



LUND UNIVERSITY
School of Economics and Management

**Influence of gender difference in reference group on
Smartphone users' purchasing decision-making process**

Master Level - Degree Project
in International Marketing and Brand Management

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Abstract

- Title:** Influence of gender difference in reference group on Smartphone users' purchasing decision-making process
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- Authors:** Ran Jin and Weeramon Punpanich
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- Keywords:** reference group, Smartphone, consumer behavior, purchase decision-making process
- Background:** Smartphone becomes the popular item nowadays and there are some studies indicated that reference group could influence mobile phone's purchasing decision-making process. Theoretically, previous studies about reference group have shown that demographic factors of consumers such as age and nationality can affect the reference group influence. However, none of them have studied the demographic differences in reference group.
- Purpose:** This study explores the impact of different genders in different reference groups on Smartphone users' purchase decision-making process and its impacts on different types of influences.
- Method:** Reference group influence on Smartphone users is explored by questionnaire method. The data were collected via online survey. The targeted respondents are Smartphone users age from 25 to 34. Univariate technique is the main technique of data analysis.

Conclusion:

In fact, the influences which are caused by reference group on Smartphone users decision making process are much higher than what we expected. We have found out that male referents have higher influences during current Smartphone users purchasing decision making process. Male referents also have stronger informational and utilitarian influences but female referents have higher value-expressive influences.

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Chapter 1: Introduction

1.1 Background

Smartphone

Nowadays, mobile phone, or cell phone, has almost become a necessity product in people's social life among the world. According to the report from Egham (2010), from the first quarter of 2009 to 2010, the sales of mobile phone increased about 17 percent. It clearly shows the continuous increasing demands on mobile phones in recent years. The ubiquity of the mobile phones caused the incredible importance of introducing Smartphone where it is one of the last remaining areas for wireless companies to grow and expand their business (CFI Group, 2009). Moreover, the dramatic and continuously development in technology contribute a lot in improving the functions of Smartphone which offers advanced functions that being used more like mini-computers rather than simpler peers, such as sophisticated connectivity abilities (CFI Group, 2009).

Schonfeld (2010) reports that "The iPhone saw the biggest gain (6.2 percent), compared to smaller but roughly equal jumps by Blackberry and Android (up 3.3 and 3.4 percent, respectively). All together, www.Garner.com estimates 172 million Smartphones were sold last year, up to 24 percent. Smartphones represented 14 percent of total mobile handset sales last year, up from 11 percent in 2008." The rapid growth in Smartphone sales and market shares also could be seen as a proven of the increasing of Smartphones popularity among consumers in recent years.

The target groups of Smartphone users when it first came in the market was actually the business users, who has the need to get connected to the internet anywhere and anytime in order to manage email, calendars to get updated in time (CFI Group, 2009). However, during the market development of Smartphone, the appearance of new consumers stimulates a new market for Smartphone in which the function development could not be seen as the main attraction to consumers, many other aspects need to be concerned as well. Therefore, companies should create the marketing strategy that can best satisfy their new defined target consumers that if they want to gain higher market share and bigger sales volume. Various factors that influence Smartphone consumer's purchase decision making should be taken into account.

Reference Group

Reference group has been introduced and studied as another factor besides functional technology which also has influences on target consumers' purchasing decision-making. It is called "reference group influences". Reference group, as being defined by Stafford (1996), is the group that an individual actually belongs, wants to belong, or not to belong. Murali et al. (2005) indicated that reference group influence or social influence is important in consumers' decision-making process, which might be accepted by most consumer behaviour models. In addition, a significant number of studies consider reference group influences as one of the most crucial factors which affect the consumer purchase decision-making process. The interrelated relationship between reference groups and consumer's purchasing decision making has been brought out, and the essential of study those together has also be suggested (Yang et al., 2007).

1.2 Problem Discussion

Practically, according to Yang et al.'s study (2007:320) about mobile communication, recently, "some companies are competing by promoting their high tech features. Others compete by using the so-called "star power" of celebrity endorsement (i.e., movie stars) of their products". This shows that the reference group concept has been acknowledged its advantages among professional marketers as a tool to win over their competitors. Marketers have used different stars (reference group) to attract different targeted consumers as well as communicated their messages not directly to their consumers but via people who have influences toward them. (Yang et al., 2007) This can be implied that the more marketers know about reference group knowledge, the more effective marketing strategy they can design.

Theoretically, there are many studies concerning the relationship between reference group and consumer behaviour. Most of previous reference group studies are more concerned about reference group influences on the process of consumers' decision making (Bourne, 1957; Witt, 1969; Bearden & Etzel, 1982; Brinberg & Plimpton, 1986; Childers & Rao, 1992; Mascarenhas & Higby, 1993; Martin & Bush, 2000; Yang et al., 2007). Some of them are focus more on the consumers' perspective, for example, different segments of consumers, e.g., farmers and scientists (Hyman & Singer, 1968), physicians (Coleman et al., 1966), auto owners (Grubb & Stern, 1971), cosmetic users (Chao & Schor, 1998), students and housewives (Park & Lessig, 1977; Bearden & Etzel, 1982); More specifically, there also some studies that want to investigate susceptibility to reference group influence in order to confirm that these

consumers' susceptibility are various due to their diverse demographic factors. Nationality and age are the two main factors that have been studied in reference group literature (Yang et al., 2007; Khan & Khan, 2008). Some of them studied the different influences between different kinds of reference groups (Deutsch & Gerard, 1955; Burnkrant & Cousineau, 1975; Childers & Rao, 1992; Mascarenhas & Higby, 1993; Yang et al., 2007). Moreover, in the business field, the studies related to reference groups has been applied into product level that different types of products lead to different influence of reference group (Park & Lessig, 1977; Bearden & Etzel, 1982; Makgosa & Muhube, 2007). Even though, recently, there are quite a lot of studies about the effect of reference group towards consumers' purchase decision making process, as far as we have explored in this area, we cannot find the literature concerning the possible factors from referent's perspective. We think that there are still more aspects need to be explored from the perspective of reference groups. The deeper understanding from the inside of reference groups with the link between their target consumers would be helpful to build the base of creating more appropriate marketing strategies.

Moreover, from the study of reference groups, we found that susceptibility and reference group are interconnected and the terms of susceptibility has been emphasised in relation with different types of products. Bearden and Etzel (1982) stated that consumers tend to have different susceptibility from reference group influence according to different product that they intend to buy. And we found that people who intent to purchase Smartphone is most likely to be influenced by reference group due to its high susceptibility (Makgosa & Mohube, 2007).

1.3 Knowledge gap

Since the "differences of consumers" has been widely studied in previous research, from our point of view, we consider shifting the focus from consumer to reference groups. In other words, "differences of reference groups" is decided to be an important subject to be explored in our study. Because it might somehow affect different types of reference group influences as well as consumer purchase decision-making process. To conclude, our focus of study is about demographic differences within reference group and its impacts on consumers, rather than the differences from consumers' side. We assume that demographic factors such as nationality, age, and gender which create different impacts among consumers should also applicable among different referents. So, we would like to explore reference group with different demographic backgrounds, and "Gender" will be selected as the main study topic due to the fact that it is the area has not been touched in the existing research.

Moreover, under the relevant study in product level, Yang, He and Lee (2007) have conducted a study in mobile phone industry. However, concerning about the rapid increasing in Smartphone industry and its differences towards mobile phones. Smartphone which under the mobile phone category will be used as the proper products in order to help to get better findings in our study and to produce more knowledge into the area of Smartphone industry.

1.4 Research Question

In order to clearly answer the purpose of this thesis, the main research question which will be investigated during the research process is:

“How does gender of reference groups impact the influences on consumers?”

1.5 Purpose & Objectives

The purpose of our research is to explore the impact of different genders in different reference groups on Smartphone users' purchase decision-making process and, also, to explore such impacts on different types of influences.

Our research has three main objectives:

1. To investigate whether different reference groups in different genders have different influences on different stages of Smartphone users' purchasing decision-making process;
2. To explore which reference group in which gender has more interpersonal influences on Smartphone users' purchasing decision making. Interpersonal influences are informational influence, utilitarian influence and value-expressive influence.
3. To identify the importance of reference groups when compared with other chosen important factors that influence mobile phone consumers' purchasing decision-making, including having the newest technology, the best design and appearance, the lowest price among similar products, and the most attractive calling plan package associated.

1.6 Terms of Definition

We will now define some of the most important terms that will be used in our research:

- **Purchase decision-making:** “is the decision making process undertaken by consumers in regard to a potential market transaction before, during, and after the purchase of a product or service” (www.wikipedia.com)
- **Reference group:** “are groups that people refer to when evaluating their own qualities, circumstances, attitudes, values and behaviours” (Thompson & Hickey, 2005).
- **Smartphone:** “is a mobile phone that offers more advanced computing ability and connectivity than a contemporary feature phone” (Nusca, 2009).

1.7 Structure of the Thesis

Our thesis is divided into six chapters. In the first chapter the background of the topic we have chosen to study is introduced, followed by a problem discussion part, knowledge gap, research questions and the purpose and objectives of this thesis. Chapter two is the literature review and Chapter three is the methodology part. The information used in these two chapters is from journals and textbooks in the library of Lund University. The fourth chapter is the empirical analysis of this research and the discussion. The conclusion part will be conducted at the end of our research, which consists of three sections: conclusion, implications and limitations and recommendations.

Chapter 2: Literature Review

The literature review is the foundation of our thesis. The theoretical framework for our study will be illustrated through this chapter. Ideas and theories that help us to build our hypotheses are presented. Therefore, the literature review provides us the previous knowledge about all these theories that related to our study. We divided this chapter into four parts which are mobile communication and Smartphone, theory of gender differences, consumer purchase decision-making process, and the theories of reference group.

2.1 Mobile communication and Smartphone

The popularity of using mobile phones has been discussed in the introduction. It becomes the very important item for most people in their daily lives. Mobile communication is concerned by people and society. It will lead to the high competitions between different mobile phone producers. Appropriate and effective marketing strategies are needed to increase sales and gain higher market shares. Moreover, the research studies regarding to various issues which related to mobile communication has increased recently (Massoud & Gupta, 2003; Siau & Shen 2003; Dai & Palvia, 2009; Sheng et al., 2010). Kumar (2004) has explored the competitive landscape of the mobile phone market and it summarized the mobile communication industry which covered major topics in mobile communication area, such as mobile commerce, mobile market, as well as mobile applications. Massoud and Gupta (2003) have studies mobile communication relating to marketing perspective, which focus on consumer's perception and attitude towards mobile communication. However, as we found, there is only one study focus on the reference group influence on mobile consumers, which is the research conducted by Yang, He and Lee (2007). It focuses on culture differences which investigated between United States of American and Chinese consumers.

From the survey which is conducted by Massoud and Gupta (2003), it shows that the solutions for achieving success e-commerce cannot simply apply to mobile commerce. Recently, Wen and Mahatanankoon (2004) studied the operation modes and applications of m-commerce. Chan and Chen (2003) have concluded five important factors for achieving success mobile business which emphasis that the good web-based support system is becoming an attractive factor in mobile phone industry. The study of Smartphone indicates that Smartphone is the next generation of mobile phone which contains enhanced wireless capability and an advanced operation system.

And the motivation of the mobile industry nowadays is to provide better and attractive offers for consumers and enterprises to use Smartphone (Zheng, P. & Lionel M. N., 2006). Thus, the importance of Smartphone in mobile industry could be confirmed and our study could be seen as an attempt to explore some appropriate solution factors from different aspects for mobile commerce.

2.2 The theory of gender difference

Some previous researches have examined the impact of gender in social influence. There is one popular topic has been brought out recently, which focus on gender difference in influenceability. Even though the research regarding this topic is limited, it shows that the male and female have different abilities to influence others and these differences relates to gender differences in power. (Carli, 1999)

Johnson (1976) has introduced three main powers and applied them into gender, which is expert, legitimate and referents power. In her study she predicted that generally men are more considered more expert than women, so they should have greater expert power. They should also have higher legitimate power because it seems like men have more authority in the society than women. For referent power she predicted that both men and women have similar level of such power, but women might prefer to use such power compare to men due to the natural of referents power is to maintain relationships. Therefore, in her study, she concludes the reference power as the only power that available to women but not dominated by women.

Later, Guttentag and Secord (1983) stated in their study that men gain their power from structural advantages and external resources while women gain it from domestic roles and the relationships with others. Since referent power is based on relationships, it is more characteristically connected to women more than men (Eagly, 1987). Although how much power the individual has is affected by situational factors, but in general, it shows that “men possess higher amounts of expert and legitimate power than women do, and women possess higher amounts of referent power than men do” (Carli, 1999).

