

In the study of role model influence, most research studies focus on identifying and analyzing such direct role model. Little attention has been drawn to the role models who are "individuals of outstanding achievement" and who can motivate, inspire and encourage adolescents to adopt certain self-images, lifestyle and modes of behaviour (Lockwood and Kunda 1997 cited in Clark, Martin and Bush 2001). These role models are identified by Bandura (1977 cited in Martin and Bush 2000) as vicarious role models who may be celebrity or "superstars" come from electronic or printed media and can influence consumer behaviour and attitude without directly contacting the individual consumer. From the findings of Martin and Bush (2000), both role models, direct or vicarious, have significant influence on adolescents' purchase

intentions and decisions, especially on brand switching. Moreover, the results from the study of Clark et al. (2001) show that there is a significant positive relationship between the influence of vicarious role model and the adolescents' marketplace knowledge (Mangleburg and Bristol 1998). As pointed out in the hypotheses development for gender and income in the previous sections, there is also a positive relationship between marketplace knowledge and the development of scepticism to advertising. So the vicarious role model may affect the amount of marketplace knowledge of an individual and thus affect an individual's development of scepticism to advertising. Therefore, the role model influence should not be underestimated in the analysis of young consumers' consumption behaviour.

Kuhlmann (1983) further pointed out that the most efficient way of social learning was by a combination of reinforcement and modeling. Learners can either observe the outcome of the model's behaviour (models being rewarded or punished as a result of the behaviour) or observe the actions of the model (learners being rewarded or punished if learners repeat model's action).

2.4.3.2 Socialization agents

In consumer socialization literature, a socialization agent may refer to a person, an organization or an institution that are directly involved in socialization and that have great influence on the individual because of "frequency of contact, primacy, and control over rewards and punishments given to the individual" (Moschis and Moore 1979).

Both Moschis and Churchill (1978) and John (1999) proposed that there were four main

socialization agents, namely, parents, peers, mass media and school.   However, in most conceptualization of socialization, only the first three socialization agents (i.e., parents, peers and mass media) are deemed to be primary influences on the psychological, emotional and moral development of young people (Moore et al. 2002).   Past research also indicates that these three socialization agents are important in the socialization process.   For example, results from the study of Chaplin and John (2005) indicate that parents, peers and media are influential to the process of self-concept development because adolescents appeal to these agents for advice about social norms and confirmation of self-identity.   Moreover, extant research supports the fact that as a young person gets older and mature, the relative influence of these three socialization agents on that person's attitudes, knowledge and behaviour can change (John 1999).

Parental Influences

Parental socialization can be regarded as an adult-initiated process by which children, through training and imitation, develop habits and values which are congruent with the prevailing cultural environment (Baumrind 1980).   In fact, parental influences on their children can be made directly through instruction, discussions and training of consumer skills, and indirectly, through observation, modeling and imitation of parent consumer behaviour (Moschis 1985).   Besides, children can also acquire product preferences and concerns about quality, price and value from their parents (Shim 1996).

The findings from previous research show that parents are the most important consumer socialization agents, in particular to young children (Moschis and Churchill 1978).   In fact, it is found that adolescents tend to rely twice as much more on parents than on

other socialization agents for obtaining consumption-related information (Moschis and Moore 1979). Moreover, parent-child communication is found to have a significant impact on the development of children's consumption-related skills (Bush, Smith and Martin 1999; Mangleburg and Bristol 1998; Moschis and Moore 1979; Moschis and Churchill 1978).

Despite the fact that many studies had examined the effect of family communication on adolescents' consumer socialization in various aspects (Bakir, Rose and Shoham 2005, Moscardelli and Liston-Heyes 2005, Palan 1998, Mangleburg and Bristol 1998), Mangleburg, Grewal and Bristol (1997) emphasized on the study of "marketplace-related" communication which was more relevant and specific for the study of adolescents' consumer socialization process as regards to various aspects of the marketplace. This is consistent with research examining overt communications about consumption-related issues as it is found that overt communication with adolescents and socialization agents results in various outcomes such as product knowledge, attitudes towards advertising, and ability to filter puffery in advertisements (Moschis and Churchill 1979; Moschis and Churchill 1978). Though family communication is not the area of interest in this study, exposure to marketplace-related communications to both parents and also other various socialization agents should be taken into account when studying adolescents' consumer socialization, otherwise the influence of socialization agents may be underestimated.

To capture parental influence on consumer socialization of young adults, we have to employ the theory of interpersonal susceptibility as discussed before. As pointed out

by Ward (1974), the relative importance of parental influence decreases and peer influence (to be discussed in the next section) increases with age of the adolescents for a variety of consumption-related behaviour and attitudes. Moreover, as they get older, adolescents become more susceptible to information influences than normative influences from parents (Mascarenhas and Higby 1993). Furthermore, the role or parent changes as adolescents mature, from being a disciplinarian (associated with normative influence) to a friend (having more informative influence) (Singh, Chao and Kwon 2003b). Thus, it can be proposed that the development of scepticism of young adults will be impacted more by informative parental influence than by normative parental influence. Accordingly, the following hypotheses are developed.

H5(a) : Normative parental influence is negatively related to the formation of sceptical attitude toward advertising in young adults.

H5(b) : Informative parental influence is positively related to the formation of sceptical attitude toward advertising in young adults.

Peers

Besides parents, peers are also a significant source of influence, especially during adolescence (Campbell 1969 cited in Moschis and Moore 1979. According to Bristol and Mangleburg (2005), peer influence is referred as the extent of influence which exerted by peers on the attitudes, thoughts and actions of an individual. As pointed out by Ward (1974), parental influence diminishes and peer influence escalates as children enter adolescence because adolescents have to identify with peers and to share with them interest, attitudes, and role behaviours (Bandura 1969 cited in Moscardelli and

Liston-Heyes 2005). As pointed out by Moschis and Churchill (1978), interaction with peers about consumption matters may make adolescents more aware of their consumer environment and thus in turn make them more active in interacting with other socialization agents on consumption matters. It is also suggested by Moschis (1978) that there is a positive relationship between the frequency of communication with peers and the adolescents' attitudes towards advertising. Thus, peers play a major role in forming adolescents' consumer related skills and attitudes.

The theory of interpersonal susceptibility is also applied in this study to capture peer influence on young adults' consumer socialization. This theory has been employed by Boush, Friedstad and Rose (1994) who found that there was a positive relationship between conformity and trust in advertising. Their findings were supported by Mangleburg and Bristol (1998) who found that adolescents' susceptibility to normative peer influence is related negatively to the development of scepticism to advertising while there is a positive relationship between susceptibility to informative influence and the development of scepticism to advertising. As suggested by Mangleburg and Bristol (1998), this may be due to the supply of information by peers which is critical of advertisements and helps adolescents to develop scepticism to advertising. Thus, as adolescents mature, they tend to rely on peer communication more as a source of market knowledge for evaluating advertising and market information (Moschis 1987) and use less normative peer influences (Mangleburg and Bristol 1988). Thus, it is the interest of this study to find out the relationship between peer influence and the development of scepticism towards advertising of young adults by the following hypotheses:

H6(a) : Normative peer influence is negatively related to the formation of sceptical attitude toward advertising in young adults.

H6(b) : Informative peer influence is positively related to the formation of sceptical attitude toward advertising in young adults.

Mass Media

Mass media is an important socialization agent and has always been a topic of interest that attracts most attention in consumer socialization research (John 1999; Rose, Bush and Kahle 1998; Carlson and Grossbart 1988). Media is usually considered as a major source of influence which enhances consumer knowledge in the marketplace (Moschis and Churchill 1978). However, the role of media influence, informative versus normative, has not been widely examined on adult socialization (Moschis 1987). Moreover, there is no conclusive evidence on the impact of media as a socialization agent. For example, Shim (1996) argued that exposure to mass media, such as television viewing, might lead to undesirable consumer orientations while Moore and Moschis (1981) proposed that there was close correlation between printed media with product information and consumers' rational decisions.

Nevertheless, previous research has shown that media has strong influence on consumer skills and consumption patterns among young consumers (Mangleburg and Bristol 1998; Mascarenhas and Higby 1993; Moschis and Churchill 1978). Mangleburg and Bristol (1998) even suggested that media, being a main source of marketplace information, helped in the development of scepticism to advertising and adolescents tended to rely more on media informative influence rather than media normative influence

(Mangleburg and Bristol 1998; Mascarenhas and Higby 1993). Thus, it is hypothesized:

H7(a) : Normative media influence has negative impact on the formation of sceptical attitude toward advertising in young adults.

H7(b) : Informative peer influence has positive impact on the formation of sceptical attitude toward advertising in young adults.

Television

In this study, besides the general media influence, we also particularly examine the influence of two categories of mass media, namely television and internet on the development of scepticism of young adults. Moore et al. (2002) asserted that past marketing research studies have shown television viewing can play an important role in the formation of behaviour of young consumers. Through viewing and imitation of television commercials, individuals learn how to attach social meaning to products (Bandura cited in Bush, Smith and Martin 1999) which then lead to individuals' social motivation for consumption (Moschis and Churchill 1978). Thus, television advertising is considered as a very important advertising medium (Anderson et al. 2008).

Moscardelli and Liston-Heyes (2005) also asserted the findings on the socializing impact of this medium by previous marketing researchers who concluded that exposure to television might lead adolescents to the learning of 'expressive' aspects of consumption behaviour (acquired through imitation and observations) more than the

'rational' aspects of consumption behaviour (acquired through guidance from parents and other mentors). This is supported by Moschis and Churchill (1978) who found that there was a positive relationship between the amount of television viewing and the expressive influence on the viewer. Thus television viewing, as one of the influences of mass media is chosen as the construct for measuring its impact on consumer socialization as television can be regarded as an effective mass medium in reaching adolescents (Anderson et al. 2008).

With respect to the topic of this study, i.e., scepticism to advertising, the findings of Mangleburg and Bristol (1998) suggest that the extent of television viewing is positively related to adolescent's scepticism towards advertising through the improvement of the adolescent's marketplace knowledge are of particular interest to us. Moreover, their research further shows that television can enhance the effects of family and peers in the formation of scepticism. Though the amount of television viewing decreases in the later years of adolescence (Moore and Moschis 1981; Churchill and Moschis 1979), it is generally agreed that television advertising acts as a normative influence, which relates to opinions on attitudes in product evaluation and product loyalty, rather than an informative one, which relates to brand, price and stores for consumption (Mascarenhas and Higby 1993; Moschis and Moore 1982). More recent study also shows that young adults watch television simply for entertainment instead of obtaining information on consumption (Keane and Fam 2005).

H8:   The effect of television is related positively to the development of scepticism to advertising in young adults.

<u>Internet</u>

The impact of technology is highlighted by Moschis (1987, p.18) in the following paragraph:

> "For example, perhaps the consumer socialization of children and adolescents prior to the era of television occurred in a different fashion than it does today ….. Similarly, *technology* (emphasis added) is likely to introduce changes in the individual's environment, and this might result in changes in the person's orientation towards consumption as well as changes in the individual's relationships with the various sources of consumer learning."

Thus, technology, as suggested by Moschis (1987), may have great impact on consumer socialization by changing the environment and the interaction with consumer socialization agents. In this study, a specific technology under consideration that affects consumer socialization is the internet.

In general, the conventional agents for socialization as defined over the past 30 years in prior literature are parents, peers, school, and media (Arnon, Shamai and Ilatov 2008; Churchill and Moschis 1979; Moschis and Churchill 1978). However, given the change in technology and the influence of the internet, John (1999) suggests that the internet should be considered another socialization agent that affects consumer socialization.

With the advent of the technology, new forms of media come into existence and the patterns of media usage has subject to rapid changes (Chan and Fang 2007). In fact,

the internet has already superseded television as the most influential medium among teenagers (NUA Internet Survey, 2002 cited in Lee and Conroy 2005).   Up to 2011, there are approximately 2,095 million Internet users around the world, having a growth rate of 480.4% for the decade from 2000 to 2011.   Like in Hong Kong, up to 30 June 2011, there are a total of 4.88 million of internet users out of the total population of 7.12 million (estimate in 2011), giving an internet penetration rate of around 68.5% (World Internet Usage and Population Statistics).

According to the yearbook of Hong Kong (2010), Hong Kong has one of the world's most advanced fixed broadband network infrastructures in terms of technological equipment for the internet services.   It also comes second as a global broadband leader with household fixed broadband penetration rate of 82.5%.   For public Wi-Fi service, Hong Kong had 9000 Wi-Fi hot spots in around 5000 locations in the territory in 2010. All the data shows that Hong Kong offers a favourable environment for the development and expansion of the internet and broadband services.   Thus internet services are easily and readily available to young adults at affordable rates which will greatly enhance the development of internet as a new socialization agent of young adults in Hong Kong.

Though there are several reports tracking the number of adolescents going online, little research has been conducted to examine the effects of internet on adolescents' consumer socialization.   Lee and Conroy (2005) tried to find out how adolescents' experiences and usage of the internet helped to shape them as consumers, i.e., the study of socialization through internet consumption by teenagers.   It is found that internet itself

is a social system which encourages social interactions through social learning, communication, development of social relationships and sense of belonging. Besides, internet is a place and an object of consumption for relaxation and escape, internet shopping and source of information from web sites.

Due to its ability to deliver and obtain information in a speedy and effective way at relatively low costs, in recent years, the internet has emerged as a new and important medium in consumer socialization process of young adults who have just passed the stage of adolescence (Cheung 2006).

However, a few studies explore the effect of internet and its role as a socialization agent for adolescents (Lee, Conroy and Hii 2003), not to mentioned research for young adults. Due to the scarcity of the literature on the effect of internet on consumer socialization when compared to the substantial body of literature for other socialization agents such as family, peers, schools and mass media, and given the growing significance and position of the internet in the daily life of young adults, either for playing online games, shopping or surfing the net, it is worthwhile to conduct a study on this topic and to find out the impact of the internet as a socialization agent on the development of scepticism to advertising of young adults.

Moreover, even fewer studies of the similar nature are conducted in the specific location of Hong Kong. Even so, those studies are mainly on adolescents, not on young adults. For instance, Cheung (2006) carried out a case study to find out key success factors for internet advertising targeted to teenager audience in Hong Kong. But the literature

review conducted from ABI Inform and Business Source for the present study has not found a study on consumer socialization of young adults in Hong Kong incorporating the effect of internet on the development of scepticism towards advertising. So it is of interest to find out the relationship between various environmental factors, in particular the effect of internet, and the development of scepticism towards advertising of young adults in Hong Kong.

In fact, the internet is becoming a primary source of both consumer information and entertainment for adolescents (Rose, Rose and Blodgett 2009). There is also evidence showing young adults using the internet as a significant source of market information. According to Pastore (cited in Singh, Chao and Kwon 2006), 67% of young adults in U.S. used the internet to gather market information as compared to the national average of 46 percent. Taking the effect of television on consumer learning (Churchill and Moschis 1979) and the increased levels of scepticism to advertising (Mangleburg and Bristol 1998), it can assume that the internet plays an important role in helping young adults to gather market information which help them to critically evaluate advertising claims and develop scepticism to advertising.

H9 : The effect of internet is positively related to young adults' scepticism toward advertising.

According to the Hong Kong Monthly Digest of Statistics on usage of personal computer and internet services by the Hong Kong residents (February 2008), it is found that the major usage of the internet services is for "communication with others"; "browsing/surfing the web pages" and "searching for/downloading information online".

Since there is not much research conducted on the use of internet and its effect on consumer socialization, the use of internet as a medium of television viewing is also adopted as a construct to be examined, i.e., telewebbing, the simultaneous use of internet and television. This relies on the assumption that young adults using both television and the internet together will expose to more advertisements and marketplace information and thus increase the level of scepticism. This is taken from findings of Mangleburg and Bristol (1998) with regards to the effect of television viewing alone.

H10 : Simultaneous use of Internet and television is positively related to young adults' scepticism toward advertising.

2.5 Conclusion

In this chapter we discuss the theoretical framework employed for this study. A consumer socialization perspective is adapted for the analysis of the impacts of social structural variables and socialization agents on the development of scepticism of young adults. A conceptual consumer socialization model together with the theory of interpersonal susceptibility is used as the basis for the development of the hypotheses which will then be tested by using the analytical techniques described in chapter four. However, the methodologies and the research design of this study including the research approach, the research methods, the development of measures and the sampling techniques will be discussed first in chapter three before we proceed to the analysis in chapter four.

CHAPTER THREE

METHODOLOGY

3.1 Introduction

Chapter two reviewed and analyzed literature on consumer socialization of children and young adults with reference to different socialization agents. This resulted in the development of the conceptual model of consumer socialization and young adults' advertising scepticism, upon which the hypotheses of this study were developed.   In order to address the hypotheses, this chapter presents the methodologies and the research design of this study.   Initially, the chapter describes various methodologies. This is followed by a discussion and analysis of the research design in terms of research approach; research methods; the development of measures and sampling methods. Finally, the estimation of cost, timing requirements and data collection procedures including the questionnaire administration are discussed in details.

3.2 Methodologies

The literature review in Chapter two illustrated that a substantial body of past research concerning consumer socialization of young people focuses on the effects of socialization agents on the attitudes and behaviour of young people (for example, Xie and Singh 2007; Singh, Chao and Kwon 2006; Moscardelli and Liston-Heyes 2005). These research studies within the realms of marketing and consumer behaviour have often adopted the positivist approach which uses precise and objective measures and employs quantitative mathematical research data collection methods to examine the

hypotheses (Cacana, Delahaye and Sekaran 2001). This study proposes a number of hypotheses (as mentioned in chapter two) which aim to explore the relationships between social-structural variables, the socialization process variables (socialization agents) and the scepticism towards advertising among young adults. It not only postulates a number of variables important to young adults' consumer socialization, but also hypothesizes a number of relationships between the constructs. Moreover, this study seeks to find out the direction of relationships between constructs. Thus, a quantitative research approach is adopted in order to enable analysis of the relationships via multivariate statistical methods and to answer the research questions posed in this study. In addition, this methodology provides an effective framework for planning the research design of this study

3.3 Research Design

After determining the research methodology which is quantitative by nature, it now comes to specify the research design adopted in this study which includes research approach; research methods; measurement technique; sampling; time requirements; financial requirements and data collection procedures.

3.3.1 Research approach

According to Hair, Jr. et al. (2003), there are three broad research approaches that can be adopted: exploratory, descriptive and causal research. Exploratory research is useful when little knowledge or information is available to guide predictions. It is used to gain insight into a general nature of a general problem and to develop a better understanding when the research questions are vague (Hair, Jr. et al. 2003).

Descriptive research is used to provide a more accurate description of the characteristics of the variables of interest in a situation (Cacana, Delahaye and Sekaran 2001). It is adopted when the hypotheses already exist to guide the process and provide a list of what has to be measured. Thus, the research designs are usually structured. Unlike exploratory research which aims at providing an insight to a general situation, descriptive research is, by far, confirmatory in nature and is used to test hypotheses. By addressing the hypotheses, it aims at exploring relationships between variables. However, it does not imply any causation of the identified relationships (Hair, Jr. et al. 2003).

On the other hand, causal research is used to finish the undone work of descriptive research by attempting to infer causation of any identified relationships (Hair, Jr. et al. 2003).

With the hypotheses and the conceptual framework presented in chapter two, it demonstrates that a more directional or causal approach is used to address the research problem. Thus, this study will not only describe the relationship between the variables, it will also imply predictions as proposed in the conceptual model in Figure 1.1 in chapter one.

3.3.2 Research methods

With regard to the choice of research methods, it depends on the research domain in which a study is conducted and the kind of data required for the study (Hair, Jr. et al. 2003). There are three principal research methods, namely, observation;

experimentation and survey methods. As attitudes and perceptions of young adults towards advertising cannot be observed, observational research was not appropriate to answer the research questions in this study. Moreover, experimentation is not widely used to solve most marketing problems due to their dynamic and complex nature (Baker 2002a). So it may not be suitable for conducting this study. Survey, on the other hand, is the best known source of primary data collection both in marketing and in social sciences (Baker 2002a).

Given the causal nature of this study, it requires a large amount of quantitative primary data collected specifically for addressing the hypotheses and thus survey is the most appropriate way to achieve this. Tull & Albaum (cited in Baker 2001) defined survey research as "the systematic gathering of information from (a sample of) respondents for the purpose of understanding and/or predicting some aspects of the behaviour of the population of interest". Though it may suffer from invalidate research findings due to non-response error, it is chosen as the research method for this study because of its ability to effectively answer the research questions and its advantage of collecting economically a great deal of information from a large population (Hart 1987). Thus, survey is regarded as the most compatible research method with the research approach of this study and its use is believed to be effective in addressing the hypotheses developed for this study.

As described by Tull & Albaum (cited in Baker 2001), a survey research usually connotes a project which aims at getting information from a sample of people by the use of a questionnaire, though it can also be conducted by different means, such as panel

surveys. Questionnaires, being efficient data collection mechanism, are suitable for survey research when researchers know exactly the kind of data required and the way for measuring the variables of interest (Cavana, Delahaye and Sekaran 2001). Thereby a questionnaire-based survey is chosen as a means to conduct this study, as the information required and the measurement for the variables, i.e., the consumer socialization agents and socio-structural variables, are clearly known and will be discussed in the following sections.

For questionnaire-based survey methods, they can come in different forms and can be classified according to their method of administration, namely, interviewer-administered questionnaires and self-administered questionnaires (Hair, Jr. et al. 2003). Each of these carries its own advantages and also its own unique challenges.

For the interviewer-administered questionnaires, the most common types are face-to-face interviews and telephone surveys, though mall intercepts also belong to this group (Hair, Jr. et al. 2003). These kinds of survey methods can help to explore and probe complex issues, clarify respondents' queries and usually attract a high response rate (Hair, Jr. et al. 2003). However, they have problems associated with the interviewer's bias and the relative high administration cost, especially in terms of time (Cavana, Delahaye and Sekaran 2001). As a result, they are not suitable for surveys like this study which require large sample size.

In self-administered questionnaires, or to be more exact, self-completion questionnaire as named by Bryman (2004), respondents are requested to answer the questions by completing the questionnaires themselves. Postal or mail questionnaires and fax questionnaires are the familiar forms of self-completion questionnaires. The

advantages of these methods are that they can overcome the problems associated with interviewer-administered questionnaires.   It is because they do not have problem with the interviewers' bias and also have cost advantages when compared to face-to-face interview or even telephone surveys (Bryman 2004).   Moreover, it is more convenient for respondents because they can complete the questionnaire at their own pace (Bryman 2004).   However, the response rate for mail questionnaires is always low and respondents do not have opportunities to clarify questions should there be any queries about the questionnaires (Cavana, Delahaye and Sekaran 2001).

Besides the above survey methods, the internet can also be a method of data collection such as online focus groups and online personal interviews with computer dialogue; and online social surveys like email surveys and Web-hosted surveys (Bryman 2004). While the former are interviewer-administered, the latter, i.e. the online-administered social surveys, can also be regarded as self-administered or self-completion surveys because respondents are asked to complete the questionnaires by themselves, only those respondents have to submit them online instead of by post (Bryman 2004).   These kinds of online self-completion social surveys have the advantages of speed of administration and reduction of interviewers' bias (Bryman 2004).   Moreover, Web-hosted surveys, by using pictures and graphics, can make appearance and layout of questionnaires more attractive to respondents and hence increase response rates (Hair, Jr. et al. 2003).   However, these online social surveys are only limited to respondents who have access to computer facilities and possess computer knowledge (Cavana, Delahaye and Sekaran 2001).   For Web-hosted surveys, they also suffer from high Web site programming costs and set-up costs (Hair, Jr. et al. 2003).   Confidentiality of the

questionnaire and loss of anonymity of respondents are also other issues of concern for online social surveys.

Having considered the advantages and disadvantages of the various survey methods, the self-administered approach with traditional pen and paper questionnaire was selected as the appropriate method for this study. This method was chosen because of its advantage of cost efficiency, ability to accommodate lengthy questionnaire and suitability for large sample sizes (Hair, Jr. et al. 2003), which were all important considerations for this study. Moreover, this method was commonly used in previous consumer socialization research (e.g. Mangleburg and Bristol 1998; Schaefer, Hermans and Parker 2005; Singh, Chao and Kwon 2006).

However, in order to overcome the disadvantages of this method such as low response rate and inability of respondents to clarify questions, a modified approach was adopted for data collection. This is what Cavana, Delahaye and Sekaran (2001) referred to as personally administered questionnaires by which questionnaires are hand-delivered by the researcher to the respondents who are invited and assembled together for the survey. Thus, any doubts regarding the questionnaires from the respondents can be attended and clarified on the spot. The researcher also has the opportunity to explain the purposes of the research project and thus encourage the respondents to give frank answers (Cavana, Delahaye and Sekaran 2001). After the questionnaires have been completed by the respondents, the researcher can collect all the completed responses within a short period of time and thus a higher response rate can be generated. Moreover, it is more cost efficient when compared with the mail surveys which involve high postage costs

for mailing questionnaires to the respondents and pre-paid envelopes for returning questionnaires (Hair, Jr. et al. 2003).