Some other studies illustrate that women are considered as being warm, expressive, compassionate, and understanding (Broverman et al., 1972; Martin, 1987; Ruble, 1983; Williams & Best, 1990). People feel more positive toward women than men and, also, prefer to like women to men. (Eagly & Mladinic, 1989) Thus, Women are

perceived more preferable when showing warmth, friendliness. However, men have more expert and legitimate power than women so they are able to portray their competence, leadership, and assertiveness. (Carli, 1999; Rudman, 1998)

2.3 Purchase decision-making process

Understanding consumers' purchase decision-making process allows marketers to gain more knowledge about their consumers. Moreover, it can be a foundation for them to create more suitable marketing strategies for their target consumers. If marketers understand this process of their consumers, they will know how their consumers search for information before buying, which criteria can encourage them to buy, and what factors influence their purchase decision-making. (Solomon et al., 2010) Literatures show that there are many factors which could have an impact on consumers' purchasing decision. Most consumer behaviour models support that reference groups play an important role in many stages of consumers' decision-making process (Mourali et al, 2005). Consumers' decision-making process is divided into three or five stages. According to Ferber (1962), these three distinct stages are (1) gaining buying attention, (2) specification among alternative forms of action, and (3) the actual choice, which the first stage of decision making can be influenced by reference groups. Venkatesan (1966) also point out in the study that peer groups and acquaintances might be important influencers and sources of information during the stage of gaining attention in decision-making process. Nevertheless, in many consumer behaviour studies, the classic view of consumer behaviour principle is the five stage of decision-making model, which is based on the idea that considers consumers as an information-processing machine. The classical five stages of consumer decision-making process are (1) problem recognition, (2) information search, (3) alternatives evaluation, (4) product choice, and (5) post-purchase evaluation. (Solomon et al., 2010) (refer to figure 2.1)

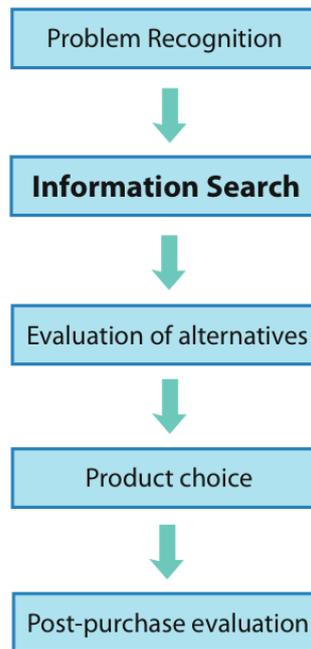


Figure 2.1 - *The Five-stage Classical Model of Consumer Decision-Making Process*

2.3.1 Problem recognition

Problem recognition is the first stage of consumer decision-making process. It happens when consumer realise that there are some differences between their actual state and ideal or desired state. When facing with problems of these differences, consumers will try to seek for solutions to solve these problems. There are two types of the problems, which are need recognition and opportunity recognition. The decrease of consumer's actual state's quality is result in need recognition. In contrast, when the quality of consumer's ideal state increases, opportunity recognition can be appeared. (Solomon et al., 2010) It can be implied that opinions of other people can have an impact on encouraging consumers' awareness of the problems.

2.3.2 Information Search

Information search is the stage when consumers are searching for more knowledge in order to solve the recognised problem. To help themselves to make a decision, consumers will look for information from their environment. (Solomon et al., 2010) Information search process can be classified into two types. Firstly, the pre-purchase search process is the process when consumers seek for the information to satisfy their

needs or solve their problems, which begin after consumers realise their needs or problems. Secondly, an ongoing search is the process when consumers browse the information for their pleasure and to keep them up-to-date with new products or current situations of the products' market. (Bloch et al., 1986)

There are two types of information source; which are internal and external. Internal information sources are thoughts and opinions about different products in the market, which come from consumers themselves. Internal information sources are different among different consumers due to the differences in each individual's cultural and environmental backgrounds. When consumers want to buy, they will use their knowledge to make a buying decision. However, only internal source of information is not enough for some consumers. External information sources are also needed to enhance their knowledge before buying. Celebrities, media (promotions and advertisement), close people (family, peers, and colleagues), or by watching common people are examples of external sources of information. (Solomon et al., 2010) External information sources can be called reference groups for consumers. Therefore, It can be said that reference groups might be one of the important sources of information that influence consumers' purchase decision-making process at the information seeking stage.

2.3.3 Evaluation of alternatives

In this stage, consumers have to evaluate their available alternatives that they have received from the previous stage, information search. (Solomon et al., 2010) Since there are a great number of brands in the marketplace, consumers will create their own evoke set which consists of brands which are already in their minds. (Jobber, 2007) The brands that are included in the consumers' evoke sets will have more opportunities to be selected by the consumers.

2.3.4 Product choice

Consumers have to choose one brand among after evaluating their brand choices from the previous stage. Choosing product choice can be either a simply and quick or a complex stage. (Solomon et al., 2010) Consumers' product choices can be affected by various source of information during the process of decision-making.

2.3.5 Post-purchase evaluation

Even though the buying decision has finished, consumers often still evaluate their decisions. This is because they want to feel confident about their choices and to ensure that the product can solve their problems or satisfy their needs. Jobber (2007) stated in his study that the quality of product and service is a main determinant in post-purchase evaluation. Thus, it could be seen that reference group is less important for the decision-making process when compared with the quality factor of products and services during the stage of post-purchase evaluation.

During the process of consumers' purchase decision making, the importance of reference groups has been showed in the earlier stage of information seeking and the later stage of alternative evaluation and product choice. These two stages have been decided as the main stages that our study will draw attention to.

2.4 The theory of reference group

In the marketing field of study, theories about reference group have a significant effect on consumers' behaviour. A larger quantity of academic writings has studied reference group and its influences. Reference group consists of three groups, which are group that a person actually belongs, desire to belong, or not to belong (Stafford, 1966). The definition of a reference group is "a group of people that significantly influence an individual's behaviour" (Bearden & Etzel, 1982:184) Some researcher have also defined reference group as the foundation of an individual's behaviour which is formed from one's attitudes and values. (Schiffman & Kanuk, 2007; Hawkins et al, 2006) Stafford (1966) pointed out that most studies from the social psychological field mentioned that the basis of people's norms, values, and point of views is reference group. Therefore, reference group deserves noteworthy attention thanks to their important impacts on consumers' behaviour. (Burnkrant & Cousineau, 1975; Stafford & Cocanougher, 1977)

The fact that reference groups have an impact on purchasing behaviour of consumers in several aspects has been show in a considerable numbers of past studies, especially in terms of consumers' purchase decision-making process. (Bourne, 1957; Witt, 1969; Bearden & Etzel, 1982; Brinberg & Plimpton, 1986; Childers & Rao, 1992; Mascarenhas & Higby, 1993; Martin & Bush, 2000; Yang et al., 2007) Moreover, the difference of influences from different types of reference group was studied in numerous researches as well. (Deutsch & Gerard, 1955; Burnkrant & Cousineau,

1975; Childers & Rao, 1992; Mascarenhas & Higby, 1993; Yang et al., 2007) Reference group also influence consumer's brand preference and brand choice (Stafford, 1966; Witt, 1969; Bearden & Etzel, 1982), consumers' product selection (Bourne, 1957; Bearden & Etzel, 1982), and consumers' purchasing behaviour (Venkatesan, 1966; Burnkrant & Cousineau, 1975; Calder & Burnkrant, 1977; Heckler et al., 1989; Bearden et al., 1989; Hawkins et al., 2006)

2.4.1 Types of reference group

Reference group can be classified into two types which are normative and comparative referents. Firstly, normative reference groups include parents, peers, teachers, and colleagues. Through direct interaction with normative reference groups, people learn norms and developing their values and attitudes internally (Childers & Rao, 1992; Subramanian & Subramanian, 1995; Bristol & Mangleburg, 2005). There are several researches that tried to understand normative reference group influences toward purchasing behaviour or purchasing decision-making process of consumers. The examples of these studies are how parents and peers influence products and brands' purchase decision of consumers (Bearden & Etzel, 1982; Childers & Rao, 1992), how peers influence teen's susceptibility and attitudes towards retailer choices (Mangleburg et al., 2004). According to Childers and Rao, (1992:198), "how reference group influence may vary depending on whether the influence is exercised by a member of a peer group or by a family member."

Secondly, comparative reference groups include entertainment stars, celebrities and sport heroes. Despite these comparative reference groups' fairly socially distance from individuals, each individual regards these comparative groups as their achievement that they look up to. (Subramanian & Subramanian, 1995; Martin & Bush, 2000) The relationship between these reference group and consumers are indirect. This is because of their characteristic of being socially distant. Comparative referents influence consumers through media or marketing communication such as television, advertisement, news, magazines, events, and so on. However, socially distant reference groups or comparative referents can have an impact on consumers only when consumers' attitudes toward them are favourable. (Cocanougher & Bruce, 1971)

Many journals have shown the comparison between normative and comparative reference groups, for instance, how peers, parents, and media influence teen's clothing purchasing behaviour (Mascarenhas & Higby, 1993) and how parents, peers, and media influence adolescents' brand sensitivity in apparel purchasing (Lachance et al., 2003). Mascarenhas and Higby (1993) highlighted in their study that parent and media informative influences exceed almost all other factors. Furthermore, parents play the most important role in teens' shopping during special shopping.

Based on the prior discussion, it can be concluded that there are three main reference groups; parents, peers, who are normative reference groups, and media, which is considered as comparative reference groups' channel to influence consumers. Therefore, in our research, reference group will be divided into these three groups - parents, peers and media, to investigate the different influences on the Smartphone consumers' purchase decision-making process. And we are also concluded the purchase decision making process into two stages. The earlier stage is refer to information seeking stage, and the later stages are called decision making stage in our study. Therefore, combined with the theory of gender differences, our first two hypotheses are:

Hypothesis 1a: *Male Referents have a higher influence on Smartphone users in their earlier stage of purchase decision-making process than female referents.*

Hypothesis 1b: *Male Referents have a higher influence on Smartphone users in their later stages of purchase decision-making process than female referents.*

2.4.2 Types of reference group influence

There are two schools of theory for reference group influences. One classified reference group influence into three types of influences, which are information, utilitarian, and value-expressive (Deutsch & Gerard, 1955; Bearden & Etzel, 1969; Childers & Rao, 1992; Rozario & Choudhury, 2000; Martin et al., 2008; Solomon et al, 2010). While another theory explained that there are two type of reference group influence as normative and informative influence (Burnkrant & Cousineau, 1975; Park & Lessig, 1977; Bearden & Etzel, 1982; Bearden et al., 1989) In fact, these two classifications are only different in the level of classification but provide the same contents. According to the theory about the later classification, normative influence includes two parts which are utilitarian and value-expressive influence. (Park & Lessig, 1977; Bearden & Etzel, 1982; Bearden et al., 1989)

2.4.2.1 Informational influence

Informational influence happens when consumers want to make an informative decision. Under the uncertain situation, consumers will search for more knowledge from available sources of information. The information source will be more accepted if it comes together with credibility and expertise (Bearden & Etzel, 1982) or can enhance consumers' capabilities and knowledge about the surroundings (Kelman, 1961). However, according to Yang et al. (2007:324), there are some limitations of informational influence as stated that "The information influence only functions when the individual regards the behaviour and value of reference group members as potentially useful information and takes them into consideration".

2.4.2.2 Utilitarian influence

Utilitarian influence can be explained by the pervasive 'compliance process'. (Kelman, 1961) According to Park and Lessig (1977), when buying an individual may comply with others' expectations or preferences in order to avoid punishment or to receive rewards. Consumers will be willing to meet others' expectations under the condition that their behaviours might lead them to receive rewards or avoid the punishment. (Bearden & Etzel, 1982) The example of this influence is when an advertisement shows the consumers that they will be acknowledged after using a certain products.

2.4.2.3 Value-expressive influence

Value-expressive influence can be expressed as identification. This manner appears when one individual follow others' behaviours and opinions since these behaviours and opinions can fulfil his/her self-defining relationship. (Brinberg & Plimpton, 1986) Yang et al. (2007) stated that people would adjust themselves in the similar way as reference groups, which they desired to belong, did in order to express themselves in the society. This finding is in line with Park and Lessig (1997) who portray in the study that people follow their reference group steps to enhance their ego or to express their personality.

"The importance of the concept (of reference groups) for marketing strategists lies in the understanding of why behaviour develops as it does rather than in the ability to influence behaviour." (Engel et al., 1973:176) Thus, the theory of social comparison which was introduced by Festinger (1954) has been used to support the value-

expressive influence. It gives explanation to the reason why reference groups influence purchasing behaviours and why reference groups are used as the source of information (Moschis, 1976). The motivation for social comparison leads an individual to choose reference groups in order to compare with his/her own self. (Jones & Harold, 1967) In social comparison or reference group comparison there are two processes that allow consumers to gain information regarding their beliefs, abilities, and emotions. These two processes contain reflective appraisal and comparative appraisal. These appraisals will be used to evaluate reference groups while observing reference groups' members' behaviours. (Moschis, 1976)

Reflective and comparative appraisals relate to types of reference groups which are normative and comparative reference groups. Based on reflective appraisal people will evaluate others' values and they are likely to be more sensitive to the determination of people they depend on. (Moschis, 1976) This appraisal can be considered as the appraisal of normative reference group such as parents and peers. Another type of appraisal is comparative appraisal which is defined as "evaluation of one's own relative standing with respect to an attitude, belief, ability, or emotion by observing the behaviour of appropriate reference persons" (Jones & Harold, 1967:709). This observation can be made at a distance. (Moschis, 1976) Hence, this can be considered as comparative reference group's observation. People will look up to their favourite sport players or celebrities with admiration via media channels; for example, advertisement, magazines, or meeting these reference groups by chance.

2.4.3 Reference group influences on consumers' purchase decision-making

As mentioned, many academic journals have shown the reference groups' influences on purchase decision-making process of consumers. However, the extent of influences can be various which are depended on several factors in consumers' environment.

There are numerous perspectives of researches in the subject of reference groups' influences. Some scholars focus on the reference groups' influences on decision-making process of consumers (Stafford, 1966; Burnkrant & Cousineau, 1975; Park & Lessig, 1977; Bearden & Etzel, 1982; Bearden et al., 1989; Yang et al., 2007). Some studies are only about normative influence (Wooten & Reed, 2004; Martin et al., 2008) while some researchers are only about informational influence (Martin et al., 2007). Some of the studies have been applied those reference groups influences into

different segment of consumers, such as cosmetic users and students (Childers & Rao, 1992; Mascarenhas & Higby, 1993; Mangleburg et al., 2004; Makgosa & Mohube, 2007; Schiffman & Kanuk, 2007).

Furthermore, The term of Susceptibility to influence has been used as a new guild line in exploring reference group influences. It explains that to what extent that an individual willingly accept information about buying decision from other people. (Bearden & Etzel, 1982) Some scholar suggested that it could be various in consumers' response toward reference group influence or social influence (Mourali et al., 2005) which Bearden et al. (1989) also supported this statement. According to the study, the concept of susceptibility has been proved that influences can be different in each individual. (Bearden et al., 1989) The differences and similarities among influences from others on a person's beliefs, attitudes, and behaviours are regarded as manners of a person's willingness to comply the group (Kelman, 1961).

Several factors such as nationality, age, gender, occupation, social status, income, or product category are probably the cause of those variations. There are many literatures applying those variations while studying of reference group influences. For instance, in terms of nationality, there are several journals focused on consumers from different culture backgrounds or countries (Childers & Rao, 1992; Yang et al., 2007). In terms of age, Park and Lessig (1977) portrayed the comparison of the susceptibility to the influence of reference groups on brand selection between youths and elders. The findings show that there are considerably differences between two groups of people whose ages are different in reference group influence. Concerning gender, Khan and Khan (2008) conclude that there are differences in normative social influence between male and female consumers on designer labelled clothing buying decision.

Later on, the study of reference groups influences has been extended into product level, which is to emphases that reference group's influence varied across different types of products (Bearden & Etzel, 1982; Childers & Rao, 1992). Based on the theory of conspicuousness, there are four types of products which are publicly consumed luxuries, privately consumed luxuries, publicly consumed necessities, and privately consumed necessities. In the study by Makgosa & Mohube (2007), mobile phone is grouped in a private consumed luxury. Be aware of the differences between mobile phone and Smartphone, we consider Smartphone should be grouped as a public consumed luxury which is observed when it is consumed and is not commonly owned or used (Makgosa & Mohube, 2007). From the study, it shows that people will

be more susceptible to reference group influence toward the publicly consumed products (Bearden & Etzel, 1982; Makgosa & Muhube, 2007), and the luxury products are more conspicuous than necessities products (Bearden & Etzel, 1982; Childers & Rao, 1992). It could be implied that Smartphone consumers are more susceptible to reference groups when comparing to other type of products.

According to above theories, the other three hypotheses regarding to reference group influences are:

Hypothesis 2a: *Male Referents have a higher informational influence on Smartphone users' purchase decision-making process than female referents.*

Hypothesis 2b: *Female Referents have a higher utilitarian influence on Smartphone users' purchase decision-making than male referents.*

Hypothesis 2c: *Female Referents have a higher value-expressive influence on Smartphone users' purchase decision-making than male referents.*

Chapter 3: Research Methodology

The importance of choosing appropriate and consistent methodology for research study has been emphasized a lot by academic researchers. Kent (2007) mentioned that “Academic research is judged on its scientific rigor”. In other words, the methodology that is used in research studies could be defined as a measurement of evaluation the quality of research. Therefore, the methodology we considered in our research has been well selected in order to present the best result of our study.

As presented in chapter 1, the purpose of our research is to explore the impact of different genders in different reference groups on Smartphone users’ purchase decision-making process and to explore such impacts on different types of influences. Moreover, there are three objectives of our research, which are:

1. To investigate whether different reference groups in different genders have different influences on different stages of Smartphone users’ purchasing decision-making process;
2. To explore which reference group in which gender has more interpersonal influences on Smartphone users’ purchasing decision making. Interpersonal influences are informational influence, utilitarian influence and value-expressive influence.
3. To identify the importance of reference groups when compared with other chosen important factors that influence mobile phone consumers’ purchasing decision-making, including having the newest technology, the best design and appearance, the lowest price among similar products, and the most attractive calling plan package associated.

This chapter explains the methodology that we applied in our research to achieve these purpose and objectives as well as the reason why the selected methods should fit the best with our research. The philosophical underpinnings will be followed to further explain our study question. To investigate our study problem properly, a suitable ontology and the associated epistemology will be taken in consideration. Then, the research approach of our study will be presented in detail. Followed by the methods of data collection will be introduced and explained which also shows our research process, such as sampling, questionnaires. The reliability and the validity of our research will be mentioned at the end of this chapter.

3.1 The Ontology and Epistemology of this study

As Bryman and Bell (2007: 25) pointed out that, different philosophical assumptions will feed in the formation of research questions and research is carried out, for example, epistemological and ontological assumptions require different approaches to the design of researches as well as the data collection. In other words, appropriate research methods are needed for emphasizing the object of research study.

According to Easterby-Smith et al. (2008: 60), Epistemological is defined as “set of assumption about the best way of inquiring into the nature of the world”, which is normally classified into positivism and interpretivism. Positivism states that “the social world exists externally, and that its properties should be measured through objective methods”. It states that natural science methods should be used to explain social behaviours (Easterby-Smith, 2002; 57). Bryman and Bell (2007) has also defined the positivism as an approach which concludes the world is constructed with laws and elements that are measurable, independent from social factors and that can be studied with an objective point of view. Our research is actually based on the existing theory of consumer decision making and reference groups; therefore, the positivist approach is considered as the most suitable approach for it.

Ontology is the “assumptions about the nature of reality” (Easterby-Smith, 2002; 60), which is categorized into objectivism and constructivism (Bryman & Bell, 2007; 22). According to Bryman and Bell (2007: 22), “Objectivism is an ontological position that asserts that social phenomena and their meanings have an existence that is independent of social actors. It implies that social phenomena and the categories that we use in everyday discourse have an existence that is independent or separate from actors”. Based on the nature of our research question, it incorporates a view of social reality as an objective reality; we assume that Objectivism is more suitable for it, as the purpose of our research is to explore the impact of different genders in different reference groups and to explore such impacts on different types of influences. It holds the view of objectivism that there is “a reality external to social actors” (Bryman and Bell, 2007: 22).

3.2 Research Approach

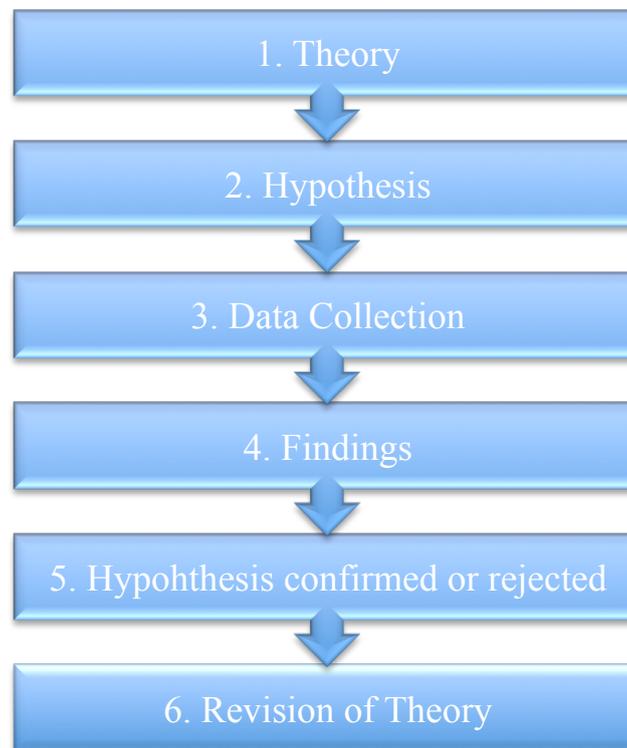


Figure 3.1 - *Research approach*

There are two main approaches, deductive and inductive (Saunders et al., 2009). According to the philosophy assumptions which are discussed above, the deductive approach will be used in this study, which is explained that “the purpose of theory is to generate hypotheses that can be tested and that will thereby allow explanations of laws to be assessed” (Bryman & Bell, 2007:16).

After confirm the purpose of our research is to explore the impact of different genders in different reference groups on Smartphone users’ purchase decision-making process and to explore such impacts on different types of influences. Hypothesis will be set based on theory within the field of theory of different genders, reference groups and consumers’ purchasing decision-making. In order to test the hypothesis, the questionnaire is conducted to measure the different levels of influences on consumers’ decision making by different reference groups in different genders. The collection of data by questionnaire is considered as quantitative nature, which double confirmed that our research study is to be seen as deductive approach.

3.3 Research Design

Saunders et al. (2009) mentioned that the research design could be divided into three types: descriptive, exploratory and explanatory. Descriptive study aims to form an accurate representation of person, events or situation where the problem is well known (Saunders et al. 2009; Ghauri & Gronhaug, 2005). Moreover, as described by Kinnear and Taylor (1996), a descriptive conclusive research design is to illustrate the marketing phenomena characteristics and determine how much the marketing variables could be involved. The exploratory study puts emphasis on seeking new insights in an issue or phenomena, and to ask questions to access it in a new light (Saunders et al., 2009; Robson, 2002). On the other hands, explanatory study focuses on establishing relationships between variables by studying a problem or a situation (Saunders et al., 2009). It is also called causal study which explains the cause-effect relation and the extent of it (Ghauri & Gronhaug, 2005).

Therefore, our study will start from exploratory to descriptive, and then explanatory by gathering and studying the existing theories about our topic in order to understand the related phenomenon, followed by structuring specific theories and information in order to come out with specific hypotheses, test them, and then examine the relationship between the variables studied, as well as to measure outcomes.

3.3.1 Hypothesis

Hypothesis will be the starting point of our research. According to previous studies, reference groups can influence consumers' purchasing decision-making. However, this kind of influences might be different due to the effect of different genders in certain reference groups as well as the different product levels, which has not been mentioned or studies yet. Therefore, our study will focus on investigating the theory of reference groups in gender differences and in Smartphone market by testing the hypothesis.

This research employs the deductive method, which is described by Bryman and Bell (2007:11) that “represents the commonest view of the nature of the relationship between theory and research”. According to the process of deduction, some hypotheses will be formed based on the chosen theory, and then conduct a study to test.

The hypotheses which are conducted by the theory of different genders, consumer purchase decision making, and different types of reference groups and will be tested in this research are:

Hypothesis 1a: *Male Referents have a higher influence on Smartphone users in their earlier stage of purchase decision-making process than female referents.*

Hypothesis 1b: *Male Referents have a higher influence on Smartphone users in their later stages of purchase decision-making process than female referents.*

The hypotheses which are conducted by the theory of different genders, different types of reference groups and different reference groups influences and will be tested in this research are:

Hypothesis 2a: *Male Referents have a higher informational influence on Smartphone users' purchase decision-making process than female referents.*

Hypothesis 2b: *Female Referents have a higher utilitarian influence on Smartphone users' purchase decision-making than male referents.*

Hypothesis 2c: *Female Referents have a higher value-expressive influence on Smartphone users' purchase decision-making than male referents.*

3.4 Primary and secondary data collection

Using secondary data is more time efficient (Kerin et al., 2003) and it can “facilitate the decision making for the researchers because as it provides a better understanding of a situation or phenomenon” (Smith & Albaum, 2005). However, Ghauri & Gronhaug (2005) indicated that secondary data refers to all previous collected data within the subject. Because this kind of data is not directly applicable to all studies, it is important to construct secondary data for matching different study purpose before using it to avoid possible information bias.

In our study, a combination of primary and secondary data collection has been used. The primary data refers to the result which we will be gathered by conducting our own questionnaire. The secondary data refers to the information and data that are gathered from internet and articles regarding to Smartphone purchase decision making. They have not been analyzed but are used to conduct our questionnaires.

3.5 Quantitative Method

Quantitative method will be used to gain primary data for this research. This is because quantitative research is regularly regarded as a hypothesis-testing tool. According to Bryman and Bell (2007), there are three features of quantitative strategy that make this method appropriate for the quantification of the data. Firstly, it shows a deductive correlation between theories and researches that focus on testing theories. Secondly, it is connected to positivism orientation. Lastly, it contains a perspective of social reality as an objective reality. Therefore, quantitative method is a suitable strategy for our research which our objective is to explore and test influence of the reference group theory, which is to some extent linked to positivism and objectivism.

This research starts with setting 5 hypotheses based on theories from literature review, then 15 statements are generated based on the theories as well in order to test the hypothesis. Several variables are measured through the questionnaires. The sample of the subjects is filtered according to the setting criteria to reduce error and bias and in order to reflect the population.

3.6 Sampling

Easterby-Smith, M. et al. (2008:213) states that the purpose of collecting data from a sample is to enable the researcher to make statements about the population that the sample is drawn from, which absolutely depend on the relationship between the target sample and the actual population. The decision of sampling should be considered as an important and very first step of gathering relevant data. Sampling unit and sampling size have to be decided carefully.