3.4 Measures

Data to be measured

Having determined the research approach and the research methods, it now comes to the development of the measures for the measurement of a concept, which is a fundamental and important issue in business research (Hair, Jr. et al. 2003).   However, to develop measures or what Cavana, Delahaye and Sekaran (2001) called, to operationalize concepts depends on the kind of information or be more specific, the variables, that have to be measured in order to provide sufficient and accurate findings for deriving an explanation to a certain phenomenon (Hair, Jr. et al. 2003).

There were three main sets, or categories, of data which had to be collected to answer the research questions in this study.   These three sets of data follow closely the conceptual consumer socialization model explained in Chapter One.   Set one includes the social-structural variables, namely age, gender, and spending power of the respondents.   Set two includes socialization agents while set three includes Internet use and simultaneous television and Internet use.

Measurement Scale

Besides learning how to operationalize concepts by identifying the variables that have to be measured, the ways to measure them have to be considered too.   There are four levels of measurement scale: nominal, ordinal, interval and ratio with degree of

sophistication of the measurement increases progressively from nominal to ratio scale (Cavana, Delahaye and Sekaran 2001).

A nominal scale uses numbers to assign individuals or objects to certain categories or groups which are mutually exclusive and exhaustive of all possibilities while an ordinal scale places objects into predetermined categories which are rank-ordered according to some criterion (Cavana, Delahaye and Sekaran 2001). An interval scale moves a level upward. It not only groups objects to certain categories and ranks the order of these categories, it also allows the measurement of the distances between points on the scale so that magnitude of the differences can be interpreted and compared in a meaningful way (Hair, Jr. et al. 2003). As for ratio scale, it provides the highest level of measurement by having a unique origin (in contrast to arbitrary origin point of the interval scale) or zero point which allows it to compute ratios of points on the scale (Hair, Jr. et al. 2003). Different variables in this study employed different measurement scales in order to obtain necessary information for this study.

In this study, different measurement scales were employed for measuring different variables, details of which are covered in the following sections.

Response Scale

After discussing the measurement scales, the methods of scaling which are used for obtaining responses from the subjects have to be examined now. There are two main categories of response scale: metric and non-metric. Metric scales, usually considered quantitative, are used to elicit responses regarding the object to be studied. Non-metric

scales, on the other hand, are often referred to as qualitative and are used to make comparisons between and among objects so as to reflect preference or importance (Hair, Jr. et al. 2003). Metric scales like summated ratings scales (Likert scale); numerical scales; semantic differential scales and graphic ratings scales are scales attempts to measure attitudes or opinions while non-metric scales such as categorical scales; rank order scales; sorting scales; constant sum scales and paired comparison scales are scales elicit the preferred choice and ranking (Hair, Jr. et al. 2003). However, the selection of response scale depends on factors such as the information requirements of the research and the characteristics of the respondents (Cavana, Delahaye and Sekaran 2001).

3.4.1 Social structural variables

Social structural variables including age, gender and spending power were assessed in this study to address their relationship with scepticism towards advertising. Information regarding gender and age of the respondents were easy to obtain without error by using nominal scales. They were measured as a simple demographic-type question by simply assigning number scores to the outcome of the gender variables, so coded as "0" being "male" and "1" being "female". As for age, since the respondents are undergraduate students aged 18 to 24, coding from "0" representing aged 18 up to "6" representing 24 year-of-age were used. For the spending powers of the respondents, it is measured by their earnings from work and from parents' allowances. Ratio scales are used to capture the earning from work from zero dollars to more than $2,500 per month while the allowances from parents ranging from zero dollars to more than $4,000 per month.

3.4.2 Socialization processes variables

Number of Items

For the socialization process variables, i.e., the parental influences, the peer influences and the media influences, they were all measures by multi-item scales which consisted of a number of closely related individual statements or items so that responses to these statements or items could be combined into a composite score or summated rating used to measure each of the variables (Hair, Jr. et al. 2003).   There are no strict guidelines for the number of items as long as they are closely related, and completely represent the variable or construct to be measured with these multi-item scales (Hair, Jr. et al. 2003). However, it is suggested by Hair, Jr. et al (2003) that a minimum of three items is necessary in order to achieve the acceptable reliability.   The multi-item scales for each of the variables, which consisted of at least three items, were all operationalized using previously established scales in the consumer socialization literature.

Response Scale

In order to capture the respondents' attitude and opinions on these socialization process variables which are measured by the multi-item scales for each of them, a summated ratings scale is selected as the response scale in this study (or a Likert scale when it is used individually) (Hair, Jr. et al. 2003).   It is because Likert scale is easy to construct and administer, and can effectively extract opinions from the respondents (Cavana, Delahaye and Sekaran 2001).

Number of Scale Categories

Hair, Jr. et al. (2003) further recommend that scale categories should not be fewer than

five categories because respondents tend to avoid the extremes and odd number can also allow them to adopt a neutral position. Therefore a five-point scale as suggested by Hair, Jr. et al (2003) was deemed to be appropriate for capturing the magnitude of responses.

Labels for Scales

There are three types of category labels – verbal labels, numerical labels and unlabeled scales (Hair, Jr. et al. 2003). Numerical labels and unlabeled scales are usually used when it is difficult to find appropriate verbal descriptions for the middle categories (Hair, Jr. et al. 2003). Thus, Hair, Jr. et al. (2003) argue that the use of scales which have verbal description at all points (verbal labels) can increase reliability of the instrument. Moreover, since the multi-item scales were taken from the consumer socialization literature, the response scales and labels for scales used by previous researchers were retained. Therefore, the five-point Likert Scale, with numbered and verbally labeled response options, ranging from strongly agree to strongly disagree was adopted.

3.4.2.1 Measuring parental influences

The multi-item scales used to measure parental influences were adopted from Mascarenhas and Higby (1993). There are five items for parental normative scale and three items for parental informative scale as shown in Table 3.1. A Likert-type five-point scale with interval measurement scale was used to capture the responses. That means the differences in the responses between any two points on the Likert scale remaining the same (Cavana, Delahaye and Sekaran 2001).

Table 3.1
Measure of Parental Influences

<u>Scale Items</u>
<u>Parental Normative</u>
I always try to shop with my parents.
I always follow my parents' decisions by buying the same products and brands.
What, where, and which brand I buy are very much determined by my parents
My parents decide all my shopping needs.
My parents accompany me when I make purchases.

<u>Parental Informative</u>
I often discuss my purchase plans with my parents.
When I do not understand prices and quality I consult my parents.
I never buy any new product until my parents and I have discussed it.
To make sure to buy the right product, I often look at what my friends are buying.

3.4.2.2   Measuring peer influences

For peer influences, the multi-item scales used in this study were developed by Bearden et al. (1989) and were later tested by Mangleburg and Britol (1998).   There are three items for normative scale and four items for informative scale as shown in Table 3.2. Same as the scales for parental influences, a Likert-type five-point scale with interval measurement scale was used to capture the responses.

Table 3.2
Measure of Peer Influences

<u>Scale Items</u>
<u>Peer Normative</u>
When buying products, I usually buy the ones that I think my friends will approve of.
It is important that my friends like the products and brands I buy.
I like to know that product and brands make a good impression on my friends.

<u>Peer Informative</u>
I often ask my friends to help me choose the best product.
If I don't have a lot of experience with a product, I often ask my friends about it.
I often get information about a product from friends before I buy it.

3.4.2.3   Measuring media influences

For media normative (three items) and informative (two items), the scales were also from Mascarenhas and Higby (1993).   Scale items for media influences are shown in Table 3.3.   A Likert-type five-point scale with interval measurement scale was used.

Table 3.3
Measure of Media Influences

<u>Scale Items</u>
<u>Media Normative</u>
I buy only those products or brands that are advertised on television, radio, newspaper or magazine.
Radio, newspaper and television advertisings determine my brand loyalty.
I continue buying the same brands as long as my favourite stars endorse them.
<u>Media Informative</u>
I always consult the media to determine the best buys.
I always look at the advertising before I buy.

3.4.2.4   Measuring effect of television

Television usage was mainly captured by the number of hours per week the respondents spent on watching television.   Ratio scales based on five hour increments from 0 hour to more than 20 hours per week are used to get this information together with one item (as shown in Table 3.4) by Likert-type five-point scale with interval measurement scale for capturing respondents' perception towards television as a socialization agent.   This item is developed by Moscardelli and Liston-Heyes (2005) as shown in Table 3.4.

Table 3.4
Measure of Effect of Television

<u>**Scale Items**</u>

<u>**Television Usage**</u>

Approximately how many hours in total do you spend watching television each week?

<u>**Perception towards Television**</u>

Television is a good source of product information

3.4.2.5 Measuring effect of internet

Internet usage was measured by adopting the same approach as the one used in measuring television usage. Ratio scales based on five hour increments from 0 hour to more than 25 hours per week (as shown in Table 3.5) are used to get the information on the number of hours per week the respondents spent on the Internet at home and at university respectively. Likert-type five-point scale with interval measurement scale was also employed to obtain respondents' perception towards internet as a socialization agent. The scale was developed and tested by Singh, Chao and Kwon (2006) as shown in Table 3.5.

Table 3.5
Measure of Effect of Internet

<u>**Scale Items**</u>

<u>**Internet Usage**</u>

How many hours in total do you spend on the Internet at home each week?
How many hours in total do you spend on the Internet at university each week?

<u>**Perception towards Internet**</u>

I sometimes check the Internet for product or price information.
I consider the Internet is a good source of product information.
I feel comfortable buying the products on the Internet.

3.4.2.6   Measuring simultaneous television and internet usage

Same as television and internet usage, this scale was measured by ratio scales based on five hour increments from 0 hours to more than 25 hours per week (as shown in Table 3.6) so as to capture the number of hours per week the respondents spent on watching television on computer and simultaneously using the Internet.

Table 3.6
Measure of Simultaneous Television and Internet Usage

Scale Item
Simultaneous Usage of Television and Internet
How many hours in total do you spend watching television on computer and simultaneously using the Internet at home each week?

3.4.3   Outcome variables

The variables described above are arguably instrumental in explaining scepticism in young adults.   Scepticism is therefore the dependent variable or the outcome variable in the regression analysis.   Bearden's (1999) scepticism scale was utilized to measure the respondents' level of scepticism towards advertising which, according to Bearden's (1999) operational definition, refers to the consumer's tendency toward disbelief of advertising claims.   This scale was also adopted by Moscardelli and Liston-Heyes (2005).   Scale items for measuring scepticism are shown in Table 3.7.

Respondents were asked to respond to each of the 11 statements as stated in Table 3.7 regarding their attitudes towards advertising and related issues.   Responses were measured on a five-point Likert Scale ranging from "Strongly disagree" to "Strongly agree".

Table 3.7
Measure of Scepticism

<div style="border:1px solid black; padding:10px;">

<u>Scale Items</u>

We can depend on getting the truth from most advertisements.

The goal of advertising is to inform the buyer.

I believe advertising offers valuable information.

Advertising is generally truthful.

Advertising is a reliable source of information about the quality and performance of products.

In general advertising presents a true picture of the product being advertised.

A company's Web site provides accurate information about its products.

Advertising is truth well told.

I feel I've been accurately informed after viewing most advertisements.

Most advertising provides consumers with essential information.

Television advertising does not provide much useful information about products.

</div>

Figure 3.1 Conceptual Model of Consumer Socialization Incorporating Survey Items

Social Structural Variables
* age (Item 47)
* gender (Item 46)
* employment (Items 52-53)
* allowance (Item 54)

Outcome variable
* advertising skepticism (Items 20-30)

Socialisation Agents
* parent normative (Items 1-5)
* parent informative (Items 6-8)
* peer normative (Items 9-11)
* peer informative (Items 12-15)
* media normative (Items 31-33)
* media informative (Items 34-35)
* television (Items 16, 42)
* internet (Items 17-19, 36-41, 43-44)
* simultaneious television & internet (Item 45)

Design of the Survey Instrument

The questionnaire was divided into three sections (see **Appendix A**). Each section was introduced by statements about the purpose of that section and instructions to respondents on how to answer the questions. To emphasize the confidentiality and anonymity of this survey and the absolute free choice of participation, statements bringing this message were included at the beginning of the questionnaire. The first part of the questionnaire focused on the perceptions of the respondents as a consumer. Respondents were asked about their attitudes towards parental influence, peer influence, media influence (including television and internet influence) and their attitudes towards advertising. Grid lines were used to separate each question so that respondents could easily identify the corresponding answer for each question. The second part was on the usage of television and internet of the participants. The classification questions which covered the few demographic questions including age, gender and family background were the last section which was placed at the end of the questionnaire due to their nature (Hair, Jr. et al. 2003).

3.4.4 Sample

Several considerations have to be taken into account in sampling: defining the target population; choosing the sampling frame; selecting the sampling method; and determining the sample size (Hair, Jr. et al. 2003).

Target population

The defining of the target population depends on the scope of the study and the research objectives (Hair, Jr. et al. 2003). The primary objective of this study is to explore the

impact of consumer socialization on scepticism towards advertising of young adults in Hong Kong.   In general, the age range of young adults is accepted as between 18 to 24 years as found in past literature (Ling and Stanton, 2002).   In view of this, the target population of this study is also determined as young people aged 18 to 24, taking into account their experiences.

Sampling frame

Undergraduate students are recruited from universities in Hong Kong aged 18 to 24 years.   This forms the basis of the sampling frame.   A student sample is justified as they are fairly representative of young adult population in general (Singh, Chao and Kwon 2003b; Feltham 1998).   University students are deemed to be viable respondents in this study because they are at the epicentre of the phenomena being studied by having more opportunities to use and be exposed to Internet technology.   There are seven universities in Hong Kong, namely, the University of Hong Kong; the Chinese University of Hong Kong; the Hong Kong Polytechnic University; the Hong Kong University of Science and Technology; City University of Hong Kong; Hong Kong Baptist University; and Lingnan University.   Undergraduate students from these seven universities are the target respondents of this study.

Sampling method

There are two main categories of sampling methods: probability and non-probability sampling.   With probability sampling, the elements in the target population have some known chance or probability of being selected as sample subjects while in non-probability sampling, the elements do not have a known chance of being selected in

a sample (Hair, Jr. et al. 2003).

As the target population of this study is all the young adults in Hong Kong, it is difficult to use probability sampling.   Thus non-probability sampling is the only alternative left.

With undergraduate students' information and data cannot be obtained without the prior consent of the students themselves, data will then be collected from the participants through the non-probability snowball sampling method.   Initial prospective respondents from the universities in Hong Kong who are acquaintances of the researcher are first approached by the researcher.   They would act as the snowball recruiters who would then help the researcher to identify and recruit other potential respondents to be included in the study through their personal network.   The potential respondents would also be asked to identify and recruit other potential respondents to be included in the study.   This process continues until the required sample size is met.

Though snowball sampling suffers from the drawback of selection bias and the problem of generalization of the findings to the target population (Hair, Jr. et al. 2003), given the concise age group of the subjects in this study (aged 18 to 24), the respondents selected will provide to a certain extent representative findings for university students in Hong Kong.   This sampling method can also collect data in a more speedy and cost effective way which is most suitable for this study.   The questionnaires are distributed to the respondents through face-to-face interactions because it is the most direct and effective way for the respondents to get hold of the questionnaire.   Moreover, it is more convenient and efficient for the researcher to collect the completed questionnaire from

the respondents.   Thus, the response rates are guaranteed and there will be sufficient data from the respondents for statistical analysis.   Furthermore, samples recruited from snowball sampling are the friends or classmates of the students who are most readily available to participate in the study by completing the questionnaire and to provide the required information.

Sample size

The statistical technique employed in analyzing the data collected is linear hierarchical regression model which is a multiple and stepwise regression.   According to Hair et al. (2010), the sample size depending on the ratio of observations to independent variables affects the generalizability of the results of a study.   The desired level as referred to by Hair et al (2010) is between 15 to 20 observations for each independent variable.

In this study, the maximum number of independent variables are 10 (Age, Gender, Employment, Allowance, Parental Influence, Peer Influence, Media Influence, Television, Internet, Television & Internet), thus the required sample size for the study, by taking the higher desired ratio of 20 respondents to 1 variable, would be around 200. Thus a sample size of 200 undergraduate students will be recruited for the study.

3.5 Cost and Timing Estimates

It was estimated that the adoption of the modified self-administered approach for data collection would reduce both the time and cost of administration.   As hard-copy questionnaires were hand-delivered to the potential respondents by the researcher and the questionnaires were collected by the researcher himself on the spot after completion,

the cost per questionnaire was very minimal, only involving the photocopying costs for preparing the questionnaires. Thus, this method of administration is far more efficient in terms of money than questionnaires collected by mail. Respondents were recruited by initial respondents through their personal networks so no incentives to respondents were offered to induce their participation in the survey.

Moreover, potential respondents were invited and assembled to attend the briefing sessions in an office where they could complete the questionnaire after the briefing sessions. Data could thus be collected within a week whereas mailing would have required a longer time frame. Though it took about week to recruit enough potential respondents by the snowballing sampling method, high response rate was guaranteed once the respondents were recruited.

3.6 Data Collection

Before conducting of the survey, a pilot test was undertaken on 10 undergraduate students consisting of 4 males and 6 females. They are undergraduate students randomly selected in a church gathering. As most of the measures are adopted from previously established scales in the consumer socialization literature, the main purpose of the test is just to identify any unclear wordings for the questions on demographic variables and to estimate the time required to complete the questionnaire. The pilot test found no serious problems and only some measures were slightly refined based on the verbal feedback and comments of the pilot-test respondents, such as the scales on the number of working hours, the amount of earning from work and the amount of allowance from parents. No analysis of data was done on the pilot test except on the

gender.   The average time required to complete the questionnaire is approximately 8 minutes.

As mentioned in the sampling section, potential participants were recruited by snowballing sampling methods.   The researcher first approached the snowball recruiters who are the acquaintances of the researcher.   The researcher then explained the purpose of the survey to the snowball recruiters because they had to explain the same to the potential participants.   Snowball recruiters were reminded not to exert pressure on the potential participants when inviting them to participate the survey. They were provided with the Participant Information Statement for the Research Project (see **Appendix B**) to facilitate them in recruiting other potential participants through their personal network.

When the snowball recruiters first approached the potential participants, they would verbally extend an open invitation for them to participate in the survey.   If the potential participants showed interest in the survey, the snowball recruiters would provide them with the Participant Information Statement for the Research Project and explain to them the purpose of the survey and what they were required to do, i.e., the completion of a questionnaire.   The potential participants were reminded that their participation in the survey was entirely voluntary.   They were also informed that if they promised to participate and changed their mind later, there would be no obligation on their part to continue the survey and/or to complete the questionnaire.

Potential participants were advised the details of the briefing sessions by the snowball

recruiters through emails or personal contact or other means of communication. Multiple briefing sessions were arranged and conducted at an office premises and the snowball recruiters were notified about the address of the office premises and the time for each of the briefing sessions. They then passed the information for the briefing sessions to the potential participants. Brief information about the briefing sessions was also included in the Participant Information Statement.

Multiple briefing sessions were arranged for groups of potential respondents during which they were advised about the objectives of the study, the meaning of the questions in the questionnaire and their consent to participate. Permission to use the conference rooms was obtained from the management of the company before the conduction of the briefing sessions. This office was chosen as the place to conduct the briefing sessions and the survey due to its convenient location. It is located in Tsim Sha Tsui and can be reached by various types of transportation such as Mass Transit Railway and public buses. Tsim Sha Tsui is a famous commercial area and potential respondents can reach the premises without difficulties and risk.

Schedules for the briefing sessions were set up with the help of the office manager. Briefing sessions were conducted at the times that caused minimal disturbance to the operation of the business. Thus most of the briefing sessions were carried out on Saturday when potential respondents were free from school, though some were held during the lunch time and even during the office hours.

With the help of the receptionist of the company, potential respondents were free to choose any briefing session that they wished to attend at their convenient time. Each briefing session was lasted for about 40 minutes and was attended by an average of 20 respondents. Information statement for the research project attached to the hard copy questionnaire were distributed to the potential respondents through face-to-face interactions because this is the most direct and effective way for potential respondents to get hold of the questionnaires and any queries relating to the research survey was explained and clarified instantly by the researcher.

The researcher personally conducted the briefing sessions and administered all the questionnaires. By doing so, all the respondents were given a uniform introduction and any queries regarding both to the questionnaires and the survey itself were attended in a similar way. Before the start of the briefing session, each potential respondent was given a hard copy questionnaire with the attached information statement. The briefing sessions then started with a brief introduction based on the objectives of this study which was followed by an explanation for the purposes of each section in the questionnaire. Any queries were attended instantly by the researcher before completing the questionnaire. Of course, the most important of all was to obtain their consent to participate in this study and to inform the potential respondents that their participation is entirely voluntary.

After reading the information statement and the questionnaire, the potential respondents were allowed to leave at their free will if they decided not to participate in this study. Those respondents who were willing to participate were requested to complete the

questionnaire by themselves on a voluntary basis within 30 minutes. Respondents were then asked not to discuss the questionnaires with other respondents when the survey was conducting to prevent their answers from being influenced by others. To maintain anonymity, the completed questionnaires were then collected by a secure collection box located at the office premises for conducting the briefing sessions.

3.7 Conclusion

The research methodology and research methods were chosen to conduct this study after reviewing existing research in the area of consumer socialization and identifying the methodologies being currently employed in this area. This resulted in a positivist framework upon which the research design of this study was formulated.

After the process of elimination on the choice of research methods, a pen and paper questionnaire-based survey with self-administered approach was selected as the most appropriate method of data collection to gather the information required for answering the research questions in this study. The quantitative data collected from the questionnaires was then analyzed. In chapter four, an in-depth description of data analysis and findings is presented, followed by a discussion of the results and presentation of implications in chapter five.

CHAPTER FOUR

ANALYSIS AND RESULTS

4.1 Introduction

The methodology and the research design of this study have been discussed in Chapter three.   After the data have been obtained through the survey questionnaires, they have to be analyzed by using appropriate statistical techniques so that meaningful results can be obtained for further discussion.   This chapter presents the procedures undertaken before data analysis; the statistical methods chosen, the steps taken for the data analysis and the results from the analysis.   The general characteristics of the sample are also described.   But first, let us briefly recap the sampling techniques which are important for the collection of data from target respondents.

4.2 Revisit Sampling Techniques

The sampling method for recruiting the target respondents (young adults aged 18 to 24), as mentioned in chapter three, is snowball sampling method.   In fact, it is one of the major types of purposive sampling technique that aims at obtaining information from specific target group (Cacana, Delahaye and Sekaran 2001).   In practice, purposive sampling technique starts with a purpose in mind and the sample is thus selected from a typical group of objects.   For example, if we want to conduct a study on the behavioral and diet patterns of video game players in Hong Kong, we will first identify that the majority of people playing video games in Hong Kong are prosperous males between 15 and 30.   Then, we recruit and focus on people who fit these criteria for our study. Similarly, in this study, we apply the modal instance sampling technique in our survey as

many researchers have targeted at a group of young customers that are aged 18 to 24 in their studies (for example, Akturan, Tezcan and Vignolles 2010; Penman and McNeill 2008; Xu 2008). Thus, in this study, we investigate the particular attitude towards advertising, i.e., scepticism, of young adults aged 18 to 24. As the purposive sampling is a non-probability technique which is subject to bias and error, and given the time and resources constraints in this study, young adults are therefore recruited by referral using snowball sampling or modal instance sampling technique. In order to improve the validity and avoid personal bias associated with this sampling technique, we aim at a sample size that is 20 percent more than the minimum number of samples required (Heckathorn 2002).

4.3 Data Preprocessing

Before we start any analysis of data, we first have to go through the procedures for data preprocessing. After we collected the questionnaires, we had to extract the useful data from the questionnaires and get them ready for use. First, we checked and filtered all those incomplete questionnaires in order to save the time for entering unused questionnaire data. After identifying all the complete and valid questionnaires, they were then marked by numbers in sequence. By doing this, on one hand, it could easily tell the total number of valid questionnaires obtained and on the other hand, it could facilitate the checking of data input.

Then, it comes to the coding of data. It is a simple and easy job in this case because by the design of the questionnaire, all the questions were structured and numbers were already given for all the items or answers. It would be easy to input the data in

computer by just keying in the associated numbers (answers) for the questions directly.