3.6.1 Sample Size

Hooley and Hussey (1999) stated that in quantitative analysis the sample size does not have to be measured relative to the population size. The validity of the study will only be increased by the quality and the representativeness of the sample. The sample size does not have to be as large as for frequently purchased products, such as food and drinks, a small sample could also represent the population (West, 1999). Thus, we decided to collect at least 200 questionnaires from the respondents who are the current user of Smartphone. In fact, we have got 321 respondents who participated in our online questionnaires which including 4 non-Smartphone respondents and 24 respondents with age range below or more than our target groups – 25 to 34 years old.

3.6.2 Sampling Method

Non-probability samples are “a sampling method in which the researchers select specific elements from the population with non-randomness”, moreover, “non-randomness results when population elements are selected on the basis of convenience – because they are easy of inexpensive to reach”. (McDaniel & Gates, 2008:334) Considered its cheaper process and easy and quick to reach and collect than probability sampling (McDaniel & Gates, 2008), non-probability sampling is the sampling method of our study. This non-probability sampling can also save time. Data can be collected more quickly than with probability sampling. We have considered our target respondents as current Smartphone users with the age range from 25 to 34 years old. And also designed specific questions in the questionnaire to double check if the respondents are within our selected sample range.

3.7 Questionnaire

The survey research approach was selected in our research, due to its advantages of being able to “deliver accurate numerical estimates from consumers and the ability to illustrate the differences between groups” (McQuarrie, 1996). Similar discussion has been drawn by Easterby-Smith et al. (2008: 219) that survey could be good ways of collecting data about the opinion and behaviors among large numbers of target respondents. This is in line with our study which needs numerical evaluations to show statistic results of the reference group influences and also to study the differences which caused by different genders in each reference group. McQuarrie (1996:94) also mentioned that the survey research is able to gain a large sample and a precise estimate, which “enable you to do two things: (a) to determine whether a difference between groups really exists and (b) to more accurately describe the nature of any difference that does exist”. Therefore, we found that the survey method is the most suitable method for our study.

The questionnaire that we conducted in our study could be seen as a self-administered questionnaire, in which the respondents need to complete all questions on its own, no external explanations and administrations will be provided. We have also considered the disadvantage of self-administered questionnaire that in the open-ended questions, respondents will be confused if the questions are not well structured and well written which will cause misleading or misunderstanding; on the other hand, unclear answers or wrong answers due to misunderstanding will become a problem while analysing the findings (McDaniel & Gates 2008). In order to reduce or avoid the above problem, most of the questions used in our questionnaire are close-ended questions,

with explanations provided in each section of the questionnaire to guide the respondents to understand our questions easily and clearly. Moreover, Due to the limited time requirement of this study, Online Survey is considered to support the self-administered questionnaire to reach large pool of respondents in a short time. It is more convenient and easy for individual respondents to response. It is also modern and saves more time from sending it out and back. McDaniel and Gates (2008) have concluded the advantages of Online Survey, which includes: timesaving, reduced cost, higher response rates, and the ability to contact people who are difficult to access. Most of the questionnaires were sent out through our Facebook connections.

3.7.1 Questionnaire Design

The target groups of our study will be focus on the respondents who is Smartphone users, which is easy for us to reach large amount of respondents as well as easier to control. According to Neilson News 2009, the Smart Phone uses from 25 to 34 years old are the main consumers in the marketing, “65% more likely than the average mobile subscribers and nearly two time as likely to make more than US dollar 100,000 a year” (Quick, 2009). Therefore, the age range of our study is from 25 - 34 years old.

The questionnaire consists of four parts (more detailed description regarding our questionnaire design please refer to Appendix 2):

At the very beginning of the questionnaire, the question regarding to whether the respondent is current Smartphone user or not has been designed to check if the respondent is our target sample. Any one tick “non-Smartphone user” will be considered as invalid questionnaire and eliminated from our analysis.

- Part 1 – Reference group influences on purchase decision-making

The purpose of this selection is to investigate whether different reference groups in different genders have different influences on different stages of Smartphone users’ purchasing decision-making process. Based on this, we have designed this part as it is explained below: It contains 6 statements, each consists a 5-point agreement/disagreement Likert scale that measures the influences of different reference groups on the different stages of respondents’ purchase decision-making process. The normative and comparative groups have been considered as one of the important index in our structure of questions. We use family members, friends and celebrities to present these different types of reference groups which we think they are

main factors and more representatives. Gender differences have been added in each type of reference groups at the end of each statement.

- Part 2 – Different influences of different reference groups

The purpose of Part 2 is to explore which reference group in which gender has more interpersonal influences on Smartphone users' purchasing decision making. We produced 9 statements to clarify which types of reference groups have more intrapersonal influences on respondents' purchase decision-making, and again which gender in a certain reference groups has more impact compare to another. Here, the interpersonal influences refer to informational influence, utilitarian influence and value-expressive influence. A 5-point agreement/disagreement Likert Scale has been conducted in each statement that all respondents need to choose from. After 9 statements, choice of gender preference has been provided.

- Part 3 – Important factors in Smart Phone consumers' purchasing decision

This part is formed by five factors that are important for mobile phone consumers' purchasing decision making, which is concluded in the study by Yang, He, and Lee (2007). The purpose of this part is to identify the importance of reference groups when compared with other chosen important factors that influence mobile phone consumers' purchasing decision-making. Besides reference groups influences, the other four factors are the newest technology, the best design and appearance, the lowest price among similar products, the most attractive calling plan package associated. The target respondents are asked to rank each factor from 1-5 (most important to least important) while they are considering of buying a Smartphone.

- Part 4 – Personal Information

Questions regard to respondents' personal information is divided into gender, age, income level, education and occupation. The age section is more important for us due to its purpose is to check whether the respondent fix in our target age range – 25 to 34 years old. Anyone younger or older than this age range will be eliminated from our study. We assume that other personal information might be helpful while analysing the findings as we can categorized all respondents to clarify our result in a better and more detailed way.

3.7.2 Limitation of online survey

Even though online survey is employed in this research for many reasons as discussed earlier, we are aware of its limitations. Firstly, when conducting online survey, researchers can encounter the sampling limitation. Since the online questionnaires of this research are sent out via online communities of targeted respondents, aside from demographic information, others information might be questionable. Secondly, some respondents might fill in the questionnaire without thoroughly read the question. As a result, the validity of the research might be problematic. Thus, in order to overcome of this survey method, replication of the questionnaire is needed. The questionnaires are sent to similar type of online communities (similar communities in Facebook) so that the researchers can gain a reliable picture of online targeted respondents.

3.8 Validity and Reliability

According to Saunders et al. (2003), validity and reliability are the two important terms that the scholars need to pay attention in research design in order to decrease the possibility of obtaining the wrong answer.

3.8.1 Validity

The definition of validity is “the extent to which data collection method or methods accurately measure what they were intended to measure”. Validity is taken into consideration with whether the research findings accurately portray the real present of what things are. (Saunders et. al., 2003) Some researchers said that validity is to what extent a research measures what we really want to measure. Validity is classified into two categories which are internal and external validity. Internal validity of research findings is the extent that a research instrument can measure what is needed to be measured according to the research purpose. External validity is the generalizability of the findings across people, settings and times. (Cooper & Schindler, 2003) In order to enhance the validity of this research, several different steps were taken:

- Data was collected from the reliable source, from the respondents who are currently using Smartphone.
- The questions used in the survey were created based on the theories and knowledge from literature review to guarantee the validity of the result.
- Data has been gathered within one week. There has been no major change related to the topic occurred due to this short period of time.

Since “generalizability” is not the main aim of this quantitative study, the questionnaires were designed in order to explore the topic rather than to maximize the results. Therefore, even if we found some results that can be generalized to other population, generalization is not the main goal of this research.

3.8.2 Reliability

Reliability is the degree to which data collection method will be able to provide consistent findings, similar conclusions will be drawn by other researchers when following the same methodology or whether there is transparency in how sense was made from the raw data. Reliability is a necessary contributor to validity but is not a sufficient condition for validity. (Cooper & Schindler, 2003)

To ensure the reliability of this research, statistical tests with SPSS software are employed. The proportion of measurement scales and the connected items can be used to study via this analysis. Descriptive and cross tabulations are mainly used in this research. T-test is employed as the statistic tests for the cross tabulation in order to illustrate the relationship between two or more variables. In order to enhance the validity of this research, several different steps were taken:

- Questionnaire were divided into four parts in order that respondents could concentrate more on each statements and to avoid respondents’ sources of confusion.
- The selected theories were clearly described and all research questions were created based on the discussed theories about reference group. The reason for this is when others researchers follow the same procedures and use the same set of questionnaires, the similar conclusions will be made.

3.9 Data analysis method

In the data analysis stage, various interrelated methods will be used to run through and reorganize the gathered data. Due to quantitative data, the statistical tools are necessary. Microsoft Excel and SPSS are software that we employed for data input and statistical analysis.

Univariate technique is the statistical technique we applied to analyze this research data. According to Malhotra and Birks (2000:442), “univariate techniques are appropriate when there is a single measurement of each element in the sample or when there are several measurements of each element but each variable is analysed in

isolation”. Each variable in our research such as referent’s or respondents’ gender is separately analysed, so it is suitable to use this technique. Moreover, though the hypotheses of this research require to study the interaction between two factors, univariate technique is still used. T-test is the main univariate technique of this research because T-test is the technique that is used for comparing two means which in first part of our questionnaire are gender of referents and different types of referents, in second part are gender of referents and different types of reference group influences. Therefore, the hypotheses are mainly tested by T-test technique and the results will be interpreted in the findings chapter.

Chapter 4: Empirical Analysis

The data that gathered from questionnaires as well as the findings which are analysed in SPSS software will be all reported in this chapter. This chapter consists of two main parts which are research findings that are used to support and test each hypothesis and other findings that we found they are important or interesting while doing the analysis.

We have got 321 respondents who participated in our online questionnaires. We found that there are 4 non-Smartphone respondents and 24 respondents with age range below or more than our target groups – 25 to 34 years old. Therefore, these questionnaires have been considered as invalid data and not being used in our research analysis. The data that we used for analysis is from the rest of 293 respondents.

4.1 Findings for Hypothesis

Our study is based on an assumption that reference groups have certain influences on mobile phone users, which is studied and tested by Yang, He and Lee (2007). We also assume that such influences could apply to Smartphone industry which under the category of mobile phone. Therefore, all the data contains choice of “disagree” and “strongly disagree” while asking for ranking the influences in the Likert Scale in the questionnaires has been considered as invalid data and not been used for analysing our Hypothesis. Moreover, we set the mean difference to be statistically significant at the 0.05 level in order to strength the validity of our study in larger population.

4.1.1 Reference group influences on purchase decision-making

The purpose of this part is to investigate whether different reference groups in different genders have different influences on different stages of Smartphone users’ purchasing decision-making process. We have defined the earlier stage of purchase decision-making process as the information seeking stage, and the later stages are all considered as decision making stage.

Thus, the first group of hypotheses that was tested in our paper are:

Hypothesis 1a: *Male Referents have a higher influence on Smartphone users in their earlier stage of purchase decision-making process than female referents.*

Hypothesis 1b: *Male Referents have a higher influence on Smartphone users in their later stages of purchase decision-making process than female referents.*

4.1.1.1 Hypothesis 1a

Firstly, the result of the preferred referents' gender in different types of referent groups at the information seeking stages will be presented. In order to keep the larger respondents numbers, we set the test value as 0.5, which is refer to the choice of "Doesn't Matter", the choice of "Male" was set as 1, and "Female" as 0. Therefore, we assume that any means bigger than 0.5 could be seen as the preference of male referents, and any means below 0.5 present the preference of female referents.

Table 4.1 – *preferred referents' gender in Smartphone users' information seeking stage*

Information Seeking Stage						
	Test Value = 0.5					
	N	Mean	Std. Error	Sig.	95% Confidence Interval	
					Lower	Upper
Family	203	0.709	0.0279	.000	0.154	0.264
Friends	275	0.664	0.0253	.000	0.114	0.213
Media	265	0.674	0.0252	.000	0.124	0.223

In Table 4.1, it shows that there are 203 respondents considered that family members have influences while they are seeking for Smartphone information, and they prefer to hear from male family members rather than female members at the information seeking stage with the mean of 0.709 (>0.5 , and $p= .000$). 275 respondents will collect information of Smartphone from their friends and they also prefer male friends (mean=0.664 >0.5 , $p= .000$) compare to female friends. The information from Media channels also has high numbers of consideration by 265 respondents, with a preference for male spokesman (mean=0.674 >0.5 , $p= .000$). Moreover, from the number of respondents we can see that more respondents will take the consideration of the Smartphone information from their friends (275) rather than from their family

(203), and the information which provided through media channels (265) is also important for them at the information seeking stage.

After knowing the preference on referents' gender in respondents' information seeking stage, now we are trying to find out how much impact different genders of reference groups could have on the Smartphone users in the information seeking stage, by adding the comparison of the answers that we have got from the 1-5 Likert Scale. Due to our focus of studying is on the different influences that different referents' gender could have, the answers of choosing "Doesn't Matter" is considered as invalid data which do not be counted in the following analysis.