So, the data were then inputted in computer as a spreadsheet by using the Excel software. If there is blank response to an interval-scaled item, the mid-point in the scale is taken as the response to that particular item. For other blank responses which are not to an interval-scaled item, we just took the mean value of all other responses to the particular item as the response for that blank response. Fortunately, there were not many blank responses found in the questionnaires. Particular attention has also been taken to responses to the negatively worded question which have to be reversed before data entry. There is only one question (Question 20) in the questionnaire which is negatively worded and responses to that question had been reversed before inputting in the data list.

Moreover, items for measuring a variable were grouped together and categorized so as to ensure that all items were included in the analysis. In fact, the categorization of items for different variables has been illustrated in Figure 3.1 in chapter three. After inputting all the data, the complete computer data record was double checked against the paper questionnaires to avoid any mistake or missing entry.

For this survey, a total of 218 questionnaires were distributed to the potential respondents and 215 questionnaires were returned. After screening and filtering for all unused questionnaires, data from a total of 203 valid respondents were collected and utilized for data analysis at the end. A copy of the final data spreadsheet showing the data from these 203 respondents is attached for reference as Appendix C.

4.4 General Characteristics of the Sample

4.4.1   Response rate

As mentioned in chapter three, the potential respondents are recruited by snowball sampling methods due to the difficulties in obtaining the personal information of the university students.   The snowball recruiters successfully recruited 223 potential respondents who were interested in the survey.   However, only 218 potential respondents finally attended the briefing sessions conducted in the office premises in Tsim Sha Tsui.   A hard copy questionnaire with the attached information statement was distributed to each of the potential respondents attending the briefing sessions and thus a total of 218 copies of the questionnaire were given out.   After all the briefing sessions, a total of 215 questionnaires were returned to and collected from the collection box located in the office premises.   After filtering and eliminating all the incomplete questionnaires, a total of 203 usable questionnaires were resulted, giving a response rate of 93% out of the total number of questionnaires distributed.   The high response rate may be due to the sampling method employed.   By the non-probability snowball sampling, the potential respondents are more willing to participate in the survey because of the relationship with the snowball recruiters.   Of course, measures had been taken to ensure that potential respondents were not under pressure to participate in the survey so that the information provided by them could really reflect their attitudes and perceptions. The high response rate is important for this survey as it can generate enough data for the analysis which is used for testing the hypotheses.

4.4.2 Demographics

Demographic information about the respondents can be found in Table 4.1. Gender representation was uneven, with 63.55% of the sample being female and the remaining 36.45% being male. This may be due to the fact that there are more females than males studying in universities. According to the report of the Hong Kong Census and Statistic Department (2011), during the year of 2010-2011, there were 30,516 (53%) females and 27,049 (47%) males studying in universities. Moreover, females may be more willing to offer help to their friends and classmates than males.

Regarding the age of the sample, most of them were between 19 to 21 years old, taking up 63.55% of the sample while less than 10% (9.36%) of the sample were between the age of 23 to 24. This is expected because following the education system in Hong Kong, most young adults should attend universities during the age of 19 to 21. As regard to the family structure of the respondents, most of them came from a family of four members (48.28%) (including the respondent) with one sibling (52.22%). Almost all of them were living with their parents (94%) and only 12 respondents did not live with parents.

Table 4.1   Demographic Characteristics of Respondents

Age	Frequency	%
18	33	16.26
19	49	24.14
20	45	22.17
21	35	17.24
22	22	10.84
23	9	4.43
24	10	4.93
Total:	**203**	**100**

Gender	Frequency	%
Male	74	36.45
Female	129	63.55
Total:	**203**	**100**

Living with parents	Frequency	%
With	191	94.09
Without	12	5.91
Total:	**203**	**100**

Family size	Frequency	%
2 person	10	4.93
3 person	48	23.65
4 person	98	48.28
5 person	32	15.76
6 or above	15	7.39
Total:	**203**	**100**

Siblings	Frequency	%
0	52	25.62
1	106	52.22
2	30	14.78
3	10	4.93
4	3	1.48
5 or above	2	0.99
Total:	**203**	**100**

4.4.3   General sample information

In addition to the general demographic information of the respondents, there are other items of interest which are shown in Table 4.2.   Most of the respondents had access to the Internet (94%) and more than half of them (58%) used the Internet services, either through email or facebook account, several times per day.   This supports the fact that the percentage of internet users in Hong Kong is high as mentioned in chapter two.

Around 22% of the respondents spent more than 25 hours a week on internet at home while 55% of them spent less than 5 hours a week on internet at university. These shows that internet has high penetration rate in household as respondents spent more time at home than at university for internet services.

With regard to the online purchase, more than 40% indicated that they did not make any purchase in the last six months and around 31% paid with credit card if they did make an online purchase. Most of them (83.25%) did not resell products online during the last six months. The information reflects that young adults may not be so devoted to online purchase, especially on reselling of products online.

Around 39% of the respondents did not commit themselves in any work, though some (18%) may have part time job of less than 10 hours. With regard to the allowance received, most of them (around 60%) received $1,000 to $2,000 allowance from their parents. On the average, they did not receive much income either from work or from parents' allowance.

As to the time on television viewing, around 44% watched less than five hours of television in a week while around 52% spent less than five hours in a week on using internet and watching television simultaneously. Thus, the respondents did not spend much time on television viewing and this may affect the effect of television on advertising scepticism among young adults.

Table 4.2   General Sample Information

Internet access	Frequency	%
With	191	94.09
Without	12	5.91
Total:	**203**	**100**

Checking e-mail account / facebook account / MSN account	Frequency	%
No email	4	1.97
1 time per month	7	3.45
1 time per week	19	9.36
1 time per day	55	27.09
Several times per day	118	58.13
Total:	**203**	**100**

The total hours spending on the Internet at home each week	Frequency	%
Not have Internet access at home	4	1.97
0-5 hours per week	35	17.24
6-10 hours per week	27	13.3
11-15 hours per week	37	18.23
16-20 hours per week	32	15.76
21-25 hours per week	23	11.33
More than 25 hours per week	45	22.17
Total:	**203**	**100**

The total hours spending on the Internet at university each week	Frequency	%
Not have Internet access at school	23	11.33
0-5 hours per week	112	55.17
6-10 hours per week	27	13.3
11-15 hours per week	20	9.85
16-20 hours per week	6	2.96
21-25 hours per week	8	3.94
More than 25 hours per week	7	3.45
Total:	**203**	**100**

The number of purchases made online in the last 6 months	Frequency	%
0 purchase	83	40.89
1 purchase	44	21.67
2 purchases	29	14.29
3 purchases	6	2.96
More than 3 purchases	41	20.2
Total:	**203**	**100**

The method of payment for the last purchase on the Internet	Frequency	%
Never make a purchase on the Internet	59	29.06
Paid with a credit card	63	31.03
Paid with the parents' credit card	29	14.29
Paid with a cheque	2	0.99
Paid with the parents' cheque	0	0
Other	50	24.63
Total:	**203**	**100**

The number of times for reselling products online in the last 6 months	Frequency	%
0	169	83.25
1	17	8.37
2	10	4.93
3	2	0.99
More than 3 times	5	2.46
Total:	**203**	**100**

Working time per month	Frequency	%
No work	80	39.41
Less than 10 hours	37	18.23
11-20 hours	31	15.27
21-30 hours	18	8.87
31-40 hours	10	4.93
More than 40 hours	27	13.3
Total:	**203**	**100**

Monthly earning (not include allowance)	Frequency	%
Not earn extra money	75	36.95
Less than $1000	29	14.29
$1001-1500	28	13.79
$1501-2000	15	7.39
$2001-2500	11	5.42
more than $2500	45	22.17
Total:	**203**	**100**

Allowance	Frequency	%
No allowance	58	28.57
Less than $1000 per month	61	30.05
$1001-2000 per month	62	30.54
$2001-3000 per month	15	7.39
$3001-4000 per month	3	1.48
More than $4000 per month	4	1.97
Total:	**203**	**100**

The total hours for watching TV in each week	Frequency	%
0- 5 hours per week	90	44.33
6-10 hours per week	53	26.11
11-15 hours per week	31	15.27
16-20 hours per week	14	6.9
More than 20 hours per week	15	7.4
Total:	**203**	**100**

The total hours spending on the Internet and simultaneously watching TV at home each week	Frequency	%
Not have Internet access at home	12	5.91
0-5 hours per week	107	52.71
6-10 hours per week	35	17.24
11-15 hours per week	16	7.88
16-20 hours per week	11	5.42
21-25 hours per week	4	1.97
More than 25 hours per week	18	8.87
Total:	**203**	**100**

4.5 Data Analysis

Basically, there are three objectives for data analysis: getting a feel for the data, testing the goodness of data, and testing the hypothesis developed for the research (Cacana, Delahaye and Sekaran 2001).   So the data analysis for this study will try to achieve these three objectives by employing different statistical techniques.   Before start doing the analysis, we have a brief description on the random variables first.

4.5.1   Random variables

In this survey, we divide the items in the questionnaire into 9 main categories: 'Parent Normative' (PaN), 'Parent Informative' (PaI), 'Peer Normative' (PeN), 'Peer Informative' (PeI), 'Media Normative' (MN) and 'Media Informative' (MI) as independent variables.   'Influence of television' (AT) and 'Influence of Internet usage' (AI)' are also included in this study.   The dependent variable is 'Scepticism to advertising' (S).

We assume all these are random variables whose values depend on the outcome from an experiment.   More formally, X is a real-valued function of outcomes.   Random variables are generally classified into two different kinds: discrete random variable and

continuous random variable. In our case, they are discrete random variables as the possible outcomes can be listed out and there are only a finite number of possible values.

In this survey, the respondents are asked to select one answer: strongly disagree; disagree; neither agree nor disagree; agree; or strongly agree; as their choice representing their perceptions for each of the statements relating to different variables, and the scores are listed as follows:

Indicated choice	score
strongly disagree	0
disagree	1
neither agree nor disagree	2
agree	3
strongly agree	4

For each of the random variables, for example PaN, we compute the outcome as the sum of the score for each completed survey questionnaire corresponding to the constructed questions. We use a five-point Likert scale in this study to indicate their preference. Some other research studies use a seven point Likert scale which may provide a wider range. In fact, this sum is the total value that represents the collective behavior of the respondents towards the prescribed variables. The possible range and the actual range (as obtained from the data obtained from questionnaire) for each of the variables are listed in Table 4.3

Table 4.3   Possible Range and Actual Range for Variables

Variable	Possible Range	Actual Range
Parent Normative(PaN)	0 - 20	0 - 15
Parent Informative(PaI)	0 - 12	0 - 11
Peer Normative(PeN)	0 - 12	0 - 11
Peer Informative(PeI)	0 - 16	0 - 15
Media Normative(MN)	0 - 12	0 - 10
Media Informative(MI)	0 - 8	0 - 7
Influence of Television(AT)	0 - 4	0 - 4
Influence of Internet(AI)	0 -12	0 - 12
Scepticism to advertising (S)	0 - 44	4 - 33

After obtaining the scores for every random variable in each survey questionnaire, we can then calculate the mean and the variance for each random variable.   However, these values are just sample means and sample variances only and should not be treated as the population means and population variances.

Besides the above random variables, we have three more variables to examine.   We try to explore whether there is any significant difference on male and female young adults on scepticism to advertising.   Moreover, we are interested to find out whether age of the young adults has any effect on advertising scepticism.   The effect of income on their sceptical attitude to advertising is also the interest of this study.

Furthermore, variables on the effects of television and internet, and simultaneous use of television and internet are also hypothesized to have impact on advertising scepticism. We shall use statistical techniques to test the hypotheses developed in chapter two in relation to all these variables.

In this study, we employ various statistical techniques such as correlation, analysis of

variance (ANOVA) and stepwise regression for the analysis of the data.   The details of these statistical techniques, which are based on Hair Jr. et al. (2010) and the lecture notes of Dr. L. K. Li from the Applied Mathematics Department of the Hong Kong Polytechnic University in Hong Kong, will be discussed in the following sections.

4.5.2   Preliminary calculations

We can acquire a feel for the data by checking the central tendency and the dispersion. Data information such as the mean, the range and the standard deviation serve this purpose by showing how good the items and measures are and how the respondents have answered the questionnaire (Cacana, Delahaye and Sekaran 2001).

4.5.2.1   Mean and variance

First of all, we compute the mean and variance for each of the independent variables mentioned above.   For illustration, we take PaN as our example and suppose having *n* completed survey questionnaire received from the respondents.   First, these observed random variables $X_1, X_2, ..., X_n$ are independent and have the same distribution, so they are independently and identically distributed (i.i.d.).   With the random sample of size *n*, the sample mean is the average of the values of $X_1, X_2, ..., X_n$.   We define its sample mean as μ, so,

$$\mu = (X_1 + X_2 + ... + X_n) / n$$

and the formula for the sample variance is

$$\sigma^2 = \Sigma^n_{i=1} (X_i - \mu)^2 / (n-1)$$

with σ being the sample standard deviation.

As pointed out by Weiss (2011), the sample mean, μ, and the sample standard deviation,

б, are different from the true population mean and standard deviation. Generally speaking, population mean and standard deviation are unknown parameters (constants) associated with a population, while sample mean and sample standard deviation can be obtained from the survey data but may vary with samples. In general, μ is 'close' to the population mean with large random samples. Hence, μ is a proper estimate of the population mean. Similarly, б is a good estimate of the population standard deviation.

4.5.2.2 Dispersion

According to Hair et al. (2010), the sample distribution of μ has a t-distribution. The degree of freedom is (n-1), where n is the number of valid completed questionnaire in our case. When n is large, μ is close to population mean with high probability and gives an accurate estimate of population mean.

For a general population (non-normal), let $X_1, X_2, ..., X_n$ be a random sample from the population with a common mean μ and sample deviation б, the well known theory, **Central Limit Theorem**, provides that **μ** holds approximately to the population mean for large **n** in general populations. Moreover, μ is an unbiased and a consistent estimator of the population mean and the approximation is usually good for n > 30 (Hair et al. 2010; Mendenhall 2008). As t-distribution table only applicable to the listed degree of freedom with maximum sample size of n = 120, for sample size more than 120, the distribution is assumed to be normal. In this study, we aim at collecting more than 200 valid completed responds, so as to make n > 200 in our case. Hence, we work on the corresponding computations by Normal distribution if t-distribution values are not available.

4.5.2.3 Confidence interval

After we get some point estimates that do not tell the precision of the estimates, in order to get some ideas on how precise that an estimate is, we need to use the concept of **confidence interval** (CI), which will lead to the so-called 'interval estimation'. For a more precise definition, let L and U be two statistics from a random sample. If

$$P(L < \mu < U) = 1 - \alpha,$$

where α is a small value.

Usually, α is often taken as 0.05, 0.01 or 0.10, then the interval (L, U), or its observation (L, U), is called a $100(1 - \alpha)\%$ confidence interval of μ. Conceptually, suppose we 'observe' (L, U) many times, each time the observed interval (l, u) is different from time to time. Then about 95% of times (l, u) will cover μ. In this survey, as n is larger than 120, we use normal distribution and assume the sample deviation is the population standard deviation.

For example, let (L, U) be a 95% confidence interval for variable X and suppose that $X_1, X_2, ..., X_n$ is a random sample from a $N(\mu, \sigma^2)$ distribution, where σ is known and μ is obtained from computation, then

$$L = \mu - 1.96 * \sigma$$
$$U = \mu + 1.96 * \sigma$$

So the correct interpretation for the confidence interval (L, U) is that it is produced by a procedure which in 95% of times will produce intervals covering μ (Weiss 2011).

We compute the mean, sample standard deviation, the lower limit and upper limit of the range of the data for the dependent variable, scepticism to advertising, and for each of the independent variables. The results of the computation are shown in Table 4.4. By

employing these concepts on means, standard deviation and confidence interval, we can obtain a feel for the data.

As we have 203 sets of valid data, we assume the distributions are normal. In the last two rows of Table 4.4, we compute the lower and upper bound of data. The choice of 3 standard deviations from the mean is a usual practice in sample quality control. Data less than the lower bound or greater than the upper bound are considered to be outliers. From Table 5.2, we find that there exist some outliers for variables like 'Peer Informative' and 'Influence of Internet' as the minimum score is zero, but the lower bound is 0.265 and 0.88 respectively. Similarly, there exists outlier for the variable 'Media Normative' as the maximum score is 10 but the upper bound is 9.624. Yet, we can still consider the data are within ranges because we only take integers in the score. As suggested by Triola (2009), if we round up the upper bounds and round down the lower bounds to the nearest integer, then all data are included in the lower and upper bounds for each dependent and independent variables.

Table 4.4   Results on the Means, Standard Deviation and Ranges of the Variables

	Scepticism to advertising	Parent Normative	Parent Informative	Peer Normative	Peer Informative	Media Normative	Media Informative	Television	Internet
Mean	18.98	7.512	4.606	5.399	8.872	3.966	3.167	1.778	7.187
standard deviation	5.291	3.45	2.38	2.506	2.869	1.886	1.539	0.92	2.102
minimum score	4	0	0	0	0	0	0	0	0
maximum score	33	15	11	11	15	10	7	4	12
L	8.611	-2.84	-2.53	-2.12	0.265	-1.69	-1.45	-0.98	0.88
U	29.35	17.86	11.75	12.92	17.48	9.624	7.784	4.539	13.49
Mean -3 σ	3.109	-2.84	-2.53	-2.12	0.265	-1.69	-1.45	-0.98	0.88
Mean +3σ	34.85	17.86	11.75	12.92	17.48	9.624	7.784	4.539	13.49

4.5.2.4   Cronbach's alpha

Besides getting a feel for the data, the reliability of measures used in the survey is also important because it tells the goodness of data for the analysis.   Cronbach's alpha is a reliability coefficient that shows how well the items for a variable are positively correlated to one another (Cacana, Delahaye and Sekaran 2001).

For an independent variable with **m** items, suppose we have obtained all the correlation coefficients between all the m items, then we can compute the mean of all inter-correlations. The Cronbach's alpha for that independent variable can then be calculated according to the following formula   (Cacana, Delahaye and Sekaran 2001):

C_α = (m*mean of all inter-correlations) /   [1 + (m-1)* mean of all inter-correlations]

Table 4.5   Cronbach's Alpha for Variables

	Scepticism to advertising	Parent Normative	Parent Informative	Peer Normative	Peer Informative	Media Normative	Internet
No. of Items	11	5	3	3	4	3	3
Cronbach's alpha	0.817	**0.568**	0.688	0.829	0.794	**0.552**	0.706

Cronbach's alpha coefficient holds a value from zero to 1.   Generally, an alpha coefficient of 0.6 or higher is accepted, though higher than 0.8 is preferable (Cacana, Delahaye and Sekaran 2001).

From Table 4.5, it shows that measures for 'Parent Normative' and 'Media Normative' are not so reliable with coefficient alphas of 0.568 and 0.552 respectively.   The measures for all other variables are reliable as the Cronbach's alpha are greater than 0.6.

4.5.3 Testing of hypothesis

In this study, we investigate the relative role of environmental factors (social structural variables and socialization-agent influences) as predictive variables of scepticism to advertising among young adults. All these variables have been hypothesized to have relationship with the dependent variable, scepticism to advertising. Thus, when the data are ready for analysis, we can test the hypotheses on their relationship developed in chapter two.

In fact, hypothesis testing is a process of making a decision between two competing assertions: the null hypothesis denoted by H_0, and the alternative hypothesis denoted by H_a or H_1. If we reject H_0 after the analysis, it means that there is strong evidence in support of H_1 and so H_1 can be claimed with confidence. However, on the other hand, if we accept H_0 after the analysis, it does not imply strong evidence supporting H_0. It only says that 'H_0 has not been found seriously wrong'. It is not clear whether it is true. Thus, in such case, we cannot claim H_0 to be true with confidence.

When choosing hypotheses, the following criteria are always recommended (Mendenhall 2008):

(i) If we are seeking evidence in support of an assertion, that assertion should be chosen as H_1 while its negation (opposite assertion) is the H_0.

(ii) If we wish to see whether there is strong evidence against an assertion, that assertion should be chosen as H_0.

Besides the socialization influence variables from parents, peers and media, we are also interested in the effects of social structural variables. In this study, we only limit ourselves to test three social structural variables: gender, age and income. We aim at comparing data from the different groups of samples, for example, different age groups, females and males, and samples having income and receiving family allowances. In this study, we focus on independent samples as we separate the collected independent data into different groups.

4.5.3.1 Analysis of social structural variables

**Analysis on Gender**

First, we shall examine whether there is any significant difference between male and female young adults on scepticism to advertising and we set up the hypothesis as follows:

H_0: There is no difference between male and female young adults on skepticism to advertising,

i.e. mean of male young adult, μ_m, = mean of female young adult, μ_f.

H_1: There is significant difference between male and female young adults on scepticism to advertising, or mathematically,

$$\mu_m \neq \mu_f.$$

We make the decision based on the collected data from the questionnaires. If there is strong evidence in the data against H_0, then H_0 is rejected and H_1 is concluded as true. Otherwise, if the evidence against H_0 is insufficient (not strong enough), then H_0 is

accepted.   Hence, a 95% two tail test is used.   As mentioned before, we shall try our best to stick to t-distribution test.   Thus, there is only 5% chance to observe $t > t_{n-1,0.05}$ if H_0 is true.   Consequently, if $t > t_{n-1,0.05}$ is observed, then H_0 is unlikely to be true. Thus the decision rule in testing $H_0 : \mu_m = \mu_f$ against $H_1 : \mu_m \neq \mu_f$ is:

Reject H_0 if $t > t_{n-1, \alpha/2}$ (Rejection rule);

Accept H_0 if $t < t_{n-1, \alpha/2}$.

The value of α is called the level of significance.   The region $\{t > t_{n-1, \alpha}\}$ is called the critical region of the test.   A test is determined by its rejection rule or by its critical region.

In this case, we sorted the data into two groups, female and male. We count the number of young adults in each group and compute the means and standard deviations for female and male as listed in Table 4.6.

Table 4.6   Mean and Standard Deviation on Gender

	Female	**Male**
Number of samples	129	74
Mean	19.186047	18.621622
standard deviation	5.2689649	5.344829

Statistically, in order to carry out the testing of hypothesis, we assume that all the data come from same population, so that they have the same variance.   A glance of the means seem that the females is more skeptic towards advertising as their mean score is larger in value.   So we test whether they have the same mean by the difference of their mean.   If their mean is zero, then the null hypothesis is, $\mu_m - \mu_f = 0$.   We then combine the data together and find the new variance with less degree of freedom.

Since we test whether the difference is close enough to zero, this means that it is a two tailed independent test. The new variance is called the pooled variance, V, as defined in Tabachnick (2006), where

$$V = [(n_f - 1) * \eth_f^2 + (n_m - 1) * \eth_m^2] / (n_f + n_m - 2)$$

and the calculated t-value is

$$(\mu_m - \mu_f) / \sqrt{(V*(1/n_f + 1/n_m))}$$

After computation, we find that the two values are 5.2966432 and -0.7307488 respectively. For the two tail test with critical value $\alpha = 0.05$, the t-table value is 1.96. Thus, we accept the null hypothesis as the absolute value of the calculated t-value is 0.7307488 which is less than the table value. If we choose $\alpha = 0.01$ in the beginning, the t-table value is 2.576, the null hypothesis is also accepted. The results show that gender does not have significant impact on the development of scepticism to advertising among young adults. There is no difference between male and female scepticism to advertising. Thus Hypothesis 2 is not supported

Analysis on age groups

In this study, we focus on impact of consumer socialization on the development of scepticism to advertising among young adults aged 18 to 24. Thus we have only a compact age group from 18 to 24. However, we still work on the data to see whether there is any significant difference between different ages. The process is just a bookwork-based calculation (Middleton 2000).

Same as the previous calculations and testing procedures, we have to make following assumptions before we conduct the testing:

(i)   The sample in each age group is independent to each other;

(ii)   The population under consideration is normally distributed, i.e. each cell should have at least 10 data (Weiss 2011);

(iii)   The standard deviations of the populations under consideration are equal.

Then we can test whether each group is normal with the same variance. As required, we have to compute the means and variances of the scepticism to advertising score for each age group as the observed frequencies. We first divide the set of data into seven groups and each group represents a particular age of the respondents. Since we want to find out whether there is any difference in means between different age groups, the hypothesis of testing will set up as follows:

H_0: There is no difference between arbitrary age groups on scepticism to advertising, i.e., $\mu_i = \mu_j$, for all i and j.

H_1 :   Not all the means of the age groups are equal.

The basic steps of testing are:

(i)   Compute the averages for each group

(ii) Reject the null hypothesis H_0 if the variation among the sample means is large relative to the variation within the samples, otherwise, do not reject H_0.

In order to achieve this, we use the one-way analysis of variance (**ANOVA**) test.   Thus, we measure the variations among the sample means by a weighted average of their squared deviations about the mean of all the sample data.   The one-way ANOVA table is shown in Table 4.7.

Table 4.7   One-way ANOVA Table for Analysis on Age

Source	Degree of freedom (df)	Sum of Squares (SS)	MS = SS/ df	F-statistics
Treatment	7-1 = 6	SSRT	MSRT = SSRT / (7-1)	F = MSTR/ MSE
Error	n - 7	SSE	MSE = SSE / (n-7)	
Total	n - 1			

The details of analysis are described as follows and illustrated to test if there is a significant difference in scepticism to advertising in various age groups.

Let $n_1,…,n_7$ represents the data for the corresponding age group and $\mu_{1,……}\ \mu_7$ represent the means of the corresponding age groups.   After we sorted the 203 sets of data according to their ages, we then compute the means, sample standard deviations for each group. The preliminary results are listed in the Table 4.8.

Table 4.8   **Mean and Standard Deviation on the Age Groups**

Age	18	19	20	21	22	23	24
Number of samples	33	49	45	35	22	9	10
Mean μ_i	19.0303	18.69388	18.8	18.6	20.22727	20.55556	18.2
standard deviation	6.292281	4.124137	5.707252	6.27413	4.513808	3.972125	4.366539

Then, we compute the quantity treatment sum of squares SSTR according to the following formula (Mendenhall 2008):

$$SSTR = n_1(\mu_1 - \mu)^2 + n_2(\mu_2 - \mu)^2 + \ldots.+ n_7(\mu_7 - \mu)^2$$

where $\mu = 18.9803$ is the sample mean of all data.

From the formula, we find that $SSTR = 73.2575$.

Then, we compute the treatment mean square MSTR, for

$$MSTR = SSTR/(7\text{-}1) = SSTR/\ 6$$

Since we have 7 age groups, the numerical result of **MSTR** is 12.2096. As we have already found the standard deviations for each group, we then compute the error sum of squares SSE, i.e.

$$SSE = (n_1 - 1\ )\ \eth_1{}^2 + (n_2 - 1\ )\ \eth_2{}^2 + \ldots.+ (n_7 - 1\ )\ \eth_7{}^2$$

where $\eth_1{}^2$ is the sample variance for group one data (age 18) and similar for the rest of the age group and we found that $SSE = 5580.66$.

Then, we compute error mean square MSE in our case by the following formula:

$$MSE = SSE\ /\ (n\text{-}7) = 28.4728$$

Finally, in order to compare the variation among the sample mean of the 7 age groups, MSTR, to the variation within the samples, MSDE, we accomplish the **F-value** in the following formula which forms the F-statistics:

$$F = MSTR/ MSE$$

We can then find the calculated F-values from the data and compare with the F-table value with degree of freedom (7-1, n-7) = (6, 203-7) = (6,196). But if the degree of freedom is greater than 120, it is assumed to be the same value as infinity, i.e., the F values becomes F(6,196) = F(6,infinity) in the F-tables.

After computation, the calculated F-value is 0.42882 in our group which is independent of the predetermined level of significance, α, we chose. It is because if we take α = 0.01, then F(6,infinity) = 2.8; and if we take α = 0.05, then F(6,infinity) = 2.1. In either case, we accept the null hypothesis that there is no difference between different age groups because the calculated F-value = 0.42882 ,< F_α (6,infinity).

The results suggest that age, being one of the social structural variables under study, has no relationship with the development of advertising scepticism among young adults. Thus H1 is not supported.

Analysis on income

Besides age, it is also interesting to investigate whether the young adults have significant difference on advertising scepticism if the money they spend comes from parents' allowance or from wages of their own work.   Since their answers to questions 53 and 54 of the questionnaire are discrete integers from 0 to 5, we convert the answers to amount of money as the stated in the questions.   We take the mean of the income range for each answer as the amount of money they received either from work or from parents.   With regard to the last option 5 of both questions, which state "more than $4000" for question 53 and "more than $2500" for question 54, we take them as $5000 and $3000 respectively if the respondents choose this option.   The conversion table for the options is listed in Table 4.9.

Table 4.9   Conversion Table for Wage and Allowance

	Q.53			Q.54	
Option	Wage ($)		Option	Allowance($)	
0	0		0	0	
1	500		1	500	
2	1500		2	1250	
3	2500		3	1750	
4	3500		4	2250	
5	5000		5	3000	

The revised hypothesis therefore combines the H3 and H4 in chapter two with slight modifications.   For simplicity, let μ_i represents the mean of the young adult group who has employment and received wages while μ_a represents the mean of the young adult group who receives allowance from their parents.   Then, the hypothesis for testing is defined as:

H_0 : There is no difference in means between young adults with income or

allowance on scepticism to advertising, i.e. the mean of young adults

receiving wages, μ_i = mean of young adults receiving allowance, μ_a.

H_1 : There is significant difference in means between young adults with wages or

allowance on scepticism to advertising, or mathematically,

$$\mu_i \neq \mu_a.$$

We shall test whether these groups of young adults (receiving wage from employment and receiving allowance from parents) have any significant difference to the development of scepticism to advertising. After conversion, there are 15 young adults that neither have income nor allowance. Before we work on testing of hypothesis, we introduce a new number for the data, allowance ratio, that is:

amount of allowance / (allowance + wage).

Then, we can divide the young adults into 5 groups according to the allowance ratio.

Table 4.10   Mean and Standard Deviation on Income

Allowance Ratio	Number of respondents	mean	Standard deviation
1	60	18.23333	5.110198
average > 0.5	29	19.24138	6.599
less than 0.5	56	19.23214	4.928548
0	43	19.2093	4.575078
No Income	15	19.86667	6.68545
	Overall mean	18.9803	

Again, this is an independent sample test. We shall compute their individual group deviations. In this study, we consider two cases. First, we exclude the group with no income, i.e., the group of no allowance or wage. Base on the computation method

above, we construct the table with m = 4 groups according to the allowance ratio and n = 188 young adults.

Table 4.11   Mean and Standard Deviation on Income (excluding no-income group)

Allowance Ratio	Number of respondents	mean	Standard deviation
average 1	60	18.23333	5.110198
average > 0.5	29	19.24138	6.599
less than 0.5	56	19.23214	4.928548
0	43	19.2093	4.575078
	Overall mean	**18.90957**	

The overall mean after computation is 18.90957 (Table 4.11).   The rest of the steps of analysis are just routine works by adopting the same calculation for the analysis of age. The computed results for the F-statistic value are as follows:

Table 4.12   F-Statistic Value for Income (excluding no-income group)

SSTR =	41.26094
MSTR =	13.75365
SSE =	4975.142
MSE =	27.03882
F = MSTR/ MSE =	0.508663

As in the previous discussion, for n > 121, we take it as infinity in the F-table.   For α = 0.01, the table value F(3,187) = F(3,infinity) = 3.78.   If we take α = 0.05, the one tail test has critical value 3.12.   In the case, we shall accept the null hypothesis that there is no difference on scepticism to advertising with regard to the two groups of young adults.

On the other hand, if we include the group of young adult with no allowance nor wage, then m = 5 and n = 203. We repeat the whole process of computation for the F-Statistic value as above and the results are as follows:

Table 4.13   F-Statistic Value for Income Variable

SSTR =	53.04575
MSTR =	13.26144
SSE =	5600.875
MSE =	28.28725
F = MSTR/ MSE =	0.468813

As before, we find the table value F(4,202)   = F(4,infinity)   = 3.32   if we take α = 0.01.   The results clearly show that we should accept the null hypothesis.   It means that there is no difference in the means between young adults with wage or allowance on scepticism to advertising.   So income, as one of the social structural variables under this study, has no significant impact on the development of advertising scepticism among young adults.

Finally, we test whether there is any significant difference for young adults who have allowance only and those who receive their own wages only.   That is to say, we compare the group with zero allowance ratio and the group with allowance ratio being 1. As the basic information has been computed and listed in Table 4.10, we just carry out the computation.   In this situation, we have a two tail t-test on 60 + 43 =103 samples instead of F-distribution test.   From above table, the difference in the means for these two groups is:

$$18.23333 - 19.2093 = -0.97597$$

The pooled variance is therefore calculated as follows:

$$[(60 - 1)*(5.110198)^2 + (43-1)*(4.575078)^2] / (60 + 43 -2) = 23.95891$$

The calculated t-value is -0.99792 and looks significant. If we take $\alpha = 0.01$, we can estimate t-value as 2.617 as the t-table has very limited list for the degree of freedom if it is larger than 30. The t-value 2.617 comes from degree of freedom 120 instead of 101 (103-2) as we required. Nevertheless, for degree of freedom equals to 60, the table value is 2.660. Hence, we believe that the true t-value is around 2.6 and far from the absolute calculated t-value 0.99792. Hence, we still accept the null hypothesis in this case. In order to estimate t-value and compare with the t-table value or the Normal distribution value if the degree of freedom exceed 120, statisticians use the well known approximation formula, if $\alpha = 0.01$, and they take

$$t_n (\alpha) = Z(\alpha)*\sqrt{(n/(n-2))}.$$

From the results of the above analysis, it is found that income, whether it is from employment or from allowance, has no statistically significant relationship to the development of scepticism to advertising. Thus Hypotheses 3 and 4 are not supported.

So we cannot discover any relationship between all the social structural variables under study with the outcome variable, advertising scepticism. Thus, we may need to investigate whether the socialization agent influence can account for the advertising scepticism among young adults.

4.5.3.2   Analysis of socialization agent influence

The rest of the hypotheses relate to the socialization agent influence, which aim at finding out whether the eight independent variables have positive or negative influence on the dependent variable sceptical attitude towards advertising. Yet, this is not done by simply dividing the data set into different groups as for the social structural variables and carrying out the testing of hypothesis. Nevertheless, we can still compute the correlation between each of the independent variables and the dependent variable and to find out whether there is any relationship between the dependent variables and independent variables. It is clear that if the correlation coefficient is positive, then the independent variable has positive effect on the dependent variable, i.e., sceptical attitude towards advertising in our case. Conversely, the independent variable has negative impact on sceptical attitude towards advertising if the correlation coefficient is negative. We can simply use Excel to handle the data (Triola 2009) and get all the inter-correlations between the dependent and the independent variables and the results are listed in the Table 4.14.

Table 4.14   Correlation among all the Dependent and Independent Variables

	Scepticism to advertising	Parent Normative	Parent Informative	Peer Normative	Peer Informative	Media Normative	Media Informative	Television	Internet
Scepticism to advertising	1	0.11	0.045	0.201	0.229	0.667	0.505	0.271	0.364
Parent Normative	0.11	1	0.629	0.223	0.085	0.07	-0.01	0.186	-0.1
Parent Informative	0.045	0.629	1	0.277	0.131	0.049	*0*	0.136	-0.02
Peer Normative	0.201	0.223	0.277	1	0.594	0.126	0.156	0.112	-0.05
Peer Informative	0.229	0.085	0.131	0.594	1	0.173	0.181	0.152	0.075
Media Normative	0.667	0.07	0.049	0.126	0.173	1	0.572	0.17	0.282
Media Informative	0.505	-0.01	0	0.156	0.181	0.572	1	0.124	0.364
Television	0.271	0.186	0.136	0.112	0.152	0.17	0.124	1	0.175
Internet	0.364	-0.1	-0.02	-0.05	0.075	0.282	0.364	0.175	1

The correlations are between zero and one.   If it is one, it is completely in ratio or the same. If it is zero, that means there is no linear relation between the variables, so that no relation or other form of relation, say, may be quadratic relation.   Other forms of relations are beyond the scope and are too difficult for our present study.   Since all the correlation between the independent variables 'Parent Informative' and 'Media Informative' is 0.0005, we practically take it as zero.   The table is symmetric between the diagonal because the correlation is the product sum that is unchanged if we interchange the role of the variables and is a good information for checking because if we compute it wrong, they will be different.   Furthermore, the diagonal is 1 because the correlation of a variable to itself is always 1.   Moreover, a simple rule is to say that the two variables are related if their join correlation is greater than 0.15.   It is significantly related if the correlation is larger than 0.8. We can then use these criteria to determine whether the hypotheses relating to the socialization agent influence should be accepted or not.

From the results shown in Table 4.14, it is found that parental influence (both normative and informative) on the formation of sceptical attitude towards advertising among young adults is found to be insignificant with the correlation coefficients 0.11 and 0.04 respectively.   Thus, Hypotheses 5(a) and 5(b) are not supported.

In terms of peer influence, even though normative peer influence has a correlation coefficient 0.201 which is significant, it is a positive correlation meaning that Hypothesis 6(a) is not supported.   That mean normative peer influence is related to the formation of sceptical attitude towards advertising in young adults positively instead of

negatively. For peer informative influence, we find that there is a significant positive relationship with the development of advertising scepticism, with correlation coefficient of 0.229. Thus, Hypotheses 6(b) is supported. We find the same results for media influence. For normative media influence, as there is a significant positive relationship with advertising scepticism, Hypothesis 7(a) is not support even though the correlation coefficient is 0.667. As for informative media influence, it is found that there is significant positive relationship with advertising scepticism, having correlation coefficient of 0.505. Thus Hypothesis 7(b) is supported.

To test whether television has any influence on the advertising skepticism, we employ the same analysis for the variables of income. The effect of television is captured by the number of hours spent on watching television. First, we divide the respondents into 5 groups, each corresponding to the options for the answers on number of hours spent on watching television each week. We carry out a testing of hypothesis to see whether there is any positive relationship between the total number of hours spent on television and the level of skepticism to advertising (S).

Table 4.15   Mean and Standard Deviation on Television Usage

Options	Number of respondents	Mean value of S	Sample Deviation
0	90	17.8667	5.24715
1	53	19.9057	5.70851
2	31	20.6774	4.55622
3	14	18.5	5.33133
4	15	19.3333	4.35343

We then use the results for computing the F-value.

Table 4.16   F-Statistics for Television Usage

SSTR =	251.39
MSTR =	62.846
SSE =	5402.5
MSE =	27.286
F = MSTR/ MSE =	2.30328

But the table value $F(4,198) = F(4, \text{infinity}) = 3.32$ for significant level $\alpha = 0.01$.   Thus, we have to accept the null hypothesis H_0 that there is no significant difference between the total number of hours spent on television and the level of scepticism to advertising.

While media influence has significant impact on advertising skepticism, television itself, on the other hand, does not have significant relationship with advertising skepticism. However, besides capturing the television usage information, respondents were asked to respond to their perception towards television and result as shown in Table 4.14 is significant with correlation of 0.271.   So Hypothesis 8 is partially supported if taken into account the perception towards television in the analysis.

Same as the effect of television, by conducting the analysis on F-statistics, the effect of internet was found to have no significant impact on advertising skepticism if just relied on the analysis of internet usage which is also captured by the number of hours respondents used internet at home and at university.   However, if taken into account the results about their perception towards internet, the effect of internet is shown to be significant, with correlation of 0.364.   Thus, Hypothesis 9 is partially supported if taken into account the perception towards internet.

For simultaneous television and internet use, it is also captured by the number of hours spent on watching television on computer and used the internet simultaneously. After the analysis, it is also found that there is no significant relationship with advertising scepticism. Thus Hypothesis 10 is not supported.

4.5.4   Stepwise estimation and linear regressions

After the correlation analysis and in order to better justify the relationship between the dependant variables and independent variables, we perform a regression analysis. Regression analysis is perhaps the most popular data analysis technique for measuring linear relationships between two or more variables (Hair, F. Jr. 2003). While bivariate regression analysis is used to examine the relationship between one independent variable and one dependent variable, multiple regression analysis is employed to include several independent variables in the regression equation for the predicting or explaining the value of a single dependent variable (Hair, F. Jr. 2003). Since our study involves more than one independent variables, multiple regression is more appropriate for the analysis of data in this study.

Stepwise regression is also a kind of multiple regression which serve the same purpose. However, instead of placing all the independent variables simultaneously in the regression to predict the single dependent variable, stepwise regression is a 'sequential approach in which the regression equation is estimated with a set of independent variables that are selectively added or deleted from the model' (Hair, Jr. et al. 2003, p.306).

To develop a regression model, we have to compute the correlation between each independent variable and the dependent variable, i.e., scepticism(S). If the correlation coefficient is positive between the socialization agent variable and the advertising scepticism, that particular variable will have positive effect on the dependent variable and vice versa. The correlation coefficients are directly proportional to the coefficient obtained in the multivariate regression model. So we first develop a simple regression model for each of the independent variable to the dependent variable and evaluate the sum of residuals, which is the sum of errors. The simple regression is expressed as follows:

$$S = mX + b,$$

where S is the dependent variable and X is the independent variable.

Table 4.17   Simple Regression Model for the Independent Variables

	Parent Normative	Parent Informative	Peer Normative	Peer Informative	Media Normative	Media Informative	Television	Internet
m	0.1689	0.09911	0.42453	0.42251	1.87109	1.7346	1.55599	0.91473
b	17.7118	18.5238	16.6882	15.2319	11.5605	13.486	16.2132	12.406
Residual square	23011.00	9967.75	5425.27	5357.12	**3137.56**	4214.77	5239.85	4906.82

The residual is the difference between the true value for scepticism to advertising and the model prediction value. The last row of Table 4.17 shows the sum of all residual squares base on the linear regression model with respect to each independent variable. It is clear that if only one independent variable is used to develop the regression model, then the one with largest correlation coefficient, i.e., 'Media Normative', is the best

variable to use in the sense that the sum of residual squares is the least. Mathematically speaking, if we use more independent variables, we shall reduce the error, i.e., the sum of residual squares. By using the software Matlab, if we include all the independent variables, we shall get the multivariate regression model with sum of residual squares 2673.83. That means we cannot get better result than this if we use the data on hand in developing the linear relation between the dependent variable and the corresponding independent variables. The coefficients of the models are given in Table 4.18:

Table 4.18   Coefficients of the Models for the Independent Variables

	Parent Normative	Parent Informative	Peer Normative	Peer Informative	Media Normative	Media Informative	Television	Internet
a_i	0.15354	-0.19254	0.194897	0.068278	1.43948	0.398870	0.675497	0.416361

Where Scepticism to Advertising (S)

$$S = a_0 + a_1 X_1 + a_2 X_2 + \ldots + a_8 X_8$$

and $a_0 = 5.8902536$. Moreover, the independent variables are not independent to each other, or else their correlation coefficient will be zero. From the correlation table in Table 4.14, we find that the variables 'Media Informative' and 'Parent Informative' are independent while the variables 'Parent Informative' and 'Parent Normative' are highly correlated with coefficient 0.629. In order to reduce the complexity of the model and eliminate the redundant variables used, a backward reduction of variable scheme can be conducted by the following steps:

(i)   Compute the correlation table for all the dependent and independent variables.

(ii) Set up the multivariable regression model for all variables and find the sum of

residual squares.

(iii) Eliminate the independent variable that has least correlation with the dependent variable.

(iv) Find the new sum of residual squares and if this sum of residual squares is not increased by 10% or some prescribed ratio, then repeat process (iii) till it is violated.

On the other hand, stepwise regression is a systematic way for adding or removing independent variables from an underlining multivariate regression model. Stepwise regression starts with an initial model and then compares the explanatory power of incrementally larger and smaller models. In each step, we compute the p value of an F-statistic and test models with and without that variable.

If a variable is not currently in the model, the null hypothesis is that the variable would have a zero coefficient if it is added to the model. Practically, we use the independent variable with largest correlation with the dependent variable. That is why computing the whole correlation coefficient table is important in all sense. Now, if there is sufficient evidence to reject the null hypothesis, the variable is added to the model. In fact, adding such variable is solely based on their statistical significance in a regression.

Conversely, if a variable is in the model, the null hypothesis is that the variable has a zero coefficient. If there is insufficient evidence to reject the null hypothesis, then this variable will be removed from the regression model. The detail procedures are listed as below:

(i) Set up the initial regression model with the largest correlation coefficient with the dependent variable.

(ii) If any variable not in the model have p-values less than an entrance tolerance (that is, if it is unlikely that they would have zero coefficient if added to the model), add the one with the smallest p value and repeat this step; otherwise, go to step 3. We shall use the usual rule-of-thumb value for "significance at the 5% level."

(iii) If any variable in the model have p-values greater than an exit tolerance (that is, if it is unlikely that the hypothesis of a zero coefficient can be rejected), remove the one with the largest p value and go to step 2; otherwise, end.

Depending on the variables included in the initial model and the order in which variables are moved in and out, this method may build different models from the same set of potential variables. However, one of the hesitations to apply for this technique is the solution need not be unique as the method terminates when the root mean square error is within our prescribed tolerance. Of course, there is no guarantee that a different initial model or a different sequence of steps will not lead to a better solution. Also, if more than one independent variables are highly correlated, usually only one of them will finally be included in the model with a stepwise analysis, even though both of them can be regarded as predictors.

Instead of using the above methods in developing a neat regression model, according to Hair Jr. et al. (2010), we apply a stepwise forward approach for our analysis and the details are described as follows:

(i) We compute the correlation coefficients for all variables as above.

(ii) We set up the simple regression model with the independent variable that has the largest correlation coefficient with the dependent variable.

(iii) We find the predicted values by the regression model and compute the correlation between the model and the corresponding dependent variable. If the correlation exceeds some pre-specified value, say 0.8, done.

(iv) Otherwise, we compute the residual and form the correlation between the residual and independent variables. Then we add the independent variable with largest correlation coefficient and form the new multivariate regression model.

(v) We stop if the correlations of the remaining residuals and the independent variables are less than 0.15. That is to say, adding the independent variable will not lead to significant improvement of the model.

From the correlation table in Table 4.14, we set up the linear regression model with 'Media Normative' which has correlation 0.667, so the equation for 'Scepticism to Advertising' (S) is as follows:

$$S = 1.87109 * (\text{Media Normative}) + 11.560456.$$

The correlation between the model and the dependent variable 'Scepticism to Advertising' (S) is 0.66713, that means the model is not good enough to describe the situation. Then, we compute the residuals and the sum of residual squares is 3104. The correlations between the residuals and the independent variables are shown in Table 4.19.

Table 4.19   Correlation Between the Residuals and the Independent Variables (with Media Normative)

	Parent Normative	Parent Informative	Peer Normative	Peer Informative	Media Normative	Media Informative	Television	Internet
correlation coefficient	0.08476	0.01617	0.15667	0.15265	0	0.16533	0.21143	0.2349

As the correlation coefficient for 'Media Normative' is $3.6*10^{\wedge}(-15)$, it is practically equal to zero. So when we use 'Media Normative' to predict the value for 'Scepticism to Advertising', the correlation is zero between the residual and the used independent variables.

Then, we add the variable 'Internet' which has the largest correlation coefficient (Table 4.19) to the model and form the new regression model by Matlab software. The resulting model is as follows:

S = 1.72037 *(Media Normative)   +   0.47868475*(Influence of internet) +   8.71774

Similarly, we find the sum of residual squares was reduced to from 3104 to 2949.296. After adding the variable 'Internet', the correlation between the model and the dependent variable 'Scepticism to Advertising' (S) increases to 0.691638.   The correlations between the residuals and the independent variables after using two variables are shown in Table 4.20.

Table 4.20   Correlation Between the Residuals and the Independent Variables (with Media Normative & Internet)

	Parent Normative	Parent Informative	Peer Normative	Peer Informative	Media Normative	Media Informative	Television	Internet
correlation coefficient	0.119	0.026	0.183	0.15	0	0.117	0.185	0

At the third stage, we add the variable 'Television' which now has the largest correlation coefficient.   After we form the new regression model, the sum of residual squares was reduced to 2843.9388.   In fact, we see that there is not much improvement if the variable 'Television' is added.   Nevertheless, we continue to develop the multivariate regression model and evaluate the correlations.   The correlations between the residuals and the independent variables after using two variables are shown in Table 4.21.

Table 4.21 Correlation Between the Residuals and the Independent Variables (with Media Normative & Internet & Television)

	Parent Normative	Parent Informative	Peer Normative	Peer Informative	Media Normative	Media Informative	Television	Internet
correlation coefficient	0.084	**0**	0.167	0.13	0	0.12	0	0

It is interesting to find that the correlation of the variable 'Parent Informative' is practically zero after using the variable 'Television' in the model. That means the effect of this variable can be represented by a combination of the other three independent variables. Lastly, we add the variable 'Peer Normative'. The correlation between the model and the dependent variable 'Scepticism to Advertising' (S) increases to 0.70498. The resulting sum of residuals reduces to 2762.27 and the correlation between the residual and the variables are shown in Table 4.22.

Table 4.22 Correlation Between the Residuals and the Independent Variables (with Media Normative, Internet, Television & Peer Normative)

	Parent Normative	Parent Informative	Peer Normative	Peer Informative	Media Normative	Media Informative	Television	Internet
correlation coefficient	0.053	-0.045	0	0.033	0	0.104	0	0

The regression stops as all the correlations are less than 0.15 which means that adding more variables will not improve the situation significantly. The correlation between the model and the dependent variable is 0.715151.