Table 4.2 – *Different influences of referents' gender in Smartphone users' information seeking stage*

					Information Seeking stage				
					t-test for Equality of Means				
	Gender	N	Mean	Std. Error Mean	Sig.	Mean Difference	Std. Error Difference	Lower	Upper
Family	Male	124	3.73	.061	.000	.452	.118	.219	.684
	Female	39	3.28	.082					
Friends	Male	156	4.19	.048	.013	.231	.092	.050	.413
	Female	66	3.95	.085					
Media	Male	151	3.99	.055	.364	.095	.105	-.111	.301
	Female	59	3.90	.089					

As shown in Table 4.2, there is a high preference for male family members among respondents when they are seeking for Smartphone information (124 : 39). Moreover, there is also a statistically significant differences ($p = .000$) about the influences which are caused between male family members and female family members. It clearly shows that male family members have stronger influences on Smartphone users' information seeking stage with a mean of 3.73 compare with female family members with a mean of 3.28. Now, take a look at the influences of friends, Smartphone users still have high preference for collecting information from male friends but not female friends, with a respond number of 156 and 66. And again, the influence causes by male friends is statistically significant higher than the one causes by female friends among these respondents (4.19 : 3.95, $p = .013$). Although, we can see that the Smartphone respondents prefer to get information from a male representative through

media channels, and the influence which is caused by male representative is higher than which is caused by female representatives (3.99 : 3.90), the differences are not statistically significant ($p = .346$)

By considering the results of the gender preference which is tested at the beginning, as well as the results from the second test of influence differences which are caused by different gender of reference groups, we could conclude that our **Hypothesis 1a** of “Male Referents have a higher influence on Smartphone users in their earlier stage of purchase decision-making process than female referents” has been supported and approved.

Additional Research on Hypothesis 1a

Based on the analysis of Hypothesis 1a, we have summarized all types of reference groups into one group in order to get the conclusion which is only focus on the gender differences of reference groups and their difference influences in the earlier stage of Smartphone users’ purchase decision making process. Now, we are seeking for the influence differences between different types of reference groups – Normative and Comparative. Therefore, we combine the category of “Family” and “Friends” together to be under normative reference groups, and “Media” will be grouped under Comparative reference group. Moreover, as it is found in the above analysis, we can conclude that male from Normative group and Male from Comparative group have higher preference by our Smartphone users and also have higher influences on these users in their information seeking stage. Therefore, these two specific groups are used as the main categories to compare with.

Table 4.3 – *Influence differences between Normative Male and Comparative Male in Information Seeking Stage*

Information Seeking stage								
					t-test for Equality of Means			
							95% Confidence Interval	
Type of reference groups	N	Mean	Std. Error Mean	Sig.	Mean Difference	Std. Error Difference	Lower	Upper
Normative Male	280	3.99	.040	.910	-.008	.068	-.141	.126
Comparative Male	151	3.99	.055					

Here we can see from Table 4.3, both Normative male and Comparative male have very strong influences on Smartphone users' information seeking stage with a same mean of 3.99. Unfortunately, the results which are calculated from the answers of our respondents are the same. Based on these, we only can assume that there is no statistically significant differences ($p = .910$) between those two types of reference groups at this stage.

4.1.1.2 Hypothesis 1b

Firstly, same as the way we have tested on Hypothesis 1a, the result of the preferred referents' gender in different types of referent groups at the decision making stages will be presented as below:

Table 4.4 – Preferred referents' gender in Smartphone users' Decision Making stage

Decision Making Stage						
	Test Value = 0.5					
	N	Mean	Std. Error	Sig.	95% Confidence Interval	
					Lower	Upper
Family	208	0.716	0.0292	.000	0.159	0.274
Friends	246	0.604	0.0281	.000	0.048	0.159
Media	200	0.663	0.0279	.000	0.107	0.218

In Table 4.4, it is clear that 208 respondents think that family members have influences while they are making decisions comparing between brands and models and they prefer to hear from male family members compare with female members at this stage with the mean of 0.716 (>0.5 , and $p = .000$). 246 respondents is willing to get some advice about Smartphone from their friends while they are considering which one to buy and they also high preference for male friends (mean=0.604 >0.5 , $p = .000$) rather than female friends. About 200 respondents think Media also has influences on their decision making stage, with a preference for male representative (mean=0.663 >0.5 , $p = .000$). Again, by comparing the number of respondents between different types of reference groups, it shows that more respondents consider friends (246) as one of the factors which can influence their minds at the decision making stage.

Secondly, how much impact from different genders of reference groups could have on the Smartphone users in the decision making stage will also be presented as below:

Table 4.5 - Different influences of referents' gender in Smartphone users' Decision Making Stage

					t-test for Equality of Means				
								95% Confidence Interval	
	Gender	N	Mean	Std. Error Mean	Sig.	Mean Difference	Std. Error Difference	Lower	Upper
Family	Male	138	3.78	.058	.079	.199	.113	-.023	.422
	Female	48	3.58	.093					
Friends	Male	126	4.10	.053	.104	-.153	.093	-.337	.032
	Female	75	3.95	.085					
Media	Male	105	3.60	.058	.067	.200	.109	-.015	.415
	Female	40	3.40	.086					

As shown in Table 4.5, Smartphone respondents of our study prefer to ask male family members for advices while they are considering between brands and models (138 : 48), and the influences which are caused by male family members are higher than the influences which are caused by female family members (3.78 :3.58), but the differences are not statistically significant. Under the analysis of friends influences, there is also a preference for male friends members among respondents at their decision making stage compared with female friends (126 : 75), and male friends also have higher influences with a mean of 4.10 compare with female friends with a mean of 3.95. However, the differences are not considered as statistically significant ($p= .104$). Have a look at the influences which are caused by media, Smartphone respondents still think that male representative from media channels has more influences on their decision making stage, and also consider such influences are higher than the one which is caused by female representative (3.60 : 3.40), but again, the differences of influences are not statistically significant ($p= .067$).

Therefore, by combining the results of the gender preference which is tested at first, together with the results which is tested at the second test of influence differences which are caused by different gender of reference groups, we could conclude that our **Hypothesis 1b** of “Male Referents have a higher influence on Smartphone users in

their later stages of purchase decision-making process than female referents.” has been supported and approved.

Additional Research on Hypothesis 1b

The same as the additional research on Hypothesis 1a, this research also aim to seek the influence differences between different types of reference groups – Normative and Comparative in Smartphone users’ decision making stage. We also combine the category of “Family” and “Friends” together to be under Normative reference groups, and “Media” will be grouped under Comparative reference group. From the above analysis, we found that Normative male and Comparative male also have higher preference by our Smartphone users and higher influences on these users in their decision making stage. Therefore, these two specific groups are used as the main categories to compare with.

Table 4.6 – Influence differences between Normative Male and Comparative Male in Decision Making Stage

					t-test for Equality of Means			
							95% Confidence Interval	
Type of reference groups	N	Mean	Std. Error Mean	Sig.	Mean Difference	Std. Error Difference	Lower	Upper
Normative Male	264	3.77	.040	.023	.169	.074	.024	.314
Comparative Male	105	3.60	.058					

The result of Table 4.6 reveals that Normative male and Comparative male both have very strong influences on Smartphone users’ decision making stage, with a mean of 3.77 and 3.60. Moreover, we can assume that Normative male has stronger influences than which are caused by Comparative male, and this kind of influences difference is statistically significant ($p= .023$). The assumption of such influences is only applicable at the Smartphone users’ decision making stage.

4.1.2 Different influences of different reference groups

This part aims to explore if different genders of reference group have different types of reference group's influences on Smartphone users' purchase decision-making process. The reference group's influences are classified into three types which are informational, utilitarian, and value-expressive influence.

Therefore, the second group of hypotheses which was tested in this research are:

Hypothesis 2a: *Male Referents have a higher informational influence on Smartphone users' the purchase decision-making process than female referents.*

Hypothesis 2b: *Female Referents have a higher utilitarian influence on Smartphone users' purchase decision-making than male referents.*

Hypothesis 2c: *Female Referents have a higher value-expressive influence on Smartphone users' purchase decision-making than male referents.*

4.1.2.1 Hypothesis 2a

The data of the preferred referents' gender in informational influence of reference group will be reported. Following the same statistic technique used in hypothesis 1a and 1b, the test value is set as 0.5 for "Doesn't matter", 1 for "Male", and 0 for "Female". Thus, any means is higher than 0.5 meaning male referents are preferred, and lower than 0.5 meaning female referents are preferred.

Table 4.7 – Preferred referents' gender in Informational influence

	Information influence					
	Test Value = 0.5					
	N	Mean	Std. Error	Sig.	95% Confidence Interval	
Lower					Upper	
Family	236	0.583	0.0293	.005	0.025	0.140
Friends	280	0.654	0.0271	.000	0.100	0.207
Media	206	0.614	0.0300	.000	0.055	0.173

According to Table 4.7, 236 respondents think that family members have informational influence toward them, and male family members are their preference (mean=0.583 >0.5, p= .005). 280 respondents indicate the fact that friends have

informational influence toward Smartphones users, and male friends are preferred when comparing to female friends with the mean of 0.654 (>0.5 , and $p=.000$). 206 respondents point out that they receive informational influence from media, and they tend to prefer male spokespersons than female spokespersons (mean=0.614 >0.5 , $p=.000$). Furthermore, we can clearly see that, for Smartphone users, informative influence is from friends (280) more than family member and media (236 and 206).

After knowing the results of preferred informational influencers, the next step is to explore the different level of the influence of reference group from different genders toward Smartphone users. The data from the Likert scales is employed, and “Doesn’t matter” is considered as invalid data, which will be excluded. This is in order to clearly clarify the differences between male and female reference group.

Table 4.8 – *Different informational influences of referents’ gender in Smartphone users*

					t-test for Equality of Means				
								95% Confidence Interval	
	Gender	N	Mean	Std. Error Mean	Sig.	Mean Difference	Std. Error Difference	Lower	Upper
Family	Male	118	3.98	.052	.205	.122	.096	-.067	.312
	Female	79	3.86	.088					
Friends	Male	171	4.37	.046	.020	.210	.090	.033	.386
	Female	85	4.16	.087					
Media	Male	105	3.57	.054	.562	.054	.093	-.130	.238
	Female	58	3.52	.079					

As reposted in Table 4.8, the respondents prefer male than female family members to be the informational influencers (118 : 79). The influence, which is caused by male family members, is also higher than female family members (3.98 : 3.86), but not statistically significant ($p=.205$). Looking at friends, male friends are favoured more than female friends to be the informational influencers with the number of response of 171 versus 85. The influence caused by male friends is statistically significant higher than the influence from female friends (4.37 : 4.16, $p=.020$). Respondents’ preference for the media spokesperson is male more than female. The statistic result also shows

that male media representative’s informational influence is higher than female (3.57 : 3.52), but the influence difference is not statistically significant ($p = .562$).

Thus, when combining the first and the second statistical tests about different genders of informative influencers, we could conclude that our **Hypothesis 2a** of “*Male Referents have a higher informational influence on Smartphone users’ purchase decision-making process than female referents*” has been supported and approved.

Additional Research on Hypothesis 2a

This additional research aims to study the different types of reference group. The reference groups are divided into two groups which family members and friends are in normative reference group, and media is in comparative reference group. This is in order to enable us to explore more specifically into gender difference of different types of reference group and their informational influence. As shown in the earlier analysis, male normative referents as well as male comparative referents gain more preference and have higher informational influences on Smartphone users than female reference group. So, these two groups of referents are to be compared.

Table 4.9 – *Informational influence’s differences between Normative Male and Comparative Male*

					t-test for Equality of Means			
							95% Confidence Interval	
Type of reference groups	N	Mean	Std. Error Mean	Sig.	Mean Difference	Std. Error Difference	Lower	Upper
Normative Male	289	4.21	.036	.000	.643	.069	.508	.778
Comparative Male	105	3.57	.054					

It can be seen from Table 4.9 that both normative male and comparative male have considerably high informational influence toward Smartphone users. It could be assume from the data that normative male has higher impact than comparative male with the means of 4.21 which is more than 3.57. Moreover, the difference is statistically significant ($p = .000$).

4.1.2.2 Hypothesis 2b

Following the consistent method tested on Hypothesis 2a, the results of the preferred referents' gender in utilitarian influence are presented.

Table 4.10 – Preferred referents' gender in utilitarian influence

Utilitarian influence						
	Test Value = 0.5					
	N	Mean	Std. Error	Sig.	95% Confidence Interval	
					Lower	Upper
Family	205	0.673	0.0271	.000	0.120	0.227
Friends	214	0.626	0.0291	.000	0.069	0.184
Media	153	0.703	0.0326	.000	0.138	0.267

As illustrated in Table 4.10, 205 respondents consider family members as their source of utilitarian influence which they also prefer family members who is male than female (mean=0.673 >0.5, p= .000). 214 respondents think that friends have utilitarian influence, and they favour male friends more than female friends (mean=0.626 >0.5, p= .000). Media as the utilitarian influence's source is in the consideration of 153 respondents, whose preferences are male spokespersons than female spokespersons with the means of 0.703 (>0.5, and p= .000). In addition, the table shows that family members (205) and friends (214) have significantly higher utilitarian influence than media (153).

Next, how much different genders of referents can have utilitarian influence to Smartphone users will be investigated according to the next table.