The results of the stepwise regression show that media normative influence, internet, television and peer normative influence are the four independent variables which contributes the most towards predicting the dependent variable, i.e., scepticism towards advertising, with media normative influence being the most predictive variable.   That means they all have significant relationship with the scepticism towards advertising. The results are different from those found in correlation analysis.   It is because by using stepwise regression, some of the other independent variables (may have relationship with the dependent variable) which have multicollinearity with the other independent variables already in the regression model may be excluded in the final regression model.   Thus, a better picture on the relationship between the independent variables and the dependent variable can be shown by using the regression model.

4.6   Conclusion

After the analysis of the data, not much of the hypotheses developed in chapter two are supported.   The results show that all the hypotheses relating to the social structural variables are not supported, i..e, H1, H2, H3 and H4.   For the socialization-agent influences, both hypotheses for parental influence (H5(a) and H5(b))are not supported. Though normative peer influence and normative media influence demonstrate significant relationship with advertising scepticism, H6(a) and H7(a) are not supported because of the positive correlation.   Hypotheses 6(b) and 7(b) for informative peer influence and informative media influence, on the other hand, are supported due to the significant results.   Hypothesis 8 for the effect of television is supported if only the perception towards television is taken into account in the analysis.   The same applies to the effect of internet.   So H9 is supported if only the perception of internet is

included in the analysis.   The last hypothesis for simultaneous television and internet use is not supported.   The results from the analysis will then be further discussed in chapter five which includes limitations of this research and the recommendations for future research.

CHAPTER FIVE

DISCUSSION

5.1 Introduction

The analytical methods for analyzing the data collected from the survey have been described in details in chapter four. Results from the analysis have also been reported and presented. In this chapter, more comprehensive discussion of the results with reference to the hypotheses developed in chapter two are included, followed by the limitation of this study and the recommendations for future research. Implications to marketers and policy makers are also provided. The chapter ends with the conclusion for this study.

5.2 Discussion

In this study, a survey was conducted to examine the impact of various socialization influences on the development of scepticism towards advertising among young adults in Hong Kong. The subjects for this study were university undergraduate students aged from 18 to 24.

The results support the fact that socialization of young adults is not limited to the traditional sources of influence, such as parents, friends and media, but extends to the new source of influence from the Internet. We shall discuss the findings in respect to the hypotheses developed in chapter two.

5.2.1 Effects of social structural variables on advertising scepticism

Contrary to the previous findings from the literature, weak correlations were found between social structural variables and the level of scepticism towards advertising among young adults as the three social structural variables under this study, i.e., age, gender and income, appear to have insignificant impact on the development of advertising scepticism.

5.2.1.1 Age

It is hypothesized that scepticism to advertising is positively related to age because past literature shows that younger adolescents are more receptive to advertising than older adolescents. With increase in age, it is expected that older young adults are more sceptical than younger young adults. However, the findings are contrary to the hypothesis. Age is found statistically insignificant to advertising scepticism among the subjects of this study. This may be due to the fact that the age range of the subjects under study is very small, from 18 to 24. Worse still, the age distribution is not so even. Most of them are in the age range of 19 to 21 which is the usual age range for attending university. This makes the age range too narrow to conduct a meaningful analysis on the effect of age. Moreover, the effect of age on socialization during the period of young adulthood may not be as obvious as in the period of adolescence because much of consumer learning may have already taken place and significant information for consumer thinking and behaviour may have already obtained during the period of adolescence (Moore and Moschis 1978). Though socialization continues after adolescence, the effect may not be as prominent as before. So in order to capture a better picture on the effect of age on young adults' socialization, it may need to extend

the age range of the subjects for future study.

5.2.1.2 Gender

It is postulated that marketplace knowledge exerts positive influence on advertising scepticism (Mangelburg and Bristol 1998). As female tend to communicate more with others on consumption-related issues, it is therefore hypothesized that female young adults are more sceptical to advertising than their male counterparts. However, the results show that there is no significant difference between the level of advertising scepticism of female subjects and that of the male subjects, though from the means calculated for these two groups, it seems that female subjects are slightly more sceptical to advertising than their male counterparts. So gender may not be a good predictor of the development of scepticism towards advertising among young adults.

The findings on the insignificant effect of gender may be explained by the influence of the internet. It is postulated that females are more sceptical to advertising because of their marketplace knowledge obtained through communication with different socialization agents. It is based on the belief that girls are more willing to share and communicated with each other on different kinds of consumption-related issued than boys. However, with the popularity of the internet which made online communication platforms, such as facebook, twitter and blog, more convenient to use and easier to access, young adults, whether females or males, can communicate freely at any time convenient to them without geographical restrictions. Given the unlimited capacity of the internet, information on the internet is becoming richer both in terms of quantity and variety. Regardless of gender, young adults can have communications online with

their friends or even with unknown individuals.   Most updated marketplace knowledge and consumption-related information can be obtained from the internet without any difficulties.   This may contribute to the limited effect of gender on advertising scepticism.

5.2.1.3   Income

Applying the same reasoning for the variables of age, it is hypothesized that young adults who have income from employment and/or allowances from family are more sceptical because they obtain more marketplace experience from consumption spending. The results again indicate that income, whether it is come from employment or as allowance from family, is not statistically significant to the development of advertising scepticism among young adults.

This findings may be explained by an important source of income which is not included in the data.   In Hong Kong, university students are entitled to apply for government grant and loan if they fulfill the requirements and criteria for application.   In fact, all the university students can apply for non-means-test loan scheme, i.e., there is no screening on family asset before making the application.   So as long as they are students attending university study, they can apply for the government loan.

According to the statistics released in May 2012 by Student Financial Assistance Agency of the Hong Kong Special Administrative Region, the average grant and loan released to each eligible university student during the year 2011-2012 amounts to HK$67,274.   That means there is an amount of HK$5,606 per month in terms of

income for the university students from grant and loan alone, excluding any employment wages or family allowances. This constitutes a significant amount in relation to the total income of the students as most of subjects in this study receive only a total of about HK$1,000 to HK$3,000 per month from employment wage and family allowance. So even if a respondent receives zero wages or zero allowances as shown in the data, the income effect on advertising scepticism on this respondent will not be reflected because the grant and loan from government are not taken into account in our analysis. So it is not surprising to find that the effect of income on advertising scepticism is not statistically significant. Future research on the effect of income on young adults' consumer socialization should specially be designed to include all the sources of income of young adults so as to reflect the true picture.

5.2.2   Effects of socialization agents on advertising scepticism

The findings of this study indicate that the socialization of young adults does have impact on their development of advertising scepticism, though socialization agents vary in the impact that they exert on advertising scepticism.

5.2.2.1   Parental influence

According to Moschis (1987), with increasing age, individuals learn consumption skills and attitudes more by observation rather than compliance to others. Thus, young people tend to seek market information through interaction with peers instead of parents (Moschis 1987). It is also pointed out by Ward (1974) that parental influence diminishes with increasing age of adolescents. It is more prominent to parent normative influence because as adolescents get mature, they tend to rely more on

parental informative influence. So it is hypothesized that normative influence is negatively related while informative influence is positively related to the formation of advertising scepticism among young adults.

Contrary to the hypotheses, the results show that parental influence provides no significant explanatory power in predicting the formation of scepticism towards advertising among young adults. However, this study provides evidence that young adults, in contrast to adolescents, are less susceptible to parental influence on the development of consumption-related attitudes. Such results are expected based upon the age-resulted developmental changes as described in previous literature.

One interesting finding is that even though most of the respondents are still financially dependent, whether fully or partially, on their parents (about 64% are receiving allowance from family), they tend to be less receptive to parental influence. This is not difficult to understand. Being university students who have just passed the period of adolescence, the respondents start enjoying independence and obtaining some kinds of autonomy from their parents. Still, they have to live with their parents (94%) and rely on their support as they have still not achieved full financial autonomy. So young adults, on one hand, want to obtain financial support from the family while on the other hand, refuse to submerge to parental influence. Thus, the parents have weak influence, both normative and informative, on young adults.

5.2.2.2 Peer influence

As pointed out by (1974), peer influence goes up as adolescents mature because they

have to identify themselves with peers.   Moschis (1978) also suggested that frequency of communication with peers is positively related to adolescents' attitudes towards advertising.   Thus, it is hypothesized that peer normative influence is negatively related while peer informative is positively related to the development of scepticism to advertising.

The results demonstrate that peer influence is also important in helping young adults to acquire sceptical attitudes towards advertising.   It is found that both peer normative influence and peer informative influence have impact on advertising scepticism. However, the findings are contrary to the argument of Mangleburg and Bristol (1998) who claimed that susceptibility to normative peer influence does not enhance marketplace knowledge.   Instead of having negative impact, normative peer influence exerts positive impact on scepticism development.   Thus Hypothesis 6(a) is not supported.   As for peer informative influence, it is found to have positive relationship with advertising scepticism and Hypothesis 6(b) are supported.   Thus it supports the argument of Mangleburg and Bristol (1998) who suggested that the informative communication with peers helps adolescents to develop scepticism to advertising. Moreover, the results support the fact that as adolescents mature to the stage of young adulthood, parental influence will be diminishing while the peer influence will be escalating.   Young adults are more willing to communicate with friends on consumption-related issues and thus their attitudes towards advertising will be affected by friends' attitudes, opinions and information.   Stepwise regression results also show that peer informative influence is the fourth important variable for explaining the development of scepticism towards advertising among young adults.   However, with

the reliance on the internet as a source for product and consumption-related information, the impact of peer influence may have to be reevaluated.

5.2.2.3 Media influence

As mentioned in chapter two, mass media is an important socialization agent that draws much attention in consumer socialization research.   As suggested by Mangleburg and Bristol (1998), media, being a source of marketplace information, helps in development of scepticism of advertising.   Thus it is hypothesized that normative media influence has negative impact while informative media influence has positive impact on the formation of sceptical attitude towards advertising among young adults.

It is found that both media influence show not only statistically significant but also profound results.   Contrary to Hypothesis 7(a), both media normative influence and media informative influence have positive relationship to advertising scepticism.   In fact, stepwise regression results indicate that media normative influence is the socialization agent with the most predictive power for the dependent variable, scepticism towards advertising.   This may be due to the effect contributed by the internet.   Recently, there is a trend of converging traditional media with the Internet in order to maintain their presence among young people in Hong Kong.   Radio is converging with the internet.   Radio stations put their programs online, making online broadcasting become more popular.   Some Chinese newspapers post some or all their news contents on their web sites.   A free domestic television service provider also put some of their programmes online for their audiences to watch them online.   As internet integrates the functions of traditional media such as television and printed media, it

becomes a multi-media platform. Thus the results of media influence may be amplified with the influence of internet.

However, for the effect of television, its impact may not be as significant as the internet, though it is also one of the variables that are found to have predictive power from stepwise regression results. This is may be due to the fact that young adults have to devote more time on school work or university activities and spend less time on television. Most of them watch less than 5 hours of television in a week, which is much less than the time they spend on the internet.

5.2.2.4 Internet

In this study, we are specifically interested in the role of the internet as a new socialization agent for young adults. Apart from being a primary source of consumer information and entertainment for adolescents (Rose, Rose and Blodgett 2009), the internet in fact creates a social environment where young people can observe and learn attitudes and behaviour at anytime and in anywhere, without just restricted to the traditional sources of influence such as family, friends and schools, or passive media such as television. Thus, it is hypothesized that internet use is positively related to young adults' scepticism towards advertising.

The findings also show that the internet has statistical significance to advertising scepticism among young adults. From the stepwise regression results, the internet is the second significant variable that provides explanation to advertising scepticism. This may be explained by the high penetration rate of the internet in Hong Kong

household. With reference to the general sample information in Table 4.2, 94% of the respondents have internet access at home with nearly half of them spent more than 16 hours on internet per week at home, not to mention their time spent on internet at universities.

Besides a socialization agent, internet can be viewed as a virtual social system in which social learning can take place. It facilitates young people to communicate and share their interests and opinions and to form relationships and communities without geographical constraints. Its unique features have made itself distinctive from traditional media. It allows young adults to access information easily from all over the world and to befriend and to interact with friends globally. All these are likely to change the way young adults learn consumption-related knowledge, skills and attitudes. This will definitely have significant influence on young adults' socialization. With the popularity of smart phone and the tablet PC such as ipad which is made possible by the advancement of technology, access to internet is becoming easier and more convenient. It is expected that internet will play a more significant role on consumer socialization of young adults in the future.

Though internet service is very popular in household, 'telewebbing', i.e., watching television while using the internet, is not so popular among young adults. More than half of them spend less than 5 hours on telewebbing. Thus its' effect on advertising scepticism is not so significant. This also shows that young adults may not be so attracted to television programmes.

In summary, the results show indications on how young adults differ from adolescents in their consumer socialization. For example, the impact of parental influence on development of advertising scepticism of young adults is not significant in this study. However, previous studies have found the impact of parents is prominent among adolescents (Moscardelli and Liston-Heyes 2005; Mangleburg and Bristol 1998). Thus socialization and consumer learning is different when individual is positioned in different stage of one's lifetime.

5.3 Limitations

Given the complexity of the consumer socialization process which involves various constructs and variables, it is no surprise that this study will have its limitations. So the findings of this study should be interpreted with consideration to the limitations that restrict the scope of this research.

First, this study involves only the examination of the interaction with four socialization agents: parents, peers, media (television) and internet. There might be more socialization influences that impact the development of scepticism to advertising among young adults. For example, the influence of celebrities, the importance of role models the level of marketplace knowledge, the personality of an individual such as self-esteem, are some socialization influences that are under investigation in the literature, but not included in this study.

This study only explores one dimension of interaction with the socialization agents, like susceptibility to parental, peer and media influence. Other dimensions of interaction

may also be important in explaining the development of young adults' scepticism towards advertising, for example, the frequency and the intensity of communication with parents and peers; the modeling effects from parents and celebrities, and the reinforcement effects.

As regards to media, only television viewing and internet use are examined. However, besides these two media, young adults are exposed to various media such as magazines, newspaper, radio and outdoor advertisements which may also be related to the development of scepticism towards advertising. The impact of more contemporary media such as smart phone and tablet PC such as ipad are also worth for studying because they allow individuals to access online services without any geographic restrictions.

In this study, the effects of internet use on development of scepticism to advertising are not activities-specific, i.e., no information on the particular activities that contribute to the development of scepticism. Moreover, the young adults' motivation for using internet and the activities they engaged in are not explored in this study. Furthermore, only one outcome, the development of scepticism, is examined under this study. Other relationships among the variables are not explored, for example, whether young adults put heavy weight on internet, instead of other media, for making consumption decisions.

The sample for this study is undergraduate university students which might not be representative of the young adult population in Hong Kong. In the circumstances, the specific levels of the construct, i.e., advertising scepticism, cannot be generalized for the

entire population. A larger and non-student sample will provide sufficient data and variability to examine how social structural variables like income, gender and age might affect consumer socialization of young adults. Moreover, the respondents for this study, who are referrals of snowball recruiters, are recruited by non-probability snowball sampling method. So a probability sample is required in order to generate the results to the youth population in Hong Kong. Furthermore, the findings of this study are location-specific as they are just limited to Hong Kong. It may not be generalized for young adults in other countries because of the unique cultural and economic characteristics of each location.

5.4 Future Research

The growth of mobile phones and the advancement of the Internet technology, as evidenced by the widespread use of tablet PC such as ipad, demonstrate the trend of young adults or the youth moving away from traditional media platforms such as television. According to the key telecommunications statistics from the Office of the Communications Authority in Hong Kong, up to March 2012, there are 15.29 millions mobile subscribers, accounting for a penetration rate of 215.3%. So the young population can gain easy access to mobile services. Moreover, up to May 2012, there are a total 10512 public Wi-Fi access points in Hong Kong. The young population in the present day is the wired generation. Thus they are less influenced by traditional mass media such as newspapers and television (Goetz and Barger 2008). Mobile phones are key influences during the process of consumer socialization and interpersonal communication (Lueg and Finney 2007). Future research may therefore investigate the impact of smart phone and tablet PC such as ipad on the development of

advertising scepticism as both devices allow access to internet service.

Moreover, as shown in the Literature Review in chapter two, there is little research done on the consumer socialization of young adults, adults or even the elderly even though consumer socialization is recognized as a continuous process in the literature. During different stage of life and with different experience, factors affecting advertising scepticism may be different for people of different age. Hong Kong is rich in telecommunication and new media. According to the report from the Office of Communications Authority, free domestic television services penetration rate is up to 99% up till December 2011. People in Hong Kong expose to great influence of television. Future research may examine the socialization influences on advertising scepticism on adults or elderly who pass their time mostly with television viewing.

Due to the problem of generalizability of the findings on young adults as a whole, future research may be required to confirm whether similar findings can be obtained from larger population of young adults. Sample in this study covers only the university students. Young adults from different walks of life may provide a fuller picture on consumer socialization of young adults.

The measure of scepticism in this study tends to focus on television advertising. Future research may be extended to include other forms of advertising. Given the advancement of mobile technology, mobile phones are considered as an efficient and effective channel for marketing communications. Young adults' attitudes towards mobile-advertising or pop-up advertising from internet may be other kinds of

advertising that are worth-studying.

5.5 Implications to Marketers and Policy Makers

Our findings provide some important implications for both policy makers and marketers. It is mainly concerned with the effect of internet on young population which is found to be a significant socialization agent on young adults in this study. As mentioned before, the internet is becoming an important platform for reaching young consumer groups, including young adults. But its properties are very different from those of traditional media. There are potential misuse of the Internet as a means of communication or advertising which, if uncontrolled, will lead to negative influence on young population, even on young adults. So appropriate regulations and guidelines for marketers to monitor the use of the internet, either through smart phone, tablet PC or other electronic devices, for advertising messages may be considered. Policy makers need to provide marketers with some guidelines or a code of practice regarding the appropriate forms of communication message and advertising on the internet.

Government organizations should also make good use of the internet to communicate and convey positive and healthy messages or government policies and planning more effectively to young adults, instead of just relying on the traditional media such as television advertising and printed media. Web sites of government organizations targeting young adults should be more interactive so as to enhance its modern image among young adults.

With the spread of technology, digital world is the main environment for young adults

that enables them to learn, share and spread information without geographic boundaries. When designing marketing communications, marketers should direct more advertising message through the internet to young adults.

5.6 Conclusions

The purpose of this study was to extend the current research on consumer socialization and the development of scepticism to advertising of children and adolescents to young adults. This study also demonstrates that socialization is a useful theoretical framework for understanding young adults' scepticism to advertising. Though the results cannot provide a full support to the conceptual model of consumer socialization and young adults' advertising scepticism, they confirm the role of internet and media as important socialization agents for young adults.

The results of this study suggest that marketers need to take into consideration the differences in consumer socialization between adolescents and young adults when marketing to young adults. Adolescents and young adults should not be considered as one uniform segment of the population. From the findings, it is suggested that marketers should pay more attention to the media and internet influences instead of parental influence when targeting young adults.

It is also essential to encourage young adults to establish a reasonable degree of consumer prudence by developing more positive and important consumption-related skills, knowledge and attitudes so as to better prepare themselves to function as consumers in this commercial-oriented society filled with abundant advertisements.

Scepticism towards advertising is an important and necessary consumption-related attitude which helps to equip young adults with the ability to filter puffery advertisements and to develop young adults into knowledgeable and healthy consumers.

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APPENDIX A

SURVEY QUESTIONAIRE

Questionnaire for Research Project

on

An empirical investigation of consumer socialization and the impact of internet use on scepticism towards advertising among young adults

The purpose of this survey is to learn what young adults like yourself think about consumer-related issues and how you act as consumers. The survey will also help us learn how young adults use the Internet and what they may learn from the Internet as consumers. Before answering this survey we would like to remind you not to talk about your answers with your friends. We are interested in learning what you yourself think about these issues.

Participation is entirely voluntary. All information is kept strictly confidential and no personal information will be gathered about you. Your agreement to participate in this survey infers your consent.

I. Listed below are some questions about your perceptions as a consumer. Please read each statement carefully and circle the number that indicates whether you strongly disagree, disagree, neither agree nor disagree, agree, or strongly agree.

		Strongly Disagree	Disagree	Neither Agree Nor Disagree	Agree	Strongly Agree
1.	I always try to shop with my parents	0	1	2	3	4
2.	I always follow my parents' decisions by buying the same products and brands	0	1	2	3	4
3.	What, where, and which brand I buy are very much determined by my parents	0	1	2	3	4
4.	My parents decide all my shopping needs.	0	1	2	3	4
5.	My parents accompany me when I make purchases.	0	1	2	3	4
6.	I often discuss my purchase plans with my parents.	0	1	2	3	4
7.	When I do not understand prices and quality I consult my parents	0	1	2	3	4
8.	I never buy any new product until my parents and I have discussed it.	0	1	2	3	4
9.	When buying products, I usually buy the ones that I think my friends will approve of.	0	1	2	3	4
10.	It is important that my friends like the products and brands I buy.	0	1	2	3	4
11.	I like to know that product and brands make a good impression on my friends	0	1	2	3	4
12.	I often ask my friends to help me choose the best product.	0	1	2	3	4

		Strongly Disagree	Disagree	Neither Agree Nor Disagree	Agree	Strongly Agree
13.	If I don't have a lot of experience with a product, I often ask my friends about it.	0	1	2	3	4
14.	I often get information about a product from friends before I buy it.	0	1	2	3	4
15.	To make sure to buy the right product, I often look at what my friends are buying.	0	1	2	3	4
16.	Television is a good source of product Information.	0	1	2	3	4
17.	I sometimes check the Internet for product or price information.	0	1	2	3	4
18.	I consider the Internet is a good source of product information.	0	1	2	3	4
19.	I feel comfortable buying products on the Internet.	0	1	2	3	4
20.	We can depend on getting the truth from most advertisements.	0	1	2	3	4
21.	The goal of advertising is to inform the buyer.	0	1	2	3	4
22.	I believe advertising offers valuable information.	0	1	2	3	4
23.	Advertising is generally truthful.	0	1	2	3	4
24.	Advertising is a reliable source of information about the quality and performance of products.	0	1	2	3	4
25.	In general advertising presents a true picture of the product being advertised.	0	1	2	3	4
26.	A company's Web site provides accurate information about its products.	0	1	2	3	4
27.	Advertising is truth well told.	0	1	2	3	4
28.	I feel I've been accurately informed after viewing most advertisements.	0	1	2	3	4
29.	Most advertising provides consumers with essential information.	0	1	2	3	4
30.	Television advertising does not provide much useful information about products.	0	1	2	3	4
31.	I buy only those products or brands that are advertised on television, radio, newspaper or magazine.	0	1	2	3	4

		Strongly Disagree	Disagree	Neither Agree Nor Disagree	Agree	Strongly Agree
32.	Radio, newspaper and television advertisings determine my brand loyalty.	0	1	2	3	4
33.	I continue buying the same brands as long as my favourite stars endorse them.	0	1	2	3	4
34.	I always consult the media to determine the best buys.	0	1	2	3	4
35.	I always look at the advertising before I buy.	0	1	2	3	4

II. This section will be used to give us some ideas of how often you watch television and use the Internet. Please read each statement carefully and circle the appropriate number.

36. Does your household own a computer with Internet access?

   0) Yes   1) No

37. How many purchases have you made online in the last **6** months?
   0) 0 purchase
   1) 1 purchase
   2) 2 purchases
   3) 3 purchases
   4) More than 3 purchases

38. The last time you made a purchase on the Internet, how did you pay for the purchase?
   0) I have never made a purchase on the Internet
   1) I paid with a credit card in my name
   2) I paid with my parents' credit card
   3) I wrote a cheque
   4) My parents wrote a cheque
   5) Other

39. How many times have you resold products online in the last **6** months?
   0) 0
   1) 1
   2) 2
   3) 3
   4) More than 3 times

40. Do you have an e-mail account, facebook account and/or MSN account that you use ?
   0) Yes   1) No

41. How often do you check your e-mail account / facebook account / MSN account?
    0) I do not have any of the above account
    1) 1 time per month
    2) 1 time per week
    3) 1 time per day
    4) several times per day

42. Approximately, how many hours in total do you spend watching television each **week** ?
    0) 0- 5 hours per week
    1) 6-10 hours per week
    2) 11-15 hours per week
    3) 16-20 hours per week
    4) more than 20 hours per week

43. How many hours in total do you spend on the Internet at **home** each **week** ?
    0) I do not have Internet access at home
    1) 0-5 hours per week
    2) 6-10 hours per week
    3) 11-15 hours per week
    4) 16-20 hours per week
    5) 21-25 hours per week
    6) More than 25 hours per week

44. How many hours in total do you spend on the Internet at **university** each **week** ?
    0) I do not have Internet access at university
    1) 0-5 hours per week
    2) 6-10 hours per week
    3) 11-15 hours per week
    4) 16-20 hours per week
    5) 21-25 hours per week
    6) More than 25 hours per week

45. How many hours in total do you spend watching television **on computer AND simultaneously** using the Internet at **home** each **week** ?
    0) I do not have Internet access at home
    1) 0-5 hours per week
    2) 6-10 hours per week
    3) 11-15 hours per week
    4) 16-20 hours per week
    5) 21-25 hours per week
    6) More than 25 hours per week

III. This section is meant to give us some ideas of you and your family's background. Please read each statement carefully and circle the appropriate number. Please circle only ONE answer.

46. What is your sex ?

    0) male   1)   female

47. What is your age in years?
    0) 18   4) 22
    1) 19   5) 23
    2) 20   6) 24
    3) 21

48. Do you currently live with your parent(s)?

    0) Yes   1) No

49. How many people are in your household including you?
    0) 2
    1) 3
    2) 4
    3) 5
    4) 6 or more

50. How many are under the age of 24 including you?
    0) 1
    1) 2
    2) 3
    3) 4
    4) 5
    5) 6 or more

51. How many brother(s) and sister(s) live with you in this household?
    0) none
    1) 1
    2) 2
    3) 3
    4) 4
    5) 5 or more

52. How many hours per **month** do you work (part-time)?
    0) I do not work
    1) less than 10 hours per month
    2) 11-20 hours per month
    3) 21-30 hours per month
    4) 31-40 hours per month
    5) more than 40 hours per month

53. How much do you earn per **month** from your **work** (do **NOT** include allowance from your family)?
    0) I do not earn extra money each month
    1) less than $1000 per month
    2) $1001-1500 per month
    3) $1501-2000 per month
    4) $2001-2500 per month
    5) more than $2500 per month

54. How much money do you get in your allowance or pocket money per **month** from your family?
    0) I do not get an allowance
    1) less than $1000 per month
    2) $1001-2000 per month
    3) $2001-3000 per month
    4) $3001-4000 per month
    5) more than $4000 per month

Your responses to all questions will remain strictly **confidential and anonymous**.

Thank you for taking the time to respond to this survey.   We appreciate your participation.

APPENDIX B

PARTICIPANT INFORMATION STATEMENT

30th May 2012

Information Statement for the Research Project:
An empirical investigation of consumer socialization and the impact of internet use
on scepticism towards advertising among young adults

You are invited to participate in the research project identified above which is being conducted by Chan Man Chi, a student from the Faculty of Business and Law at the University of Newcastle, Australia. This research is part of Man Chan's thesis for the University of Newcastle, supervised by Dr. Clare D'Souza.

Why is the research being done?
This research is important as it will attempt to examine the effects of socio-structural variables such as gender and spending power; socialization agents such as parents, peers, television and internet that contribute to the development of scepticism towards advertising among young adults in Hong Kong. The survey will help in our understanding of the young adults markets and how companies can improve their promotion strategies and understand the decision making process within the context of young adults.

Who can participate in the research?
We are seeking young adults aged 18 -24 to participate in this research project who are receiving education from universities and use the Internet service either at home or at the universities. They have also the habit of watching television.

What choice do you have?
Participation in this research is entirely voluntary. Only those people who give their informed consent will be included in the project. Whether or not you decide to participate, your decision will not disadvantage you.

What would you be asked to do?
If you agree to participate, you will be invited to attend a briefing session at an office premises at your convenient time during which you will be asked to complete the hardcopy questionnaire which consists of three main sections.

How much time will it take?
The whole questionnaire will take about 10 minutes to complete.

What are the risks and benefits of participating?
There are no known risks associated with this research.   We would be grateful if you would assist us in completing the questionnaire.   However, we cannot promise you any benefit from participating in this research.   Nevertheless, the results of this research will help marketers understand young adults' advertising attitudes and assist with formulating marketing and positioning strategies.

How will your privacy be protected?
We are interested only in the general relationships between the development of scepticism towards advertising and other variables among young adults in Hong Kong.   We are therefore not interested in the specific responses of any particular individual.   The questionnaire is anonymous and voluntary.   It will not be possible to identify you from your answers.

Data will be stored on the personal computer of the researcher and the supervisor of the researcher which can only be assessed with the researcher's own password for research purpose. No other person would have access to the collected data.   After the data have been entered into a database, the questionnaire will be disposed of in a security-protected recycle bin.   Data will be retained for at least 5 years at the University of Newcastle and in the personal computer of the researcher.

How will the information collected be used?
The data will be reported or presented in a dissertation to be submitted for Man Chan's Doctorate Degree in Business Administration.   There is a possibility that the outcomes of the research may be presented at conferences, seminars, forums or may be published in journals.   The published results from the study will be available to you on request.   The findings will be all reported in aggregate form without referring to any specific questionnaire.   The respondents will remain anonymous.   There is no identifying information in the questionnaire, and therefore there is no possibility of recognising individual participant's responses.

A non-technical summary of the findings, implications and discussion will be sent to the participants at their written request by e-mailing or by post to the researcher after the final examination of the dissertation.

What do you need to do to participate?
Please read this Information Statement and be sure you understand its contents before you consent to participate.   If there is anything you do not understand, or you have questions, contact the researcher.

If you would like to participate, please complete and return the attached anonymous questionnaire to the secure collection box located at the office premises where the briefing sessions are held.   This will be taken as your informed consent to participate.

Further information
If you would like to have more information, please contact Dr. Clare D' Souza or the undersigned.

Thank you for considering this invitation.

Yours sincerely,

Dr Clare D' Souza   **Man Chan**

Complaints about this research

This project has been approved by the University's Human Research Ethics Committee,
Approval No.: H-2012-0132.

Should you have concerns about your rights as a participant in this research, or you have a
complaint about the manner in which the research is conducted, it may be given to the researcher,
or, if an independent person is preferred, to the Human Research Ethics Officer, Research Office,
The Chancellery, The University of Newcastle, University Drive, Callaghan NSW 2308,
Australia, telephone (02) 49216333, email Human-Ethics@newcastle.edu.au.

APPENDIX C:

DATA FILE

No. of Survey	1	2	3	4	5	6	7	8	9	10	11	12	13
	I always try to shop with my parents	I always follow my parents' decisions by buying the same products and brands	What, where, and which brand I buy are very much determined by my parents	My parents decide all my shopping needs.	My parents accompany me when I make purchases.	I often discuss my purchase plans with my parents.	When I do not understand prices and quality I consult my parents	I never buy any new product until my parents and I have discussed it.	When buying products, I usually buy the ones that I think my friends will approve of.	It is important that my friends like the products and brands I buy.	I like to know that product and brands make a good impression on my friends	I often ask my friends to help me choose the best product.	If I don't have a lot of experience with a product, I often ask my friends about it.
1	1	0	0	0	0	0	0	0	3	3	2	1	2
2	3	1	1	1	2	1	1	1	2	2	3	3	3
3	1	1	2	1	2	3	1	2	1	3	2	2	2
4	2	1	1	0	1	3	2	2	2	2	3	3	4
5	0	1	0	1	0	2	2	0	1	0	2	0	0
6	2	1	1	0	3	4	4	1	3	3	3	2	3
7	3	1	1	1	1	1	3	0	3	2	3	1	3
8	2	3	3	2	3	4	4	2	3	4	3	2	1
9	3	0	0	0	2	1	2	1	2	1	2	2	3
10	2	1	1	0	2	3	3	1	3	2	3	1	3
11	2	1	1	2	2	1	2	1	3	2	3	1	3
12	1	3	3	3	3	3	3	3	3	2	3	2	2
13	1	1	1	1	1	1	1	1	2	2	2	2	3
14	3	3	2	2	3	2	1	1	2	2	2	1	2
15	3	3	2	2	3	3	3	2	4	3	4	2	2
16	1	1	1	1	1	3	3	1	1	1	1	1	3
17	3	2	2	1	2	3	2	1	2	1	1	2	3
18	3	3	2	2	2	2	2	2	1	2	2	2	2
19	1	1	1	1	2	2	2	0	3	2	2	4	3
20	1	1	0	1	1	1	2	1	2	2	3	1	3
21	2	1	1	1	1	3	3	0	1	1	3	1	3
22	3	2	3	1	3	2	3	1	3	3	3	3	3
23	3	2	2	0	1	0	1	0	3	3	3	3	3
24	4	2	2	1	3	3	3	3	3	3	3	2	3
25	3	2	1	1	3	3	3	2	2	1	2	1	1
26	4	3	2	1	3	3	3	2	3	2	3	3	3
27	2	2	3	2	2	3	1	1	3	3	2	3	4
28	3	2	3	1	3	3	1	1	1	0	0	0	1
29	3	3	3	1	2	1	3	0	1	1	2	3	4
30	1	2	3	2	1	1	2	1	3	2	2	2	3
31	4	1	2	0	4	3	3	3	3	3	2	1	3
32	3	3	3	3	2	2	2	2	3	2	3	1	1
33	2	2	0	0	0	0	0	0	2	2	2	3	3
34	1	0	0	0	0	0	0	0	0	1	1	1	1
35	2	1	0	0	1	0	1	0	1	1	1	2	3
36	2	0	0	0	3	0	0	0	4	3	3	3	3
37	1	3	1	2	3	1	1	1	3	3	3	3	1
38	3	2	1	2	2	3	2	1	3	3	3	3	3
39	3	2	1	1	2	2	3	1	2	2	2	3	3
40	3	3	1	1	1	1	1	1	1	1	1	1	3
41	2	1	1	1	2	1	2	1	1	1	1	2	2
42	1	1	1	1	1	2	1	0	2	2	2	3	3
43	1	1	0	1	1	1	2	0	3	0	2	3	3
44	2	0	0	0	0	0	0	0	0	0	2	2	3
45	3	2	3	2	2	2	3	2	2	3	2	2	2
46	1	1	1	2	3	1	3	1	3	2	3	3	3
47	4	3	3	2	3	3	3	2	2	2	2	2	3
48	3	2	1	1	2	1	3	1	1	2	2	4	3
49	2	1	1	1	2	2	2	1	1	1	2	1	3
50	0	1	1	1	1	1	2	0	2	1	2	2	3

No. of Survey	14	15	16	17	18	19	20	21	22	23	24	25	26
	I often get information about a product from friends before I buy it.	To make sure to buy the right product, I often look at what my friends are buying.	Television is a good source of product Information.	I sometimes check the Internet for product or price information.	I consider the Internet is a good source of product information.	I feel comfortable buying products on the Internet.	We can depend on getting the truth from most advertisements.	The goal of advertising is to inform the buyer.	I believe advertising offers valuable information.	Advertising is generally truthful.	Advertising is a reliable source of information about the quality and performance of products.	In general advertising presents a true picture of the product being advertised.	A company's Web site provides accurate information about its products.
1	2	3	2	3	3	3	3	3	3	3	2	3	2
2	3	2	1	2	2	1	1	3	1	1	1	1	1
3	3	2	1	3	2	1	0	1	1	1	1	1	2
4	4	3	1	3	2	2	0	0	3	3	2	1	2
5	0	0	0	4	4	2	0	3	1	0	0	0	1
6	3	3	2	3	3	1	0	0	1	0	1	1	2
7	2	2	2	3	1	0	0	2	1	0	1	1	2
8	1	3	2	4	4	2	1	2	2	1	1	1	2
9	3	2	0	2	1	3	0	3	0	0	1	1	1
10	2	1	1	3	3	0	1	1	2	1	1	3	2
11	2	2	1	3	3	2	2	3	3	1	1	2	2
12	2	2	1	2	2	1	1	1	1	1	1	1	2
13	2	2	2	3	3	2	1	2	2	1	1	1	1
14	2	2	3	3	3	2	2	3	2	2	2	2	2
15	2	4	3	1	2	2	1	2	2	2	1	1	2
16	3	1	3	3	3	3	2	3	3	3	1	2	3
17	2	2	1	2	2	1	1	1	1	1	1	2	2
18	2	2	2	2	2	2	2	2	2	2	2	2	2
19	3	3	3	2	3	2	3	2	3	2	1	1	2
20	2	2	1	4	4	3	2	1	2	2	2	1	2
21	1	1	1	0	1	0	1	1	1	1	1	1	1
22	3	3	3	0	1	0	1	4	3	1	1	1	2
23	3	3	3	2	3	3	3	3	3	3	3	3	3
24	3	3	1	1	1	1	0	0	0	0	0	3	2
25	1	1	1	3	3	2	3	2	2	2	2	2	3
26	3	2	2	3	3	3	3	2	2	2	2	2	3
27	3	2	1	2	3	2	2	3	3	2	3	2	3
28	1	1	3	2	2	0	1	1	1	1	1	1	1
29	3	3	3	3	4	2	1	3	2	1	1	1	2
30	1	2	0	4	4	1	2	3	1	0	1	1	2
31	3	3	1	3	2	2	3	1	2	3	1	3	1
32	1	1	1	2	2	0	0	3	2	1	1	1	1
33	3	3	3	3	3	3	3	3	3	3	0	0	0
34	2	2	2	3	3	3	1	2	1	1	1	1	3
35	1	1	2	3	2	2	1	3	2	1	1	2	2
36	3	3	1	0	0	0	0	1	0	0	3	1	2
37	3	3	1	3	2	1	3	3	1	1	1	1	1
38	3	3	2	3	2	2	1	1	1	0	0	0	2
39	3	2	1	3	3	2	1	2	2	1	2	1	2
40	1	3	2	1	2	3	1	1	1	1	1	1	3
41	2	1	1	3	3	3	2	1	2	1	2	2	3
42	2	2	1	2	2	2	2	1	1	1	1	1	1
43	3	2	0	2	3	1	1	2	1	0	1	1	2
44	2	2	2	3	3	2	1	3	1	1	1	1	1
45	1	2	2	2	1	2	2	2	1	2	2	1	2
46	3	2	3	3	3	2	2	3	2	2	2	2	2
47	2	2	3	3	4	3	2	3	2	2	2	2	3
48	1	1	0	4	4	1	2	2	1	2	2	1	3
49	2	2	2	3	3	2	2	3	2	2	1	2	3
50	2	3	3	4	4	4	2	2	3	2	1	1	2

No. of Survey	27	28	29	30	31	32	33	34	35	36	37	38	39	40
	Advertising is truth well told.	I feel I've been accurately informed after viewing most advertisements.	Most advertising provides consumers with essential information.	Television advertising does not provide much useful information about products.	I buy only those products or brands that are advertised on television, radio, newspaper or magazine.	Radio, newspaper and television advertisings determine my brand loyalty.	I continue buying the same brands as long as my favourite stars endorse them.	I always consult the media to determine the best buys.	I always look at the advertising before I buy	Does your household own a computer with Internet access?	How many purchases have you made online in the last 6 months?	The last time you made a purchase on the Internet, how did you pay for the purchase?	How many times have you resold products online in the last 6 months?	Do you have an e-mail account, facebook account and/or MSN account that you use ?
1	3	3	2	3	2	3	2	3	3	0	0	0	0	0
2	1	1	1	3	1	1	2	1	1	0	0	0	0	0
3	1	1	1	3	1	2	0	0	1	0	1	1	0	0
4	2	1	2	3	1	3	3	2	2	0	0	0	0	0
5	1	1	1	3	0	2	1	2	0	0	2	5	0	0
6	0	0	1	3	1	1	1	2	3	0	0	0	0	0
7	0	0	1	1	0	0	0	0	0	0	1	1	0	0
8	1	1	2	1	1	1	0	1	2	0	1	1	0	0
9	0	1	1	3	0	1	1	3	0	0	1	1	0	0
10	1	3	2	2	1	1	0	1	0	0	0	0	0	0
11	2	1	0	3	1	1	0	1	2	0	1	1	0	0
12	1	2	2	1	1	1	1	1	1	0	0	0	0	0
13	1	2	1	3	1	1	1	1	1	0	2	1	0	0
14	2	2	3	2	1	1	0	1	1	0	0	0	0	0
15	1	2	2	3	0	1	0	0	3	0	0	0	0	0
16	3	3	3	3	3	2	1	1	1	0	4	5	0	0
17	1	2	2	2	2	2	2	2	2	0	0	0	0	0
18	2	2	2	2	2	2	2	2	2	0	0	0	0	0
19	1	3	3	2	1	1	1	2	3	0	0	1	0	0
20	2	2	3	3	1	1	0	1	1	0	3	1	1	0
21	1	1	1	1	1	1	0	1	2	0	0	0	0	0
22	2	2	2	1	1	0	0	1	2	0	0	0	0	0
23	3	3	3	3	3	2	3	3	3	0	3	5	0	0
24	2	0	0	3	0	0	0	0	0	0	0	1	0	0
25	2	1	1	3	1	1	1	2	3	0	2	2	0	0
26	1	2	2	2	2	2	2	2	3	0	2	2	2	0
27	2	2	2	3	1	3	2	3	2	0	1	1	0	0
28	1	1	1	1	1	1	1	1	1	0	0	0	0	0
29	1	1	2	4	1	1	1	1	1	0	1	5	0	0
30	0	2	2	2	1	2	0	2	2	0	1	5	1	0
31	2	3	2	3	1	1	2	1	2	0	4	2	0	0
32	1	1	1	2	1	2	1	1	1	0	0	0	0	0
33	0	0	2	2	1	0	3	1	3	0	4	5	0	1
34	1	0	1	4	0	0	0	0	1	0	2	1	1	0
35	1	1	1	3	1	1	1	1	1	0	2	2	0	0
36	1	2	2	1	3	0	0	1	0	1	0	0	0	0
37	1	2	1	1	1	1	2	2	1	0	0	1	0	0
38	0	1	1	3	1	1	0	1	1	0	4	2	0	0
39	1	1	2	2	1	2	1	2	3	0	2	1	0	0
40	1	1	1	3	1	1	1	1	1	0	4	1	0	0
41	2	2	1	3	1	1	1	1	1	0	2	1	0	0
42	1	1	1	2	1	1	1	1	1	0	4	5	0	0
43	1	1	1	4	0	0	0	0	0	0	0	0	0	0
44	1	1	2	2	1	2	3	2	2	0	4	1	0	0
45	2	2	2	1	2	2	1	2	2	0	1	1	1	1
46	2	2	2	3	2	2	1	1	2	0	0	0	0	0
47	2	3	2	2	1	2	1	2	2	0	1	5	0	0
48	2	1	1	3	0	0	2	2	1	0	2	1	0	0
49	2	2	1	3	2	2	1	2	2	0	0	1	0	0
50	2	2	1	3	2	1	1	2	1	0	4	1	0	0

No. of Survey	41	42	43	44	45	46	47	48	49	50	51	52	53	54
	How often do you check your e-mail account / facebook account / MSN account?	Approximately, how many hours in total do you spend watching television each week?	How many hours in total do you spend on the Internet at home each week?	How many hours in total do you spend on the Internet at university each week?	How many hours in total do you spend watching television on computer AND simultaneously using the Internet at home each week ?	What is your sex ?	What is your age in years?	Do you currently live with your parent(s)?	How many people are in your household including you?	How many are under the age of 24 including you?	How many brother(s) and sister(s) live with you in this household?	How many hours per month do you work (part-time)?	How much do you earn per month from your work (do NOT include allowance from your family)?	How much money do you get in your allowance or pocket money per month from your family?
1	4	0	1	6	6	1	4	0	3	0	2	0	0	3
2	4	0	2	2	1	1	1	1	2	1	1	0	0	3
3	4	0	4	2	1	0	3	0	1	0	0	1	2	2
4	3	0	4	1	1	0	1	0	2	1	1	0	0	1
5	4	2	6	2	1	0	4	0	2	1	1	2	0	1
6	4	0	6	6	1	0	2	1	2	1	1	1	1	2
7	4	0	1	6	1	1	3	0	1	1	1	0	0	2
8	4	0	1	4	1	0	4	1	2	1	1	5	0	1
9	4	0	3	3	0	1	3	0	3	1	1	3	3	2
10	3	0	6	1	1	1	2	0	0	0	0	2	5	2
11	4	1	5	1	1	0	1	0	2	1	1	3	4	0
12	4	4	6	3	1	0	2	0	2	1	1	1	1	1
13	4	1	6	1	2	0	3	0	3	1	2	1	1	2
14	4	1	2	6	1	0	2	0	3	1	2	0	0	2
15	4	2	4	3	3	0	0	0	4	1	1	0	0	2
16	3	0	4	0	2	0	0	0	2	0	1	0	0	1
17	4	0	1	1	1	1	1	0	2	0	0	0	0	1
18	3	2	1	0	1	0	0	0	1	0	0	0	0	1
19	4	1	5	1	1	0	2	0	2	1	1	0	0	2
20	4	0	6	2	1	0	4	0	2	1	1	0	0	2
21	4	1	1	2	1	1	2	0	3	1	1	0	0	1
22	3	0	3	3	4	1	3	0	1	0	1	1	2	0
23	2	1	2	3	2	1	3	0	2	1	1	2	1	3
24	4	0	1	6	1	0	2	1	1	0	0	0	0	0
25	4	2	6	2	2	0	1	0	1	0	0	1	2	3
26	3	0	3	3	1	1	4	1	1	0	0	0	1	2
27	4	1	1	0	1	1	5	0	2	1	1	5	5	0
28	4	1	5	2	1	1	2	0	1	0	0	0	0	2
29	4	0	1	3	1	1	3	0	2	0	1	0	0	1
30	4	1	6	1	1	0	1	0	2	0	0	0	0	1
31	4	1	2	5	5	1	1	0	2	1	1	1	1	1
32	4	0	1	0	1	1	2	0	2	1	1	1	1	1
33	0	0	1	0	1	0	0	0	2	0	2	0	0	2
34	4	0	1	1	1	0	4	0	1	0	0	1	1	1
35	3	0	1	1	1	1	3	0	2	0	2	4	5	0
36	3	0	0	0	1	1	6	0	4	1	2	5	5	0
37	2	0	4	3	1	0	2	0	2	0	1	0	0	2
38	4	0	4	3	1	1	3	0	4	3	1	0	0	2
39	4	2	4	6	1	1	5	0	4	0	1	5	5	0
40	3	0	6	1	6	0	6	0	2	0	1	0	0	3
41	4	0	5	5	6	1	4	1	1	0	0	4	4	4
42	3	0	2	1	1	0	6	0	2	0	1	5	5	0
43	4	1	6	1	1	0	5	0	2	0	1	5	5	0
44	4	4	6	3	6	1	6	0	2	4	4	5	5	0
45	2	1	3	3	1	0	4	0	2	1	2	2	2	2
46	3	1	4	1	1	0	5	0	3	2	2	5	5	0
47	4	4	6	3	6	1	4	0	1	0	0	0	0	2
48	3	0	6	1	1	1	6	0	3	0	3	5	5	0
49	3	0	2	1	1	1	6	0	2	0	1	0	5	0
50	4	0	3	6	1	0	3	0	2	1	1	0	0	1