Table 4.11 – Different utilitarian influences of referents' gender in Smartphone users

Utilitarian influence					t-test for Equality of Means				
	Gender	N	Mean	Std. Error Mean	Sig.	Mean Difference	Std. Error Difference	95% Confidence Interval	
								Lower	Upper
Family	Male	109	3.47	.058	.854	.021	.111	-.199	.240
	Female	38	3.45	.090					
Friends	Male	111	3.86	.057	.000	.435	.096	.245	.624
	Female	57	3.42	.075					
Media	Male	93	3.66	.060	.011	.301	.116	.072	.530
	Female	31	3.35	.087					

As shown in Table 4.11, there are a preference for male than female family member for utilitarian influence (109 : 38), and the influence is also higher in male than female family members (3.47 : 3.45), however, there is no statistically significant difference in between (p= .854). For friends, respondents tend to go for male friends than female friends to be the utilitarian influencer (111 : 57). And it also shows the significant difference (p= .000) between male and female friends. It can be said that male friends have stronger utilitarian influence on Smartphone users with the mean of 3.86 than female friends with the mean of 3.42. Male media representative gain more popularity than female being in the media (93 : 31). Male representative has stronger utilitarian influence than female (3.66 : 3.35), with statistically significant differences (p= .011).

Hence, considering the this stage of analysis and the earlier stage on the topic of different genders of utilitarian influencers, we could conclude that our **Hypothesis 2b** of “*Female Referents have a higher utilitarian influence on Smartphone users’ purchase decision-making than male referents*” has not been supported but rejected. The new conclusion of our test is *Male Referents have a higher utilitarian influence on Smartphone users’ purchase decision-making than female referents*.

Additional Research on Hypothesis 2b

The objective of this additional research is to explore the utilitarian influence from normative and comparative. Following the same additional research of Hypothesis 2a, male referents from both normative and comparative group are more preferable and more influential than female referents so that these two groups are chosen to study here.

Table 4.12 – *Utilitarian influence’s differences between Normative Male and Comparative Male*

					Utilitarian Influence			
					t-test for Equality of Means			95% Confidence Interval
Type of reference groups	N	Mean	Std. Error Mean	Sig.	Mean Difference	Std. Error Difference	Lower	Upper
Normative Male	220	3.66	.043	.919	.008	.078	-.142	.158
Comparative Male	93	3.66	.060					

According to Table 4.12, normative male as well as comparative male has very high utilitarian influence on Smartphones users. However, we cannot indicate which one is stronger due to the same means of 3.66. We can only assume that there was no statistically significant difference between them ($p = .919$).

4.1.2.3 Hypothesis 2c

Following the consistent method tested on Hypothesis 2a and 2b, the data of which gender is more preferable for value-expressive influence for Smartphone users are illustrated below.

Table 4.13 – Preferred referents' gender in Value-expressive influence

	Value-expressive influence					
	Test Value = 0.5					
	N	Mean	Std. Error	Sig.	95% Confidence Interval	
Lower					Upper	
Family	190	0.753	0.0274	.000	0.199	0.307
Friends	179	0.466	0.0335	.319	-0.100	0.033
Media	190	0.455	0.0343	.194	-0.112	0.023

As reported in Table 4.13, 190 respondents regard family members as their value-expressive influencers, and male family members are preferred more than female family members (mean=0.753 >0.5, $p = .000$). 179 respondents receive value-expressive influence from their friends, which it tends to be from female than male friends, but this preference is not statistically significant (mean=0.466 <0.5, $p = .319$). Media as value-expressive influencers are considered by 190 respondents, with the preference of female spokespersons than male with a not statistically significant differences (mean=0.455 <0.5, $p = .194$). Moreover, the table shows that the respondents think family members (190) and media (190) have higher value-expressive influences when comparing to friends (179).

Secondly, in the next table, how much different genders of referents can have value-expressive influence to Smartphone users will be shown.

Table 4.14 – Different value-expressive influences of referents' gender in Smartphone users

Value-expressive influence					t-test for Equality of Means				
								95% Confidence Interval	
	Gender	N	Mean	Std. Error Mean	Sig.	Mean Difference	Std. Error Difference	Lower	Upper
Family	Male	126	3.65	.052	.073	.217	.120	-.020	.455
	Female	30	3.43	.114					
Friends	Male	66	3.39	.064	.443	-.068	.088	-.214	.106
	Female	78	3.46	.060					
Media	Male	77	3.52	.073	.084	-.161	.093	-.345	.022
	Female	94	3.68	.059					

In Table 4.14, when it comes to value-expressive influencers, male family members are preferred by the respondents than female family members (126 : 30). Male family member also can influence the respondents more than female family members (3.65 : 3.43), but two influences are not statistically significant ($p = .073$). When friends are their influencers, the respondents favour female than male friends with the number of 78 and 66. Female friends also have higher value-expressive influence than male friends with the mean of 3.46 and 3.39 respectively; the differences are not statistically significant ($p = .443$). Next is looking at media as value-expressive influencer. Female presenters are more favourable than male presenters from the respondents' perspective (94 : 77), and female has stronger value expressive influence than male presenters without a statistically significant differences (3.68 : 3.52, $p = .084$).

From the above analysis we can see that, both male and female referents have certain degree of value-expressive influences on Smartphone users' purchase decision making process. It is hard for us to make any conclusion at this point, therefore, we assume that the new conclusion could be found out by below additional research which will help to determine which gender has the most strong value-expressive influences.

Additional Research on Hypothesis 2c

Based on the previous analysis of Hypothesis 2c, male normative referents and female comparative referents are selected as a study object for studying the connection

between difference types of reference groups, gender difference, and their value-expressive influence. The reason for this is due to the higher preference and higher influence on Smartphone users.

Table 4.15 – *Value-expressive influence’s differences between Normative Male and Comparative Female*

					t-test for Equality of Means			
							95% Confidence Interval	
Type of reference groups	N	Mean	Std. Error Mean	Sig.	Mean Difference	Std. Error Difference	Lower	Upper
Normative Male	126	3.65	.052	.704	-.030	.079	-.186	.125
Comparative Female	94	3.68	.059					

Table 4.15 reveals that normative male and comparative female are crucial value-expressive influencers for Smartphone users. Comparative female are a stronger influencers when compared to normative male with the means of 3.68 and 3.65. However, we can also assume that there is no statistically significant difference ($p = .704$) between these two.

Therefore, the our **Hypothesis 2c** of “*Female Referents have a higher value-expressive influence on Smartphone users’ purchase decision-making than male referents*” has been tested and approved. Moreover, we could say that female comparative referents have most value-expressive influences on Smartphone users purchasing decision making process.

4.2 Other Findings

4.2.1 Important factors in Smart Phone consumers’ purchasing decision

This part aims to compare and determine the importance of reference groups influence between four other factors which have been tested and concluded that all of them have certain influences on mobile phone consumers’ purchasing decision-making (Yang, He, and Lee. 2007: 333). By applying the five factors on Smartphone users, whether the reference groups influence could be seen as an important factor on

their decision making or not, as well as how important it is could be understood after comparing with other four factors.

Again, as our study is mainly focus on the current Smartphone users and age group between 25-34, 4 respondents who are not Smartphone users and 24 respondents who are younger or older than our selected age range have not been counted in the calculation of this part as well. Therefore, the total number of respondents which are used in this part is 293.

Table 4.16 - Factors influencing Smartphone consumers' decision-making

	Factors influencing smartphone consumers' decision-making (n=293)									
	The newest technology		The best design and appearance		The lowest price		The most attractive calling plan		The reference group influence	
	N		N		N		N		N	
1st	104	35%	94	32%	32	11%	28	10%	26	9%
2nd	79	27%	84	29%	61	21%	47	16%	51	17%
3rd	27	9%	42	14%	106	36%	103	35%	106	36%
4th	51	17%	31	11%	66	23%	73	25%	55	19%
5th	32	11%	42	14%	28	10%	42	14%	55	19%

As it shows in Table 4.16, the newest technology has been chosen as the most important factor among respondents, which is 35%. There are 32% of respondents consider the best design and appearance as their most important factor while buying Smartphone, which is only few percent less than the first rank (the newest technology). Not surprisingly, the second important factor is the best design and appearance with 29% of respondents chose this. The lowest price and the reference group influence are both considered as the third important factor with 36%. The most attractive calling plan is also very competitive for third rank with tiny difference of 35%, and concluded as the forth important factor with 25%. However, still, 19% of respondents think the reference groups' influence is the least important factor affecting their purchase decision-making. To conclude, the lowest price, the attractive calling plans and reference group influences have a very competitive percentage between each other for the third rank. They are as the same important as each other while consumers considering them as the factors that influence their smartphone purchase decision making.

4.2.2 Gender vs. Gender

This part is designed to find the possible interrelationship between gender in reference groups and gender in Smartphone users. The analysis will also be divided into two main parts, which are between different stages of purchase decision making process and between different types of reference groups influences. Again, in this analysis, all the data contains choice of “disagree” and “strongly disagree” from the Likert Scale in the questionnaires has not been used due to the base of an assumption that reference groups have certain influences on mobile phone users (Yang, He and Lee 2007). Please refer to Appendix 3 for Graph Comparison.

4.2.2.1 Reference group influences on purchase decision-making

Table 4.17 - Information seeking stage

Respondents	Family			Friends			Media		
	Male	Female	Neutral	Male	Female	Neutral	Male	Female	Neutral
Male	60%	23%	17%	62%	19%	19%	53%	16%	31%
Female	62%	18%	20%	53%	27%	20%	60%	26%	14%

In Table 4.17, it shows the results separate between both male and female respondents regarding to their preference for gender of referents in their purchase decision-making process at the stage of information seeking. The referents are divided into three groups: family, friends and media. From the presented percentage we can know that male referents think male family members, friends and male representative from media have more influences at this stage (60%, 62%, 53%). Female respondents also prefer to get the information from male family members, friends and male representative from media (62%, 53%, 60%). When comparing between the results from male and female respondents, it shows that male respondents prefer to hear from male friends while female respondents prefer male family members.

Table 4.18 – Decision making stage

Respondents	Family			Friends			Media		
	Male	Female	Neutral	Male	Female	Natural	Male	Female	Neutral
Male	77%	6%	17%	57%	8%	35%	57%	9%	34%
Female	62%	30%	8%	48%	43%	9%	50%	26%	24%

Table 4.18 reports the preference for genders in reference group on the decision making stage from both male and female respondents. According to the figure, male family members, friends and male representative from media have more influences on both male and female respondents. Female friends also have high influences on female respondents (43%). Moreover, both male and female respondents consider male family members as the most influences referents at the decision making stage (77%, 62%).

4.2.2.2 Different influences of different reference groups

Table 4.19 - Informational influence

Respondents	Family			Friends			Media		
	Male	Female	Natural	Male	Female	Natural	Male	Female	Natural
Male	48%	23%	29%	80%	5%	15%	41%	33%	26%
Female	51%	39%	10%	49%	46%	5%	56%	26%	18%

The Table 4.19 depicts the data gathered from both male and female respondents regarding which gender of referents has more informational influence. Both male and female respondents chose male referents have higher informational influence, in which for male respondents, male friends have highest informational influences (80%); but for female respondents, the influence from three types of referents are quite similar, male representative from mass media is a bit higher compared with the other two (56%). Moreover, for female respondents, male and female friends have certain information influences on them (49%, 46%).

Table 4.20 - Utilitarian influence

Respondents	Family			Friends			Media		
	Male	Female	Natural	Male	Female	Natural	Male	Female	Natural
Male	60%	5%	34%	62%	7%	31%	47%	19%	35%
Female	49%	26%	25%	47%	36%	17%	66%	21%	13%

The results regarding which gender of referents has more utilitarian influence on male and female respondents are shown in Table 4.20. The majority of both male and female respondents chose male referents as their preferred utilitarian influencers. Male respondents think their male friends have most utilitarian influences (62%)

while female respondents consider male referents from mass media have more utilitarian on them (66%).

Table 4.21 - Value-expressive influence

Respondents	Family			Friends			Media		
	Male	Female	Natural	Male	Female	Natural	Male	Female	Natural
Male	69%	1%	30%	60%	4%	36%	90%	1%	9%
Female	65%	24%	11%	27%	60%	13%	13%	76%	11%

This Table 4.21 is clearly shows the proportion of gender preference in value-expressive influencer from male and female respondents' perspectives. The highest percentages are all shown in male reference group, which male in media is the highest percentages when comparing with in male referents (90%). Quite different from male respondents, the results shows that male family members, female friends and female representative from media have more value-expressive influences on female respondents, in which female comparative referents have been considered as the most value-expressive influencers for female respondents (76%).

4.2.3 Reference group influences on Smartphone users' purchase decision-making process

As mentioned before, our study is based on the study by Yang, He and Lee (2007) that reference groups have certain influences on mobile phone users, and apply to Smartphone industry which under the category of mobile phone. Based on the natural of our study all the data contains choice of "disagree" and "strongly disagree" while asking for ranking the influences in the Likert Scale in the questionnaires has not been used before. However, in this part, we would like to test again whether the reference groups have influences on Smartphone users' purchase decision making process, and if so, which types of influences have more impact on Smartphone users?

Table 4.22 - Reference group influences on Smartphone users' Purchase Decision Making Process

	Range	Purchase Decision Making Process	
		Information Seeking Stage	Decision Making Stage
Family	1-5	3.02	3.00
Friends	1-5	3.91	3.52
Media	1-5	3.75	2.90

According to Yang, He and Lee (2007), it stated that if the mean is higher than 3.0 among the maximum value of 5.0, it could be concluded as a strong influence. Therefore, as Table 4.22 shows, all reference groups have certain influences on two stages of Smartphone users' purchase decision making process, except the media influence on alternative evaluation stage has the mean of 2.90. At both information seeking stage and alternative evaluation stage, friends show the strongest influences with a mean of 3.91 and 3.52 compare with other two reference groups. Moreover, we have also notice that media has strong influence on the information seeking stage with the mean of 3.75, which is even higher than the influences caused by family members, but has lower influence on the alternative evaluation stage.