	1	2	3	4	5	6	7	8	9	10	11	12	13
No. of Survey	I always try to shop with my parents	I always follow my parents' decisions by buying the same products and brands	What, where, and which brand I buy are very much determined by my parents	My parents decide all my shopping needs.	My parents accompany me when I make purchases.	I often discuss my purchase plans with my parents.	When I do not understand prices and quality I consult my parents	I never buy any new product until my parents and I have discussed it.	When buying products, I usually buy the ones that I think my friends will approve of.	It is important that my friends like the products and brands I buy.	I like to know that product and brands make a good impression on my friends	I often ask my friends to help me choose the best product.	If I don't have a lot of experience with a product, I often ask my friends about it.
51	4	1	1	0	2	3	2	2	0	0	1	0	1
52	0	0	0	0	0	0	0	0	1	1	3	1	3
53	2	1	0	0	2	1	1	0	3	2	3	2	3
54	2	2	1	1	2	1	3	2	3	2	2	3	3
55	3	2	1	1	1	1	3	1	3	2	3	3	3
56	3	2	2	3	2	3	3	3	2	3	3	4	4
57	3	2	2	1	2	3	2	1	2	1	2	3	3
58	2	2	2	1	1	2	2	1	2	1	1	3	3
59	2	2	2	1	1	2	3	1	3	2	3	2	3
60	1	1	1	0	0	0	0	0	1	1	1	1	1
61	2	1	0	0	0	1	1	1	1	1	1	1	1
62	2	1	1	2	1	2	3	2	1	2	2	2	3
63	3	1	1	1	2	3	3	1	2	1	3	2	3
64	3	1	1	1	1	1	1	1	2	1	1	1	2
65	3	2	1	0	1	1	3	0	1	1	1	3	3
66	2	1	1	0	1	1	2	1	3	3	2	3	2
67	2	2	1	1	1	1	1	1	1	2	3	3	3
68	1	1	1	1	1	1	1	1	1	1	1	3	3
69	1	3	3	2	1	1	2	1	2	1	2	1	3
70	2	1	0	0	1	0	0	0	0	0	0	1	2
71	1	1	1	1	1	2	1	1	3	3	3	3	3
72	0	2	1	0	0	0	3	0	1	3	3	3	4
73	3	1	1	1	2	1	1	1	2	2	3	2	3
74	2	1	1	0	1	1	2	2	3	3	4	4	4
75	3	2	2	1	1	3	3	3	1	3	3	3	3
76	2	1	1	0	1	1	1	1	0	1	1	1	3
77	0	0	1	1	1	2	1	1	1	1	1	2	3
78	2	1	1	1	1	1	2	1	1	1	2	3	3
79	2	2	1	0	2	1	1	0	3	2	3	2	2
80	3	2	2	2	2	2	2	1	2	2	1	1	1
81	1	0	1	1	2	1	3	1	3	2	3	4	3
82	3	3	2	1	3	1	3	1	1	1	3	1	3
83	1	1	0	1	1	2	3	1	1	1	1	1	2
84	3	1	1	1	3	3	2	1	2	1	1	2	2
85	1	0	1	1	1	2	2	2	2	2	1	3	3
86	1	0	0	0	3	2	1	0	0	0	0	0	2
87	3	2	1	1	1	2	3	0	2	1	2	1	2
88	2	2	1	1	1	1	1	1	2	2	2	3	3
89	3	2	1	1	2	2	1	1	2	1	1	3	3
90	1	1	1	0	0	0	0	0	0	0	0	0	0
91	0	0	0	0	0	0	0	0	3	2	2	3	3
92	4	1	2	1	3	3	3	0	0	0	0	1	1
93	1	1	1	2	2	0	0	2	2	1	2	3	3
94	2	2	1	1	1	2	2	1	3	2	3	3	3
95	2	1	0	1	2	0	2	0	3	3	3	3	3
96	2	2	2	2	2	2	2	2	2	2	2	2	2
97	2	1	1	0	0	0	0	0	1	1	1	2	3
98	0	0	0	0	0	0	1	0	1	3	3	2	2
99	1	1	1	1	2	2	2	1	1	1	2	1	1
100	1	1	1	1	1	1	2	1	3	3	3	3	3

No. of Survey	14	15	16	17	18	19	20	21	22	23	24	25	26
	I often get information about a product from friends before I buy it.	To make sure to buy the right product, I often look at what my friends are buying.	Television is a good source of product Information.	I sometimes check the Internet for product or price information.	I consider the Internet is a good source of product information.	I feel comfortable buying products on the Internet.	We can depend on getting the truth from most advertisements.	The goal of advertising is to inform the buyer.	I believe advertising offers valuable information.	Advertising is generally truthful.	Advertising is a reliable source of information about the quality and performance of products.	In general advertising presents a true picture of the product being advertised.	A company's Web site provides accurate information about its products.
51	1	0	4	4	3	2	2	3	1	0	2	1	1
52	2	2	1	2	3	0	1	3	3	0	1	2	2
53	3	3	2	3	3	3	1	3	2	3	1	0	1
54	2	1	2	3	3	2	2	2	2	2	2	2	2
55	3	3	2	3	3	2	2	2	2	1	1	1	2
56	2	3	2	3	3	4	4	3	2	3	2	3	3
57	2	2	1	3	2	1	1	3	1	0	1	0	2
58	2	2	1	3	3	1	2	3	2	2	2	1	2
59	3	2	1	3	3	1	1	3	1	1	1	2	3
60	1	1	1	1	1	1	1	1	1	1	1	1	1
61	1	1	1	1	1	1	1	1	1	1	1	1	1
62	3	3	3	3	3	2	1	2	2	2	1	2	3
63	2	2	3	3	3	2	2	2	2	1	3	1	3
64	2	1	1	2	2	2	1	3	3	2	1	2	2
65	3	3	1	4	3	3	2	3	1	1	1	2	2
66	2	1	1	3	3	1	1	2	1	1	1	2	3
67	3	3	2	2	2	3	3	3	3	3	3	3	2
68	1	2	2	2	3	1	2	2	2	2	1	1	3
69	2	1	2	1	2	1	0	2	1	1	1	0	1
70	1	1	2	3	2	2	2	3	3	2	2	2	2
71	3	4	2	3	3	2	2	3	2	3	2	2	3
72	3	2	1	2	3	1	1	2	2	2	2	2	2
73	3	2	1	3	2	2	2	3	2	2	2	2	2
74	4	3	1	2	3	2	0	1	2	1	2	1	4
75	3	3	3	3	2	1	1	1	1	1	1	1	1
76	2	2	2	3	3	3	3	1	1	1	1	1	3
77	3	2	2	2	2	3	2	2	1	2	1	1	2
78	3	2	3	3	2	1	1	2	2	1	1	1	2
79	2	1	1	2	2	2	1	1	1	1	1	1	1
80	1	2	2	2	1	0	0	0	0	0	0	0	0
81	2	1	2	4	3	2	2	1	2	1	1	1	2
82	3	3	3	1	1	1	1	1	1	1	1	1	3
83	1	2	3	4	4	3	2	3	2	2	2	3	2
84	1	3	2	3	3	2	2	1	1	1	1	1	2
85	3	2	3	3	2	3	2	3	3	2	2	2	2
86	0	0	1	2	3	2	1	2	1	1	1	1	3
87	2	1	2	3	3	2	1	3	1	1	1	1	2
88	2	2	1	3	3	3	1	1	2	1	1	1	3
89	3	2	1	3	3	3	2	1	2	1	1	1	2
90	0	1	0	4	4	4	3	3	2	2	2	2	2
91	3	2	1	3	2	2	2	3	1	1	2	2	3
92	2	1	0	2	4	3	1	2	1	1	2	2	2
93	4	3	2	2	2	3	2	3	1	0	1	1	2
94	3	3	0	3	2	2	1	2	1	1	1	2	2
95	3	3	1	2	3	1	2	1	2	1	2	1	3
96	2	2	2	2	2	2	2	2	2	2	2	2	2
97	2	1	0	3	3	3	2	3	2	1	2	1	2
98	3	3	2	3	3	1	2	4	2	2	1	2	1
99	2	1	2	3	2	2	2	1	1	1	1	1	2
100	3	3	2	3	3	2	2	3	3	2	2	2	2

No. of Survey	27	28	29	30	31	32	33	34	35	36	37	38	39	40
	Advertising is truth well told.	I feel I've been accurately informed after viewing most advertisements.	Most advertising provides consumers with essential information.	Television advertising does not provide much useful information about products.	I buy only those products or brands that are advertised on television, radio, newspaper or magazine.	Radio, newspaper and television advertisings determine my brand loyalty.	I continue buying the same brands as long as my favourite stars endorse them.	I always consult the media to determine the best buys.	I always look at the advertising before I buy	Does your household own a computer with Internet access?	How many purchases have you made online in the last 6 months?	The last time you made a purchase on the Internet, how did you pay for the purchase?	How many times have you resold products online in the last 6 months?	Do you have an e-mail account, facebook account and/or MSN account that you use ?
51	1	2	2	2	1	1	0	0	2	0	0	1	0	0
52	1	1	1	3	0	2	2	1	0	0	0	0	0	0
53	1	1	1	3	1	1	1	2	2	0	4	1	0	0
54	2	2	2	3	1	2	2	2	2	0	1	1	0	0
55	1	2	2	2	1	1	3	2	2	0	2	5	0	0
56	4	3	2	3	3	3	2	2	4	0	2	5	1	0
57	2	1	3	3	2	2	1	2	0	0	0	0	1	0
58	2	1	1	3	0	1	3	2	2	0	1	2	0	0
59	2	1	2	2	2	1	3	2	1	0	0	5	0	0
60	1	1	1	1	1	1	1	1	1	0	0	1	0	0
61	1	1	1	1	1	1	1	1	1	0	0	5	0	0
62	2	2	3	2	1	1	2	2	2	0	4	1	0	0
63	2	2	2	2	1	3	1	1	1	0	4	2	0	0
64	2	2	3	2	1	1	1	1	1	0	0	2	0	0
65	2	2	1	3	1	1	3	2	1	0	4	1	2	0
66	1	2	2	2	0	1	3	3	2	0	2	2	0	0
67	2	2	3	2	2	1	2	2	2	0	1	5	4	0
68	2	1	2	1	1	1	2	1	1	1	1	1	1	0
69	1	1	2	2	2	1	1	2	0	0	0	0	0	0
70	2	2	3	3	2	1	1	1	1	0	0	1	0	0
71	3	2	3	2	1	3	3	3	3	0	4	2	0	0
72	2	1	2	2	1	1	2	2	0	0	0	0	0	0
73	2	1	2	3	1	1	3	2	1	0	1	2	2	0
74	0	2	2	1	0	0	1	1	2	0	0	0	0	0
75	1	1	1	3	1	1	1	1	1	0	0	5	0	0
76	1	1	1	1	0	0	3	1	0	0	0	0	0	0
77	1	1	2	1	1	2	1	3	3	0	4	2	0	0
78	1	1	1	1	1	1	1	1	1	0	0	0	0	0
79	1	1	1	3	1	1	1	1	1	0	3	5	0	0
80	0	0	2	2	0	0	0	0	0	0	0	0	0	0
81	0	1	2	3	1	1	3	2	1	0	2	2	0	0
82	1	1	3	3	1	1	1	0	0	0	0	0	0	0
83	2	3	3	1	3	3	1	3	2	0	2	1	0	0
84	1	1	2	2	1	1	3	1	1	0	4	1	0	0
85	1	2	2	3	2	2	3	2	2	0	4	1	1	0
86	1	1	2	2	0	1	1	0	0	0	3	1	0	0
87	1	1	1	3	1	1	1	1	1	0	1	1	0	0
88	1	2	1	3	1	1	3	2	1	0	4	5	0	0
89	1	2	2	3	2	1	1	1	1	0	4	5	0	0
90	2	3	3	3	2	2	4	3	3	0	3	1	0	0
91	2	3	2	2	1	2	2	2	3	0	0	0	0	0
92	1	2	3	3	1	2	3	2	1	0	0	2	0	0
93	1	2	2	2	1	2	1	1	1	0	0	5	0	0
94	1	1	2	2	1	2	1	2	3	0	4	1	1	0
95	2	2	2	2	3	2	2	2	2	0	0	0	0	0
96	2	2	2	2	2	2	2	2	2	0	4	1	0	0
97	1	2	1	2	2	2	1	2	1	0	4	1	4	0
98	2	2	2	1	1	1	3	1	2	0	0	5	1	0
99	1	1	1	2	1	1	2	2	2	0	1	5	0	0
100	2	1	1	1	1	1	1	2	1	0	1	1	0	0

No. of Survey	41	42	43	44	45	46	47	48	49	50	51	52	53	54
	How often do you check your e-mail account / facebook account / MSN account?	Approximately, how many hours in total do you spend watching television each week?	How many hours in total do you spend on the Internet at home each week?	How many hours in total do you spend on the Internet at university each week?	How many hours in total do you spend watching television on computer AND simultaneously using the Internet at home each week ?	What is your sex ?	What is your age in years?	Do you currently live with your parent(s)?	How many people are in your household including you?	How many are under the age of 24 including you?	How many brother(s) and sister(s) live with you in this household?	How many hours per month do you work (part-time)?	How much do you earn per month from your work (do NOT include allowance from your family)?	How much money do you get in your allowance or pocket money per month from your family?
51	2	0	2	3	1	0	4	1	2	0	1	1	2	1
52	3	2	3	1	1	0	6	0	3	1	1	5	5	0
53	4	0	1	1	1	1	6	1	4	1	2	5	5	0
54	3	0	6	1	1	1	5	0	2	1	2	5	5	1
55	3	1	2	1	1	1	4	0	2	0	1	5	5	0
56	1	1	3	2	2	0	3	0	1	1	1	0	1	1
57	4	3	2	1	1	1	0	0	1	0	0	0	0	3
58	4	0	3	1	2	1	1	0	1	0	0	5	5	1
59	4	2	3	1	2	1	1	0	2	1	1	0	0	2
60	4	0	1	1	1	0	3	0	1	0	0	0	0	0
61	4	0	1	1	1	1	3	0	2	0	1	2	5	0
62	2	1	3	1	2	1	4	1	0	0	0	0	0	1
63	4	1	3	2	2	1	1	0	2	1	1	1	3	0
64	3	3	4	1	2	1	4	0	0	0	0	0	0	1
65	3	0	6	2	6	1	3	0	2	1	1	4	3	0
66	4	1	5	5	3	1	1	1	0	1	0	0	0	1
67	3	3	1	3	2	1	3	0	2	2	1	1	3	0
68	4	4	6	3	6	0	3	0	2	1	1	0	0	0
69	3	3	6	1	4	0	1	0	0	0	0	1	1	1
70	4	0	6	1	1	1	3	0	2	1	1	2	5	0
71	4	2	2	2	1	1	2	0	3	3	3	3	3	1
72	4	1	2	1	2	0	1	0	2	2	2	3	2	0
73	4	1	3	1	4	0	2	0	1	0	0	1	1	2
74	4	0	1	1	1	0	3	0	1	1	1	1	1	3
75	4	1	3	1	2	1	1	0	1	0	0	1	1	1
76	4	0	6	2	6	1	2	0	2	2	2	0	0	2
77	3	0	1	2	1	1	3	0	1	1	1	5	4	2
78	3	1	1	1	1	1	1	0	2	1	1	0	0	2
79	4	2	6	2	2	1	1	0	2	1	1	1	5	3
80	3	1	2	1	1	1	1	0	2	0	1	1	1	1
81	4	4	4	1	4	1	2	0	4	1	3	5	5	2
82	4	0	3	1	1	1	1	0	3	1	1	1	4	1
83	4	0	5	1	2	1	2	0	1	0	0	2	5	1
84	4	3	3	1	1	1	3	0	2	0	1	4	5	2
85	4	3	4	0	4	1	4	0	3	0	1	3	5	0
86	4	0	3	1	1	1	3	0	2	0	0	2	5	0
87	4	2	6	1	6	1	1	0	1	0	0	2	2	2
88	4	0	5	1	6	1	1	0	1	0	0	3	2	3
89	4	0	6	1	6	1	2	0	2	1	1	2	2	2
90	3	2	2	0	1	0	3	0	2	0	1	0	0	0
91	4	2	6	1	3	0	6	0	2	0	1	3	2	3
92	3	4	6	1	1	1	2	0	2	1	1	3	3	0
93	4	1	1	1	2	1	2	0	3	1	2	5	2	0
94	4	0	4	0	1	1	1	0	3	2	2	2	3	1
95	1	2	3	1	2	1	1	0	2	1	1	2	1	1
96	3	1	3	1	3	0	3	0	2	1	1	4	5	0
97	3	0	5	1	5	0	5	0	3	1	2	1	4	5
98	4	1	6	2	6	0	5	0	1	0	0	2	1	2
99	4	2	6	1	1	0	2	1	0	0	0	0	0	2
100	3	4	6	1	2	0	2	0	2	1	1	5	5	0

No. of Survey	1	2	3	4	5	6	7	8	9	10	11	12	13
	I always try to shop with my parents	I always follow my parents' decisions by buying the same products and brands	What, where, and which brand I buy are very much determined by my parents	My parents decide all my shopping needs.	My parents accompany me when I make purchases.	I often discuss my purchase plans with my parents.	When I do not understand prices and quality I consult my parents	I never buy any new product until my parents and I have discussed it.	When buying products, I usually buy the ones that I think my friends will approve of.	It is important that my friends like the products and brands I buy.	I like to know that product and brands make a good impression on my friends	I often ask my friends to help me choose the best product.	If I don't have a lot of experience with a product, I often ask my friends about it.
101	3	2	1	1	1	2	2	1	1	1	1	2	2
102	2	1	1	0	1	1	2	1	1	1	2	3	3
103	2	2	2	1	1	1	1	1	3	2	2	2	1
104	1	1	1	1	2	2	2	1	3	2	3	3	3
105	3	3	2	1	3	3	2	2	1	3	1	1	3
106	0	0	0	0	3	3	3	0	4	4	3	4	4
107	3	2	2	1	2	3	2	2	2	2	2	2	2
108	1	3	3	4	3	3	4	3	2	2	2	3	3
109	2	1	2	2	3	2	3	2	3	2	3	3	3
110	1	1	1	1	1	1	1	1	1	1	1	1	3
111	3	3	2	0	2	2	1	1	1	2	2	3	3
112	3	3	2	3	4	4	4	3	3	3	4	3	4
113	3	1	0	1	2	0	3	1	1	1	2	2	2
114	2	2	1	1	1	0	0	0	1	0	1	3	3
115	2	0	0	0	3	1	0	2	3	4	3	4	4
116	3	2	2	1	1	2	1	2	2	2	3	2	2
117	1	2	2	2	2	2	2	2	1	3	2	1	2
118	3	3	2	3	3	2	3	3	1	1	2	3	2
119	4	1	1	0	1	3	1	1	2	1	2	1	3
120	2	3	3	1	2	3	1	3	2	0	1	4	3
121	1	3	1	2	1	1	0	1	2	1	0	1	0
122	2	1	1	1	1	2	1	2	1	1	1	2	2
123	1	1	3	1	1	1	1	1	3	3	3	3	3
124	2	1	1	0	1	2	2	1	1	0	1	2	2
125	1	1	1	1	1	1	1	3	1	1	1	1	1
126	3	1	1	1	1	2	2	1	1	1	2	2	3
127	4	1	1	1	4	2	2	1	2	2	2	3	2
128	3	3	3	2	1	1	1	1	1	1	1	2	2
129	3	3	3	3	3	3	3	3	3	3	2	2	2
130	3	3	3	3	3	3	3	1	3	3	3	2	3
131	3	1	0	0	1	2	2	1	2	0	1	3	3
132	3	2	2	1	2	2	3	1	2	3	3	3	2
133	3	3	3	3	3	3	1	2	1	0	0	0	3
134	3	2	1	1	1	1	3	2	1	1	1	1	1
135	4	2	2	1	1	3	2	2	0	0	0	2	2
136	3	2	2	2	3	3	3	3	3	3	3	3	3
137	2	2	1	1	1	2	1	2	2	3	3	2	3
138	4	2	0	0	2	2	3	0	3	4	4	3	4
139	3	2	1	0	2	1	2	2	2	3	2	3	4
140	3	2	1	0	2	3	0	1	0	0	3	4	0
141	3	2	2	1	2	2	1	1	1	1	2	2	3
142	4	1	1	1	2	2	3	1	1	1	2	3	3
143	4	3	2	0	3	3	4	1	3	0	3	4	4
144	1	1	1	1	1	3	3	1	2	0	1	3	3
145	3	2	2	1	2	2	1	1	2	1	1	2	3
146	3	2	2	1	1	3	1	0	1	1	1	2	3
147	3	3	2	1	2	3	3	1	2	2	3	3	2
148	4	3	2	2	3	3	3	1	1	1	2	2	2
149	3	2	2	1	3	2	2	3	2	2	2	2	2
150	2	0	0	0	1	3	3	2	1	1	2	2	3

No. of Survey	14	15	16	17	18	19	20	21	22	23	24	25	26
	I often get information about a product from friends before I buy it.	To make sure to buy the right product, I often look at what my friends are buying.	Television is a good source of product Information.	I sometimes check the Internet for product or price information.	I consider the Internet is a good source of product information.	I feel comfortable buying products on the Internet.	We can depend on getting the truth from most advertisements.	The goal of advertising is to inform the buyer.	I believe advertising offers valuable information.	Advertising is generally truthful.	Advertising is a reliable source of information about the quality and performance of products.	In general advertising presents a true picture of the product being advertised.	A company's Web site provides accurate information about its products.
101	2	2	2	3	3	2	2	2	2	2	1	2	2
102	3	2	3	3	3	2	2	2	1	1	1	1	1
103	1	1	1	2	2	1	2	2	1	2	2	2	3
104	3	3	2	3	3	2	1	2	1	1	1	1	2
105	2	1	2	3	3	2	2	3	2	1	1	1	3
106	4	0	2	2	3	2	2	3	3	1	3	1	3
107	3	1	2	2	3	2	2	2	2	2	2	2	3
108	3	1	1	4	4	0	3	4	1	3	3	1	2
109	3	3	2	4	3	2	2	2	2	2	2	2	2
110	1	2	2	3	3	3	3	3	2	2	2	2	3
111	3	2	3	3	3	3	1	0	3	2	2	2	2
112	3	3	2	3	3	2	2	2	2	2	2	2	3
113	1	2	0	3	2	1	1	1	1	1	1	1	2
114	3	3	3	2	2	1	2	2	2	2	2	2	2
115	4	3	2	1	1	0	0	3	3	2	1	2	3
116	3	2	3	3	3	3	3	2	2	2	2	2	1
117	2	1	1	1	3	3	2	2	3	3	2	3	3
118	3	3	3	2	3	1	2	2	3	3	2	3	3
119	2	1	0	3	3	1	2	3	1	1	1	1	3
120	3	3	2	1	2	3	0	2	1	0	1	1	1
121	1	0	1	1	1	2	2	1	1	0	3	1	2
122	2	2	1	3	3	3	2	2	1	1	1	1	1
123	3	3	1	2	2	2	1	3	2	2	2	2	3
124	1	1	2	3	3	3	2	2	2	2	1	1	2
125	1	1	2	3	3	2	2	3	2	2	2	2	3
126	2	3	1	3	3	2	2	2	2	2	3	2	2
127	3	3	2	3	3	3	2	2	2	2	2	2	3
128	2	2	2	2	2	2	2	2	2	2	3	3	3
129	2	2	3	2	2	1	2	3	2	1	1	1	1
130	3	3	3	3	2	3	1	3	2	2	3	3	2
131	2	3	1	4	4	0	0	2	1	1	2	3	3
132	3	2	2	3	3	1	1	2	2	2	2	2	3
133	1	0	2	3	3	1	0	0	0	0	0	1	2
134	2	1	1	2	2	1	0	1	1	1	1	1	2
135	2	0	2	2	2	2	0	3	2	0	0	2	2
136	3	3	3	3	3	3	3	3	3	3	3	3	3
137	3	3	2	3	3	3	3	3	3	3	3	3	3
138	4	3	2	3	3	1	1	2	2	1	0	2	2
139	3	1	1	1	4	1	1	3	1	1	1	1	2
140	3	0	0	2	2	1	1	2	0	1	2	1	2
141	2	1	2	3	3	3	2	2	2	1	1	1	2
142	2	1	3	1	2	2	3	3	2	1	1	0	2
143	4	3	0	2	3	3	1	3	2	1	1	3	3
144	2	1	3	4	4	2	2	1	1	0	1	1	3
145	2	2	3	2	3	2	2	2	3	3	3	2	2
146	3	2	1	3	4	3	1	2	2	1	1	1	2
147	2	2	3	2	2	1	1	2	2	2	2	1	2
148	1	1	1	3	2	2	1	1	1	2	1	0	3
149	2	2	3	3	1	0	0	2	0	1	0	0	1
150	2	1	1	3	2	1	0	1	1	1	2	0	3

No. of Survey	27	28	29	30	31	32	33	34	35	36	37	38	39	40
	Advertising is truth well told.	I feel I've been accurately informed after viewing most advertisements.	Most advertising provides consumers with essential information.	Television advertising does not provide much useful information about products.	I buy only those products or brands that are advertised on television, radio, newspaper or magazine.	Radio, newspaper and television advertisings determine my brand loyalty.	I continue buying the same brands as long as my favourite stars endorse them.	I always consult the media to determine the best buys.	I always look at the advertising before I buy.	Does your household own a computer with Internet access?	How many purchases have you made online in the last 6 months?	The last time you made a purchase on the Internet, how did you pay for the purchase?	How many times have you resold products online in the last 6 months?	Do you have an e-mail account, facebook account and/or MSN account that you use ?
101	2	1	2	3	1	2	1	2	2	0	1	5	0	0
102	1	1	2	2	1	1	2	2	1	0	4	5	0	0
103	1	2	3	2	2	1	2	1	1	1	0	0	0	0
104	1	1	2	3	1	2	3	3	2	0	2	2	0	0
105	2	2	1	3	1	1	1	1	1	0	2	2	0	0
106	3	2	3	2	0	3	3	3	2	0	0	0	0	0
107	3	2	2	2	2	1	2	3	2	0	2	2	2	0
108	3	2	1	0	1	3	1	2	3	0	0	5	0	0
109	1	1	1	1	1	1	1	1	1	0	2	5	0	0
110	2	2	3	2	3	2	2	2	2	0	1	1	1	1
111	2	1	3	2	0	0	2	3	3	0	0	0	0	0
112	2	2	1	3	2	2	3	3	2	0	4	5	0	0
113	1	1	1	1	1	1	1	1	1	0	0	0	0	0
114	2	2	2	2	2	2	2	2	2	0	1	1	0	0
115	2	2	1	1	0	0	3	2	0	0	0	0	0	0
116	2	2	2	2	2	2	2	2	2	1	4	5	0	0
117	3	1	1	1	2	2	2	2	2	0	0	0	0	0
118	4	3	2	2	3	3	2	1	3	0	2	1	2	1
119	2	2	2	1	2	1	1	2	1	0	0	5	0	0
120	0	1	1	2	0	0	1	0	0	0	2	2	3	0
121	2	1	2	3	0	2	3	2	1	0	0	1	0	0
122	1	1	1	1	1	1	1	1	1	0	2	1	0	0
123	1	2	2	2	2	2	2	2	2	0	2	1	0	0
124	1	1	1	1	1	2	2	2	2	0	4	5	0	0
125	2	2	2	3	0	2	3	3	2	0	4	1	0	0
126	1	2	3	1	1	3	1	1	2	0	0	0	0	0
127	3	3	2	2	2	2	2	2	2	0	4	5	4	0
128	2	2	2	2	2	2	2	2	2	0	4	1	0	0
129	1	1	1	2	1	2	1	1	1	0	0	0	0	0
130	3	3	3	4	3	3	2	3	3	0	0	0	0	0
131	2	1	1	4	0	1	1	2	0	0	0	5	0	0
132	2	3	2	2	1	2	2	3	2	0	1	0	1	0
133	1	1	1	2	0	0	0	0	0	0	0	0	0	0
134	1	2	2	2	1	1	1	1	1	0	4	2	0	0
135	0	1	2	2	0	0	0	1	0	0	4	2	0	0
136	3	3	3	3	3	3	3	3	3	0	2	2	0	0
137	2	2	2	2	2	2	2	2	2	0	1	1	1	0
138	1	2	2	3	0	1	1	1	1	0	2	5	2	0
139	1	1	1	1	1	1	0	1	1	1	0	0	0	1
140	1	3	2	3	1	1	3	3	0	1	4	1	2	0
141	2	2	2	3	1	1	2	2	1	0	4	5	0	0
142	1	1	2	2	0	1	0	2	0	0	1	2	0	0
143	1	2	2	3	0	0	4	3	2	0	4	5	0	0
144	0	1	1	3	1	3	1	1	1	0	1	2	0	0
145	3	2	2	2	2	2	2	2	2	1	0	0	0	0
146	1	2	1	4	1	1	1	2	3	0	2	5	2	0
147	2	2	3	2	1	1	2	2	1	0	0	0	0	0
148	0	0	1	2	2	1	1	4	3	0	0	0	0	0
149	0	0	1	2	1	0	0	0	0	1	0	0	0	1
150	0	1	1	2	3	1	0	2	1	0	0	0	0	0

No. of Survey	41	42	43	44	45	46	47	48	49	50	51	52	53	54
	How often do you check your e-mail account / facebook account / MSN account?	Approximately, how many hours in total do you spend watching television each week?	How many hours in total do you spend on the Internet at home each week?	How many hours in total do you spend on the Internet at university each week?	How many hours in total do you spend watching television on computer AND simultaneously using the Internet at home each week ?	What is your sex ?	What is your age in years?	Do you currently live with your parent(s)?	How many people are in your household including you?	How many are under the age of 24 including you?	How many brother(s) and sister(s) live with you in this household?	How many hours per month do you work (part-time)?	How much do you earn per month from your work (do NOT include allowance from your family)?	How much money do you get in your allowance or pocket money per month from your family?
101	3	2	2	1	1	1	2	0	2	0	1	4	2	1
102	4	3	4	1	1	1	2	0	2	1	1	5	5	1
103	1	1	1	1	1	1	1	0	1	0	0	5	5	4
104	4	0	6	2	1	1	2	0	1	0	0	2	4	2
105	4	2	2	1	1	1	2	0	2	1	1	0	0	2
106	4	0	6	1	2	0	2	0	2	0	1	1	1	2
107	3	2	3	3	2	1	2	0	2	2	3	3	1	2
108	2	1	6	1	6	1	1	0	2	1	1	5	5	1
109	2	1	5	1	1	1	1	0	1	0	0	0	0	1
110	1	1	1	0	1	1	2	0	2	1	1	5	4	0
111	3	0	2	2	3	1	3	0	0	0	0	0	0	3
112	4	2	6	1	3	1	1	0	1	0	0	4	3	1
113	4	0	6	0	0	0	3	0	2	1	1	1	1	1
114	2	3	5	3	6	1	1	0	1	0	0	0	0	3
115	3	0	5	1	2	0	3	0	0	0	0	0	0	3
116	4	1	1	1	2	1	1	0	1	0	0	3	1	2
117	0	0	0	0	0	0	4	0	3	1	2	1	1	1
118	4	4	3	5	3	0	2	0	2	0	1	0	0	1
119	4	3	5	1	2	1	3	0	2	1	1	0	0	2
120	4	0	4	1	1	0	0	0	3	2	2	2	2	2
121	0	4	2	2	0	0	5	0	2	0	0	2	5	0
122	3	0	0	0	0	0	4	0	2	1	1	0	0	0
123	4	0	5	5	4	1	0	0	1	0	0	0	0	2
124	4	0	5	5	5	0	0	0	3	1	1	0	0	1
125	4	0	3	2	1	1	1	0	2	1	1	2	5	0
126	4	2	2	2	1	1	1	0	1	1	1	3	5	2
127	4	2	4	2	2	1	0	0	2	1	1	0	0	0
128	4	1	2	4	4	0	6	0	2	1	1	0	0	0
129	2	1	4	0	4	0	2	0	3	1	2	0	1	0
130	4	2	3	2	3	0	0	0	1	1	0	0	0	0
131	2	0	4	1	1	1	1	0	2	1	1	0	0	0
132	4	0	5	1	1	1	3	0	1	1	1	0	2	0
133	3	0	4	2	5	1	0	0	2	1	1	0	0	2
134	3	0	6	1	6	0	0	0	2	0	1	0	0	1
135	4	0	3	1	1	1	0	0	3	2	2	0	0	1
136	4	0	2	2	1	1	0	0	2	0	1	2	2	2
137	4	1	4	0	1	1	2	0	3	1	2	3	4	3
138	2	1	4	1	4	1	1	0	1	0	0	5	4	1
139	3	0	4	1	1	1	0	0	0	0	0	0	0	1
140	4	0	1	3	1	1	4	0	2	1	1	2	5	2
141	4	1	4	1	1	1	0	0	3	1	1	3	2	1
142	3	2	3	1	1	1	1	0	3	2	2	0	0	1
143	4	0	4	1	2	1	1	0	4	1	1	3	2	2
144	4	1	6	1	2	1	1	0	1	0	0	0	0	1
145	2	1	3	1	1	1	3	0	2	1	1	0	0	1
146	4	0	4	1	2	1	2	0	2	1	1	2	3	0
147	1	1	6	1	6	0	0	0	2	1	1	5	5	2
148	3	3	3	1	1	1	0	0	2	1	1	1	2	1
149	0	0	0	0	0	0	2	0	1	1	1	1	5	5
150	2	0	4	1	2	0	0	0	3	1	1	3	4	2

No. of Survey	1	2	3	4	5	6	7	8	9	10	11	12	13
	I always try to shop with my parents	I always follow my parents' decisions by buying the same products and brands	What, where, and which brand I buy are very much determined by my parents.	My parents decide all my shopping needs.	My parents accompany me when I make purchases.	I often discuss my purchase plans with my parents.	When I do not understand prices and quality I consult my parents	I never buy any new product until my parents and I have discussed it.	When buying products, I usually buy the ones that I think my friends will approve of.	It is important that my friends like the products and brands I buy.	I like to know that product and brands make a good impression on my friends	I often ask my friends to help me choose the best product	If I don't have a lot of experience with a product, I often ask my friends about it.
151	2	2	1	1	1	1	2	1	1	1	2	3	3
152	1	0	0	0	0	1	3	0	0	1	0	1	3
153	1	1	1	3	3	0	2	0	3	2	2	2	2
154	3	2	0	0	0	0	0	0	2	1	2	4	4
155	3	2	0	0	2	1	0	0	1	1	0	0	4
156	3	3	1	0	3	2	3	0	3	2	1	2	3
157	2	3	2	0	1	1	3	0	2	1	2	2	4
158	0	0	0	0	0	0	1	0	1	0	1	1	1
159	3	1	1	0	0	0	1	0	1	0	0	2	1
160	4	0	0	0	1	4	0	0	2	0	2	1	4
161	1	1	0	0	1	0	1	2	1	0	1	2	3
162	3	1	1	1	1	1	2	2	2	2	2	2	2
163	2	1	2	0	1	1	1	2	3	2	3	1	1
164	3	1	0	1	0	1	1	0	1	2	2	3	3
165	2	1	0	1	2	1	1	1	1	0	1	2	3
166	3	1	1	1	3	2	2	1	2	2	1	3	3
167	0	0	0	0	0	0	0	1	3	2	3	3	4
168	3	1	1	1	2	1	2	1	2	2	2	3	2
169	3	2	2	1	2	3	1	2	2	2	3	3	2
170	2	1	0	1	1	3	3	0	2	1	1	2	1
171	1	1	1	0	2	1	1	1	2	1	2	3	2
172	1	1	1	1	1	1	1	1	2	2	3	3	3
173	2	1	1	1	0	1	1	1	2	0	3	3	3
174	3	3	2	2	3	2	3	2	1	1	2	1	2
175	1	1	1	1	1	1	1	1	1	1	2	3	2
176	4	3	2	2	3	2	4	0	2	1	2	2	1
177	2	3	0	1	0	3	3	2	2	2	3	3	3
178	1	1	3	3	3	1	1	1	1	1	3	2	1
179	2	1	1	1	1	1	1	1	1	1	1	2	2
180	1	2	2	2	2	2	2	2	2	2	3	2	1
181	1	2	1	1	1	1	1	1	3	2	3	3	3
182	1	0	0	0	0	0	0	0	0	0	1	1	0
183	2	1	1	0	1	1	2	0	0	0	1	1	1
184	3	3	3	2	3	3	3	1	2	1	2	2	2
185	0	0	0	0	1	3	4	1	1	1	3	2	4
186	3	3	1	0	3	3	4	0	3	3	3	3	3
187	3	1	1	2	2	3	3	1	2	2	2	3	3
188	0	1	1	4	0	0	0	0	2	4	4	3	4
189	0	1	1	0	0	1	1	0	1	1	1	2	1
190	0	0	3	2	2	1	2	3	2	1	0	1	1
191	3	1	1	1	1	2	2	1	2	2	2	3	3
192	4	2	1	1	0	0	1	2	2	1	1	2	3
193	4	2	1	1	1	3	2	2	3	2	2	3	3
194	4	3	2	1	1	3	3	2	2	1	1	2	2
195	3	3	2	2	2	0	2	2	2	0	0	1	2
196	2	1	1	1	1	3	1	1	2	1	3	1	3
197	1	1	0	0	0	0	1	0	0	0	1	1	3
198	3	2	2	1	1	2	3	0	2	2	3	2	2
199	2	2	1	1	1	1	1	0	1	0	2	2	2
200	2	1	1	1	3	2	3	2	2	1	2	1	3
201	1	0	2	1	0	2	1	0	1	1	2	2	3
202	1	1	1	1	1	3	3	1	3	3	1	3	3
203	1	3	2	1	2	2	1	1	2	2	2	3	3

No. of Survey	14 I often get information about a product from friends before I buy it.	15 To make sure to buy the right product, I often look at what my friends are buying.	16 Television is a good source of product Information.	17 I sometimes check the Internet for product or price information.	18 I consider the Internet is a good source of product information.	19 I feel comfortable buying products on the Internet.	20 We can depend on getting the truth from most advertisements.	21 The goal of advertising is to inform the buyer.	22 I believe advertising offers valuable information.	23 Advertising is generally truthful.	24 Advertising is a reliable source of information about the quality and performance of products.	25 In general advertising presents a true picture of the product being advertised.	26 A company's Web site provides accurate information about its products.
151	2	2	2	3	2	2	2	3	2	2	2	2	2
152	2	0	1	2	1	3	1	1	1	1	2	3	3
153	3	2	2	4	4	2	2	3	1	1	2	1	1
154	3	3	3	4	4	2	3	3	3	1	2	2	2
155	0	0	2	4	4	3	0	4	0	1	1	2	2
156	3	3	3	3	4	2	1	3	1	2	1	1	1
157	2	2	2	3	3	1	1	3	1	1	1	2	2
158	1	0	2	2	2	0	1	2	2	0	0	1	1
159	2	1	0	2	1	0	0	3	0	0	0	0	1
160	2	1	2	4	4	0	0	3	3	1	2	1	1
161	3	3	1	1	2	1	1	3	0	0	1	2	2
162	2	1	3	3	3	3	3	3	2	2	2	2	3
163	1	2	3	2	3	2	2	3	2	2	2	2	2
164	3	2	2	3	2	2	2	3	2	2	2	2	3
165	2	2	0	3	3	1	1	2	0	1	0	1	2
166	3	2	2	3	3	2	1	2	2	2	1	1	2
167	2	1	3	3	3	3	2	2	2	1	2	3	3
168	2	2	2	3	3	3	2	3	3	2	2	2	3
169	2	3	2	3	3	1	1	1	1	2	2	2	3
170	2	0	0	3	1	1	0	0	1	0	1	0	3
171	2	2	1	2	2	1	2	2	1	2	1	2	1
172	3	2	3	3	3	3	2	3	3	1	1	2	3
173	3	1	3	3	3	4	2	2	3	2	2	2	3
174	3	2	2	3	3	2	2	3	2	2	2	2	3
175	3	1	2	3	3	3	3	3	3	3	2	2	2
176	2	1	2	3	2	2	2	3	3	2	2	2	3
177	2	3	2	1	1	2	1	3	3	2	3	2	2
178	1	1	3	4	3	1	2	3	3	1	2	1	2
179	2	1	1	2	2	2	1	2	1	1	1	1	1
180	3	2	1	2	3	2	2	2	1	2	2	3	3
181	3	3	2	3	3	2	2	3	3	2	2	2	3
182	1	1	1	4	4	4	2	2	1	1	1	1	2
183	1	0	3	3	2	1	2	3	2	2	2	2	2
184	2	2	3	3	3	2	2	2	2	2	2	2	2
185	2	3	1	4	3	2	1	3	2	1	0	1	3
186	3	3	3	3	3	3	2	2	2	2	2	2	4
187	3	0	2	2	3	2	2	2	2	2	1	2	3
188	3	3	2	4	4	2	0	2	0	0	0	1	3
189	1	1	3	2	2	2	1	0	1	0	1	1	2
190	2	3	2	1	3	2	1	1	2	3	1	2	3
191	3	2	2	3	2	2	2	2	2	2	2	2	2
192	3	1	2	4	4	3	2	2	2	1	1	1	2
193	3	3	3	3	4	2	1	2	2	1	1	1	2
194	2	2	3	3	3	1	1	3	3	2	2	2	2
195	2	1	0	0	0	0	2	2	2	2	2	2	2
196	2	3	1	3	3	3	3	3	1	2	3	2	1
197	1	0	2	3	2	1	3	1	0	0	0	0	2
198	3	1	2	3	3	2	3	3	3	2	3	2	3
199	2	2	1	3	3	2	1	2	2	2	1	1	3
200	2	1	3	4	4	2	1	1	1	0	0	0	1
201	3	1	1	3	3	3	0	1	1	0	0	1	2
202	3	1	1	3	3	1	1	3	3	1	1	1	1
203	3	2	3	3	3	2	2	2	2	2	2	1	2

No. of Survey	27	28	29	30	31	32	33	34	35	36	37	38	39	40
	Advertising is truth well told.	I feel I've been accurately informed after viewing most advertisements.	Most advertising provides consumers with essential information.	Television advertising does not provide much useful information about products.	I buy only those products or brands that are advertised on television, radio, newspaper or magazine.	Radio, newspaper and television advertisings determine my brand loyalty.	I continue buying the same brands as long as my favourite stars endorse them.	I always consult the media to determine the best buys.	I always look at the advertising before I buy.	Does your household own a computer with Internet access?	How many purchases have you made online in the last 6 months?	The last time you made a purchase on the Internet, how did you pay for the purchase?	How many times have you resold products online in the last 6 months?	Do you have an e-mail account, facebook account and/or MSN account that you use ?
151	2	1	2	2	2	1	1	1	1	0	1	1	2	0
152	0	1	3	3	1	1	2	2	2	0	4	1	0	0
153	1	1	2	3	2	2	0	1	2	0	1	5	0	0
154	2	1	2	2	2	2	1	3	3	0	2	1	0	0
155	0	1	3	2	2	2	2	2	1	0	4	1	1	0
156	0	1	3	3	2	1	1	1	2	0	2	5	0	0
157	1	2	3	3	2	1	0	2	1	0	0	0	0	0
158	0	0	3	3	1	2	0	2	2	0	0	0	0	0
159	0	0	1	3	0	1	0	3	2	0	1	1	0	0
160	0	0	3	3	0	0	0	3	3	0	0	0	0	0
161	0	0	3	3	2	2	1	2	1	0	0	0	0	0
162	2	3	2	3	2	3	2	2	2	0	1	2	3	0
163	2	3	3	2	1	1	2	2	1	1	1	1	0	0
164	1	2	2	2	1	1	2	1	2	0	0	5	0	0
165	1	3	1	3	0	1	0	1	0	0	0	2	1	0
166	2	1	1	3	2	2	1	2	1	0	0	0	0	0
167	2	3	2	3	1	1	3	4	1	0	3	1	0	0
168	2	2	2	2	1	1	1	1	1	0	0	0	0	0
169	2	2	1	2	1	2	2	1	2	0	2	3	2	0
170	0	0	1	3	0	0	0	0	0	0	0	0	0	0
171	1	2	2	3	2	1	0	1	1	0	1	5	0	0
172	2	3	3	1	1	1	2	1	3	0	4	5	0	0
173	2	2	1	1	2	2	1	1	2	0	1	2	4	0
174	2	2	2	2	1	1	1	3	2	0	1	1	0	0
175	2	1	1	3	2	2	2	2	2	0	2	3	0	0
176	1	1	2	1	0	1	2	2	1	0	1	5	0	0
177	2	1	1	1	0	3	1	1	0	1	1	0	0	0
178	2	1	1	3	1	2	0	1	2	0	0	0	0	0
179	1	1	1	2	1	1	2	1	1	0	1	1	0	0
180	1	1	2	1	0	0	1	0	0	1	1	5	1	0
181	2	2	1	3	1	2	2	2	1	0	4	5	0	0
182	1	1	1	2	1	1	1	2	2	0	0	0	0	0
183	2	2	3	1	2	1	0	2	2	0	1	5	0	0
184	1	2	2	2	2	2	2	2	2	0	0	5	0	0
185	0	1	3	3	1	0	3	3	2	0	4	1	0	0
186	2	2	2	2	2	2	2	2	2	0	1	5	0	0
187	1	2	1	3	1	2	1	1	0	0	0	5	0	0
188	1	2	2	2	0	1	0	4	2	0	0	5	0	0
189	1	2	2	2	1	0	0	2	1	0	0	0	0	0
190	3	2	2	1	1	1	1	2	2	0	0	0	0	0
191	1	2	2	1	1	1	2	2	2	0	0	2	0	0
192	2	2	3	3	0	3	1	2	1	0	4	2	4	0
193	1	2	2	3	2	1	2	1	2	0	4	2	0	0
194	1	1	2	3	2	2	2	3	1	1	0	0	0	0
195	2	2	2	2	2	2	1	2	0	0	1	5	0	0
196	2	3	1	2	2	2	1	3	3	0	0	5	0	0
197	0	1	1	2	0	2	0	3	2	0	4	1	0	0
198	3	1	3	2	4	3	3	4	3	0	1	1	1	0
199	2	3	1	2	0	1	1	2	2	0	1	5	0	0
200	0	2	2	3	2	2	0	2	1	0	1	1	0	0
201	1	1	1	3	0	1	0	1	0	0	0	1	0	0
202	1	1	1	3	1	1	0	1	1	0	1	1	0	0
203	1	2	3	2	1	2	2	2	2	0	0	0	0	0

No. of Survey	41	42	43	44	45	46	47	48	49	50	51	52	53	54
	How often do you check your e-mail account / facebook account / MSN account?	Approximately, how many hours in total do you spend watching television each week?	How many hours in total do you spend on the Internet at home each week?	How many hours in total do you spend on the Internet at university each week?	How many hours in total do you spend watching television on computer AND simultaneously using the Internet at home each week ?	What is your sex ?	What is your age in years?	Do you currently live with your parent(s)?	How many people are in your household including you?	How many are under the age of 24 including you?	How many brother(s) and sister(s) live with you in this household?	How many hours per month do you work (part-time)?	How much do you earn per month from your work (do NOT include allowance from your family)?	How much money do you get in your allowance or pocket money per month from your family?
151	3	1	4	1	1	1	4	0	3	2	3	2	2	1
152	4	0	1	0	1	1	0	0	4	0	3	1	3	0
153	3	0	5	0	2	0	3	0	1	0	1	5	5	0
154	4	1	3	1	1	1	1	0	3	1	2	2	3	2
155	2	2	6	0	3	1	1	0	4	2	4	2	5	1
156	3	4	3	1	1	1	1	0	2	1	1	0	0	2
157	4	0	1	0	1	1	1	0	3	2	2	1	5	2
158	4	4	4	4	3	1	0	0	2	1	1	3	5	0
159	4	0	3	0	1	1	0	0	3	1	1	3	3	0
160	3	0	4	1	1	0	2	0	4	1	4	2	5	2
161	1	2	1	0	0	1	4	0	2	2	2	2	2	2
162	3	2	1	3	3	0	0	1	4	5	5	5	5	5
163	3	2	3	1	1	0	3	0	1	0	0	2	2	1
164	4	1	3	1	1	1	2	0	2	1	1	1	1	2
165	4	1	1	1	3	0	2	0	3	0	1	0	0	2
166	3	1	5	2	1	0	3	0	1	0	0	0	2	1
167	4	0	2	5	1	1	2	0	4	3	5	1	4	0
168	4	1	2	2	2	1	0	0	0	0	0	2	2	2
169	3	4	3	1	1	1	1	0	3	1	2	0	0	1
170	4	1	2	1	1	1	1	0	2	1	1	0	0	2
171	4	3	3	1	0	1	1	0	4	2	3	3	2	2
172	3	0	5	1	1	1	0	0	2	1	1	2	5	0
173	4	2	4	1	1	1	0	0	3	2	2	1	2	2
174	3	4	6	1	6	1	1	0	2	1	1	0	0	2
175	4	2	6	1	3	1	4	0	2	0	1	0	3	1
176	3	0	3	1	2	1	5	0	1	0	0	1	1	1
177	4	1	3	1	2	1	4	0	2	0	1	0	0	0
178	2	2	4	1	0	1	1	0	1	1	1	2	3	1
179	4	0	2	1	1	1	2	0	1	1	0	1	2	0
180	4	0	6	1	1	0	0	0	2	0	3	2	2	2
181	3	1	5	1	1	0	0	0	1	0	0	0	0	2
182	4	2	5	4	2	0	0	0	2	1	2	0	0	4
183	4	2	5	1	3	1	1	0	1	0	0	0	0	1
184	3	3	3	1	4	1	2	0	1	0	0	0	0	5
185	3	1	6	4	1	0	0	0	2	1	1	4	5	0
186	4	1	5	1	3	0	0	0	2	0	1	0	0	0
187	4	3	1	1	1	1	1	0	2	0	1	1	1	2
188	4	0	6	2	1	0	0	0	2	1	1	2	2	2
189	2	0	1	4	1	0	2	0	2	1	1	0	0	0
190	3	0	6	0	0	0	4	0	1	1	0	0	0	1
191	2	0	2	1	2	1	1	0	3	1	2	0	0	2
192	4	1	6	1	0	1	2	0	2	1	1	5	5	1
193	1	4	3	1	3	1	1	0	4	1	3	4	3	1
194	2	4	1	1	0	1	1	0	2	1	1	0	0	0
195	2	0	4	1	1	1	0	0	2	1	1	0	0	1
196	4	0	6	5	6	0	2	0	2	1	1	4	5	3
197	4	3	5	1	1	1	2	0	1	0	0	1	1	2
198	4	0	2	1	1	1	2	0	3	1	3	0	0	0
199	3	0	2	1	1	0	2	0	2	0	0	1	1	0
200	4	1	4	1	4	1	3	0	2	1	1	0	0	0
201	4	1	6	3	2	1	3	0	1	1	1	0	0	1
202	3	0	1	1	1	1	3	0	2	2	2	1	1	0
203	4	0	1	1	1	1	2	0	2	2	2	1	1	2