Table 4.23 – Reference group influences on different types of influences

	Range	Types of reference groups Influences		
		Informational	Utilitarian	Value-expressive
Family	1-5	3.38	2.84	2.72
Friends	1-5	4.15	3.08	2.65
Media	1-5	2.94	2.61	2.98

As shown in Table 4.23, family members have strong informational influences on Smartphone users with a mean of 3.38, however, the utilitarian and value-expressive influences which are caused by family are not that strong, with the mean of 2.84 and 2.72. For friends, it has very strong informational influences with a mean of 4.15, a strong utilitarian influence with a mean of 3.08, but weak value-expressive influences with a mean of 2,65. Overall, media does not have strong influence in all types of influences, but higher informational influences compared between all three types. To conclude, friends have highest informational influences and utilitarian influences, but media has highest value-expressive influence even such influence could not be seen as a strong one.

Chapter 5: Discussion and Conclusion

In this chapter, the results which are analyzed from Chapter 4 will be discussed and concluded. We are also trying to match and compare our findings with other existing studies which we have mentioned before in Literature Review. The purpose is to clarify the importance of our study by providing useful and interesting findings which are explored in our research.

5.1 Discussion

According to Chapter 4, we have divided into two main parts which are research findings that are used to support and test each hypothesis and other findings which contain the comparison between the reference group influences and other important factors, the gender versus gender analysis, and the general test of reference group influences on Smartphone users' purchase decision making process. The main results will be discussed in the following sections in detail.

5.1.1 Reference group influences on Smartphone users' purchase decision making process

We decided to put this part at the beginning of our discussion because it is the base of our study. As mentioned before, previous studies have been emphasised a lot that reference groups have significant influences on consumers' purchase decision-making process (Bearden & Etzel, 1982; Childers & Rao, 1992; Yang et al., 2007). Moreover, according to the study of Yang, He and Lee (2007), it approved that reference groups also have significant influences on the mobile phone consumers' decision making process and the result shows that such influences are quite high. Therefore, by assuming that reference groups also have certain influences on Smartphone users' purchase decision making due to its being the next generation of mobile phone (Zheng & Lionel, 2006), we have confirmed that this assumption is approved and the influences of reference groups in Smartphone users' decision making process is significant. It also matches with the statement mentioned in the previous study that the public consumed luxury product has high susceptibility with strong influences which are caused by reference groups (Makgosa & Mohube, 2007).

In general, normative referents have stronger influences when compared with comparative referents in Smartphone users' purchase decision making process. However, the influences of comparative referents are only strong at Smartphone users'

information seeking stage, and such influences are comparatively weak at the alternative evaluation stage.

In order to understand the reference group influences deeper, we have also investigated the interrelationship between two types of reference groups and three types of reference group influences. In the study of Yang, He and Lee (2007), it indicated that reference groups have higher informational and utilitarian influences but lower value-expressive influences on mobile phone consumers. We have found the similar conclusion but deeper, that normative referents have stronger informational and utilitarian influences, but comparative referents can cause higher value-expressive influences on Smartphone users purchase decision making process. Therefore, our study's results could be used as a guideline for marketing practice that not only which kind of industry should use reference groups as their promotion tools but also which kind of reference groups they should use to achieve better sales.

5.1.2 Hypothesis

Based on the existing literatures about reference groups, reference group influences, and consumer purchase decision making process, two hypotheses have been constructed in our research, which has been tested under different stages in the purchase decision making process as well as under different types of reference group influences. Different from previous studies, we shift the focus from consumers' perspective to reference groups' perspective, and aim for finding the different impact which is caused by referents in different genders.

5.1.2.1 Hypothesis 1a & 1b – Reference group influences on purchase decision making process

According to Solomon et al (2010), he shortened the purchase decision making process into two main stages, information seeking stage and decision making stage. Therefore, Hypotheses 1a and 1b have been tested to determine the different influences of different genders' referents at each stage.

In these hypothesisises, we found that both normative and comparative male referents have higher influences on Smartphone users in both information seeking stage and decision making stage of the purchase decision-making process than female referents. This might be because men are normally considered as being more knowledgeable

and more expert than women (Johnson, 1976). In other words, male referents have more influences than female referents in the stage of collecting and evaluating different information. By seeking for more detailed results in this study, we have also made additional test for each hypothesis. Unfortunately, after analysing the answers from our respondents, at the information seeking stage, there is no significant difference between the influences which are caused by male normative referents and male comparative referents. However, at the decision making stage, it clearly shows that male normative referents have stronger influences on Smartphone users compared with male comparative referents. Again, previous studies only have confirmed the existence and importance of reference groups in consumers' purchase decision making process (Park & Lessig, 1977; Childers & Rao, 1992; Yang et al., 2007). In our study, such existence and importance have been applied into Smartphone users and double confirmed. Based on that, which types of reference group and in which gender has stronger influence either information seeking or alternative evaluation stage have also been explored through our research.

5.1.2.2 Hypothesise 2a, 2b & 2c – Different influences of different reference groups

Three types of reference group influences have been identified in previous researches, which are informational influence, utilitarian influence and value-expressive influence (Park & Lessig, 1977; Bearden & Etzel, 1982). Therefore, Hypotheses 2 have been tested to figure out which gender of referents have stronger influence of informational, utilitarian or value-expressive.

According to our study, male referents have higher informational influence on Smartphone users' purchase decision-making process than female referents, especially male normative referents. They have stronger informational influence than male comparative referents. It matches with the theory of social influence that male has more expert power than female (Johnson, 1976). About utilitarian influence, it shows that male referents have higher influence on Smartphone users' purchase decision making process compared with female referents, and there is no significant difference in the influences which are caused by male normative and male comparative referents. Thus, hypothesis 2b is not supported by the statistical evidence from our research. Back to the theory of social influences, it shows that female is supposed to have higher referent power which is based on building and maintaining relationships between each other (Eagly, 1987). However, such power could not be seen as that strong from our result of analysing utilitarian influences. It seems like

male also has strong referent power for Smartphone users. Moreover, the situation is a little bit complicated in the value-expressive influences.

After analysing the answers from our respondents, we found that both male normative referents and female comparative referents have higher value-expressive influences on Smartphone users' purchase decision making process. Therefore, additional test has been added in to get the final result, which is female comparative referents have stronger value-expressive influence in Smartphone users' purchase decision making process. And again, our hypothesis 2c is not approved in this research. The theory of female has stronger referent power than male has been approved here (Carli, 1999). But again, male also shows its high referent power in this hypothesis. We think that the earlier suggestion which was mentioned by Johnson (1976) is more appropriate, that referent power is applicable for both male and female.

By comparing with the study by Yang, He and Lee (2007), three types of influences have also been tested. However, different from ours, their study focuses on the consumers' perspective, they divided their respondents into different culture aspects, and test which influences have higher impact on certain consumers. Similar studies have also mentioned in our literature review that they put more focus on segmenting consumers into different occupations as well as different demographic backgrounds (Chao & Schor, 1998; Khan & Khan, 2008). By combining with our study in which deeper understanding from inside of reference groups have been explored, it is easier for finding out the appropriate referents to increase certain influences on the target consumers.

5.1.3 The comparison between reference group influences and other important factors in Smartphone users' purchase decision-making

The importance of reference group influences comparing to other important factors in Smartphone users' purchase decision making is also investigated in our study, by ranking from "the most important factor" to "the least important factor". The four other factors which are the newest technology, the best design and appearance. the lowest price, the most attractive calling plan are concluded in the study of Yang, He and Lee (2007). In our research, the newest technology has been ranked as the most important factor while purchasing Smartphone, followed by the best design and appearance. And the importance of reference group influence has been ranked as the third important factors which as same important as lowest price. Comparing with the

result from Yang, He, and Lee (2007) it indicated that reference group influence is the least important factor among mobile phone users. It clearly shows that the influences of reference groups varied across different type of product (mobile phone vs. Smartphone) (Bearden & Etzel, 1982; Childers & Rao, 1992). Moreover, the public consumed luxury product (Smartphone) has higher susceptibility than private consumed luxury (mobile phone) which is easier to be influenced by reference groups (Makgosa & Mohube, 2007). We assume that the differences between mobile phone consumers and Smartphone users are existed and the influence of reference groups are considered as a very important factor among Smartphone users recently.

5.1.4 Gender vs. Gender

It is an extra study since we have found that Khan and Khan (2008) reported in the research that male and female consumers have different susceptibilities towards reference groups. Therefore, we are also curious and analyse the interrelationship between gender in reference groups and gender in Smartphone users.

5.1.4.1 Under different stages of purchase decision making process

In our result, it shows that, under information seeking stage, both male and female respondents prefer to collect Smartphone information from male normative and comparative referents.

Under decision making stage, both male and female prefer to hear about Smartphone information from male comparative referents. However, in normative referents as we divided into family members and friends, both male and female respondents prefer to get information from male family members. But for friends, male respondents consider male friends as their information source, but female respondents do not show clear preference in genders. Therefore, we conclude that, in general, male referents have higher influences on both male and female Smartphone users at information seeking and decision making stages. Therefore, male has more expert power has been approved again (Johnson, 1976) and it also shows that such power is applicable on both male and female respondents. Moreover, for female Smartphone users, male and female friends have almost the same influences at their decision making stage, which we assume that female respondents might need the suggestion from female friends regarding to the design and appearance of the Smartphone.

5.1.4.2 Under different reference groups influences

To conclude, in general, both male and female respondents think male referents have higher informational influences which is in line with the social influence theory that male has higher expert power (Johnson, 1976). However, female respondents also show their high preference of getting information from female friends. We assume it the same as what happened above, that female respondents might seek for technical information from male friends, but fashion and design information from female friends. We also assume that, nowadays, male and female might have different expert power due to different types of information.

Both male and female respondents consider that male referents have stronger utilitarian influences on them as it was mentioned by Bearden and Etzel (1982), that “this happens when consumers comply with others’ preferences because they think that it might be beneficial to meet others’ expectations and gain acceptance from them”. Therefore, the result is different from the social influence theory, that anything related to relationships, female should have higher influences on it (Eagly, 1987). We only can assume that for Smartphone users, both male and female users prefer to meet the expectations from other males due to the nature of the Smartphone is based on the high technology functions which is more focus on information evaluation rather than relationship maintaining.

Under value-expressive influences, both male and female respondents think their male family members have stronger influences. However, both male and female respondents consider the friends and comparative referents with same gender have stronger value-expressive influences while thinking of buying Smartphone. Festinger (1954) stated that the characteristic of the value-expressive influence is kind of similar to the theory of social comparison. It happens “when people would like to adapt themselves to become similar to their reference groups that they would like to belong to” (Yang et al., 2007). Therefore, it could help us to understand that people tend to seek for sense of belonging from the same gender. Nevertheless, the image of male family members of our respondents might be unforgettable or remarkable that cause higher belongingness. Moreover, the theory of female has higher referent power could not really fit in this study, and we think that whether female or male has higher referent power depends on what kind of relationship the respondents want to have.

5.2 Conclusions

Our research contains a comparative study exploring the impact of different genders in different reference groups on Smartphone users' purchase decision-making process and, also, to explore such impacts on different types of influences. Based on the existing literatures about reference group influences and consumers' purchase decision making, two main hypothesises were constructed. The online questionnaire was designed for collecting related data in order to empirically test the proposed hypotheses. Moreover, from analysing the data, some other interesting findings are also provided.

The findings that could answer our three study objectives will be showed as below:

1. To investigate whether different reference groups in different genders have different influences on different stages of Smartphone users' purchasing decision-making process.

Our hypothesis 1a & 1b are designed to answer this objective which divide the Smartphone users' purchase decision making process into two stages – information seeking stage and alternative evaluation stage. It confirms that different reference groups in different genders have different influences on these stages. There is a clearly preference from our Smartphone users that male referents, no matter normative or comparative, have stronger influences on both information seeking and alternative evaluation stages compare with female referents.

2. To explore which reference group in which gender has more interpersonal influences on Smartphone users' purchasing decision making. Interpersonal influences are informational influence, utilitarian influence and value-expressive influence.

Our hypothesis 2a, 2b and 2c are designed for seeking the answer of this objective. We found that male normative referents have stronger informational influences compared with other types of referents. Male referents also have stronger utilitarian influences on Smartphone users' purchase decision making. And the influence differences between male normative and male comparative referents are not statistically significant. Moreover, female comparative referents have stronger value-expressive influences compare with other types of referents.

3. To identify the importance of reference groups when compared with other chosen important factors that influence mobile phone consumers' purchasing decision-making, including having the newest technology, the best design and appearance, the lowest price among similar products, and the most attractive calling plan package associated.

After comparing with four other important factors which are mentioned by Yang, He, and Lee (2007), in our study, the reference group influence has been ranked as the third important factor by Smartphone users, and as the same important as the factor of lowest price. Thus, the importance of the reference group influence on Smartphone users has been investigated and confirmed. According to our study, the most important factor for most of respondents is "the newest technology". "The best design and appearance" is ranked as the second important factor among Smartphone users.

Moreover, the interrelationship between gender in reference groups and gender in Smartphone users has also been explored in our study. It shows that both male and female respondents consider male referents have more influences on their purchase decision making. However, female respondents also shows higher preference for female referents when comparing brands and models. Both male and female respondents think male referents have stronger informational and utilitarian influences, but some of the female respondents think their female friends have higher informational influences while they are making their decisions. At the end, most respondents seek for value-expressive influences from the same gender, but male family members shows its strong value-expressive influence on both male and female Smartphone users.

Chapter 6: Implications, Limitations and Recommendations

6.1 Implications

6.1.1 Theoretical implications

Based on the literature review, reference group has an influence on purchase decision making-process of consumers. Therefore, reference group, or social influence, has been used to increase brand awareness as well as product sales. We will now present what can be the implications of our result for the academic world.

First, we noticed from the literature review that the majority of researches have primarily focused on different topic of reference group from the consumers' side. Thus, this research extends the knowledge of reference group into a different dimension. Our study has shifted the focus to study reference group from referents' perspective. Based on the theory, one of the factors influencing consumer's reference group's influence is demographical difference of consumers themselves so we could assume that demographical difference of referents might effects consumers as well. Our study focuses on gender factor. Our results found that, for Smartphone users, male referents have higher reference group influence than female referents, and are considered more preferable. However, at the stage of value influence, female referents also play an important role.

Second, we chose to study Smartphone consumers' behaviors due to its high popularity of Smartphone in today's marketplace. Since the Smartphone is rather new for the consumers, the theoretical knowledge about Smartphone is still limited as discussed in the chapter 2. Our study has filled in the knowledge of mobile communication study with the main focus on Smartphone users' purchase decision-making. Our results show the preferred gender of referent for different stage of decision-making process and different reference group influence among Smartphone consumers. In addition, we also present the ranking of reference group comparing with other factors influencing Smartphone buying decision.

Lastly, our research has never been done within Sweden. Therefore, the results of our study can contribute to show more understanding about mobile and/or consumer electronic product's consumers in Sweden.

6.1.2 Managerial implications

The concept of reference group has been studied for a period of time. However, according to our findings, we can provide some implications for managers to use it in an efficient way, especially for Smartphone producers and marketers who want to communicate mainly to consumers aged 25 - 34.

Firstly, our results reported that both male and female consumers tend to seek their information and evaluate their choices of Smartphone from male reference group. So, the marketers should provide that information about their products or brand through male more than female representative, for example, using male expert more than female experts or the salespersons in the shop should be male more than female. As well as in the alternatives evaluation stage, the marketers might go for male communities than female communities to promote their brands or products in order for them to create positive word-of-mouth.

Secondly, a certain communication message can be more effective if attached to a certain referents. The marketers should take into the consideration which gender of referents can have more informational, utilitarian, and value-expressive influence on their targeted consumers so that they can convey the different kinds of message successfully through the referents who are most preferred by their consumers. For example, if the marketers want to communication to male consumers, they should attach the content of informational influence or utilitarian influence to male friend or some commercial that act as a consumer's friends. If the marketers want to communicate to female consumers, they should communicate the utilitarian message via male celebrities while using value-expressive message via female celebrities.

Lastly, today marketing is about 360 degree around consumers and the results also show that reference group has an impact on Smartphone users. Thus, using reference group as one of the strategies to connect to consumers and combine them with the use of social media could be considered as an interesting strategy.

6.2 Limitations

This research can present interesting and insight into reference group influence on Smartphone users' purchase decision-making. However, there are also some limitations. Firstly, the sample size of Smartphone users in this research is only 293 respondents, which might be considered too small number to represent the whole

population of Smartphone users aged 25 – 34. If this research could add in more respondents, it would be a better way to represent and generalize the Smartphone users aged 25 - 34 in general.

Secondly, this research data were collected from the current Smartphone users in different countries. This might be too broad for the research findings to represent Smartphone users within certain country. If this research could conduct and compare between different cultural backgrounds, the result might be able to illustrate better coverage of Smartphone users.

Thirdly, because this research employed quantitative methodology as the tool, the results are shown in quantifications rather than insightful statements. This method of research cannot gain more insights from the respondents, though the research found some interesting figures. If the research combines quantitative with qualitative methodology, the detailed and deeper information could be obtained and used to supports the quantitative findings. Furthermore, the qualitative method might lead to more interesting results that could be useful for both academic and professional use of reference group and Smartphone users.

Finally, this research aims to explore the difference between genders of the reference groups within respondents whose aged 25 – 34. Even though the research does present some different regarding gender difference, it might be to specific to filter the respondents only by age. If other demographic factors such as income, social class, nationality, and occupation were used to categorize the respondents, since the perception of gender might be different depended on different background of people, the result of the study might come out different and also useful.

6.3 Recommendations for future researches

As earlier mentioned, there are some limitations of this research. Therefore, we would like to give some recommendations for further researches as follow. Firstly, since the sample size of this research might be too small (293 respondents), the future research should have bigger number on respondents.

Secondly, the future research should adjust or combine with the qualitative method so that they can gain deeper knowledge about different gender of reference group and the

reason of why and how they are different. They might be able to gain the knowledge that cannot imply from quantification data.

Moreover, since this research highlight only on Smartphone users aged 25-34, other age ranges as well as other demographic factors should be taken into the consideration in the future research. These might be another crucial variable of the preference of male or female reference groups.

Lastly, this research is to explore the difference within reference group focusing on gender, other factors that differentiate reference group should be explore as well such as reference group from different social class, from different occupation. These might also lead to different susceptibility of consumers toward different reference groups. Finally, this research is focus on Smartphone, other industries or products, which are different from each other in nature, might bring about different results that are worth to explore.

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Appendix 1 - Questionnaire

Are you a user of Smartphone?

- Yes No

Part 1: Reference group influence on purchase decision-making

Please read each sentence and indicate how much you agree with the statement by putting (√) in the box that best describe you.

1. I seek for information about Smartphones from my parents or family members.

Strongly agree	Agree	Neutral	Disagree	Strongly disagree

Which one do you prefer to hear from?

- Father/Male relatives Mother/Female relatives

2. I would search for information about various Smartphones' brand from my friends.

Strongly agree	Agree	Neutral	Disagree	Strongly disagree

Which one do you prefer to hear from?

- Male friends Female friends

3. I will collect Smartphone information from advertisement and other media.

Strongly agree	Agree	Neutral	Disagree	Strongly disagree

Which one do you prefer to hear from?

- Male spokespersons Female spokespersons

4. The preference of family members can influence my Smartphone's choice.

Strongly agree	Agree	Neutral	Disagree	Strongly disagree

Which one do you prefer to hear from?

- Father/Male relatives Mother/Female relatives

5. My choice of Smartphone is influenced by my friends.

Strongly agree	Agree	Neutral	Disagree	Strongly disagree

Which one do you prefer to hear from?

- Male friends Female friends

6. My favourite stars' testimonials can influence my choice of Smartphone.

Strongly agree	Agree	Neutral	Disagree	Strongly disagree

Which one do you prefer to hear from?

- Male spokespersons Female spokespersons

Part 2 : Difference influence of different reference group

Please read each sentence and indicate how much you agree with the statement by putting (√) in the box that best describe you.

1. I have never buy a product until I have discussed with people in my family.

Strongly agree	Agree	Neutral	Disagree	Strongly disagree

Which one do you prefer to discuss with?

- Father/Male relatives Mother/Female relatives

2. I always follow my family's decision by buying the same products and brands as others.

Strongly agree	Agree	Neutral	Disagree	Strongly disagree

Which one do you normally follow?

- Father/Male relatives Mother/Female relatives

3. If I use the same products as my admired family members use, I feel that I can be successful like them.

Strongly agree	Agree	Neutral	Disagree	Strongly disagree

Which one do you prefer to look up to?

- Father/Male relatives Mother/Female relatives

4. I regular talk to friends about prices and quality before buying.

Strongly agree	Agree	Neutral	Disagree	Strongly disagree

Which one do you prefer to talk to?

- Male friends Female friends

5. I rarely buy the latest products until my friends approve them.

Strongly agree	Agree	Neutral	Disagree	Strongly disagree

Which one do you prefer to be approved by?

- Male friends Female friends

6. I want to be like my friends so I buy the brand they buy.

Strongly agree	Agree	Neutral	Disagree	Strongly disagree

Which one do you want to belong to?

- Male friends Female friends

7. I buy only the products or brands which are advertised on TV, radio, and magazine by celebrities, sport heroes, or stars

Strongly agree	Agree	Neutral	Disagree	Strongly disagree

Which one do you prefer to see?

- Male spokespersons Female spokespersons

8. I continue buying the same brands as long as my favourite stars endorse them.

Strongly agree	Agree	Neutral	Disagree	Strongly disagree

Which one do you prefer the Smartphone brand to be endorsed?

- Male spokespersons Female spokespersons

9. I follow my idol's choice because it represents my desired identity.

Strongly agree	Agree	Neutral	Disagree	Strongly disagree

Which one do you prefer to be your idols?

- Male spokespersons Female spokespersons

Part 3: Important factors in Smartphone consumers' purchasing decision

Please rank (between 1 – 5) the factors that influence your decision making in buying Smartphone which 1 is the most and 5 is the least important factor.

The newest technology (e.g., new functions, new applications)

The best design and appearance

The lowest price among relatively similar products

The most attractive calling plan package associated

The reference group influence

Part 4: Personal information

1. Gender

Male Female

2. Age

Under 25 25 - 34

More than 34 (End of research)

3. Income (for a month)

Under 1000 Sek 1000- 5000 Sek
 5001 – 10,000 Sek more than 10,000 Sek

4. Education

Lower than High school High school
 Undergraduate Post- graduate
 Higher than post-graduate

5. Occupation

Students MD/ Owner/ Chief Executive
 Senior Manager Engineering
 Sales/ Marketing Academic/ Research
 Consultant Personnel/ HR
 Government Officer None
 Others.....

Appendix 2

Table 1 - Reference group influence on purchase decision-making manifestation statements (based on the theories in Chapter 2)

Order	Influence on purchase decision-making manifestation statements
	<u>Information search</u>
1	I seek for information about Smartphones from my parents or family members.
2	I would search for information about various Smartphones' brand from my friends.
3	I will collect Smartphone information from advertisement and other media.
	<u>Alternatives evaluation</u>
4	The preference of family members can influence my Smartphone's choice.
5	My choice of Smartphone is influenced by my friends.
6	My favourite stars' testimonials can influence my choice of Smartphone.

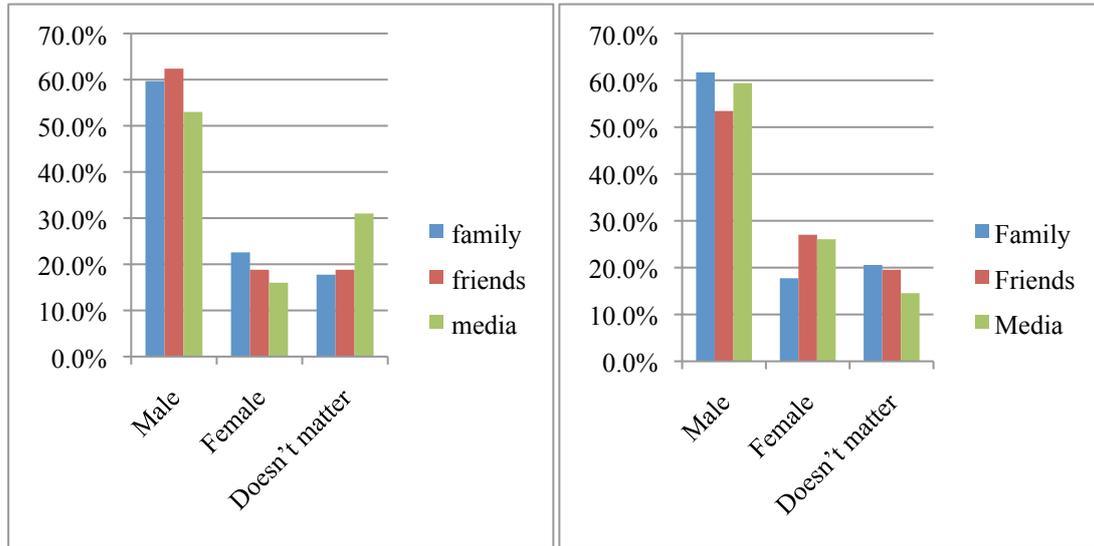
Table 2 - Reference group influence manifestation statements (based on the theories in Chapter 2)

Order	Reference group influence manifestation statements
	<u>Informational influence</u>
1	I have never buy a product until I have discussed with people in my family.
4	I regular talk to friends about prices and quality before buying.
7	I buy only the products or brands which are advertised on TV, radio, and magazine by celebrities, sport heroes, or stars
	<u>Utilitarian Influence</u>
2	I always follow my family's decision by buying the same products and brands as others.
5	I rarely buy the latest products until my friends approve them.
8	I continue buying the same brands as long as my favourite stars endorse them.
	<u>Value- expressive influence</u>
3	If I use the same products as my admired family members use, I feel that I can be successful like them.
6	I want to be like my friends so I buy the brand they buy.
9	I follow my idol's choice because it represents my desired identity.

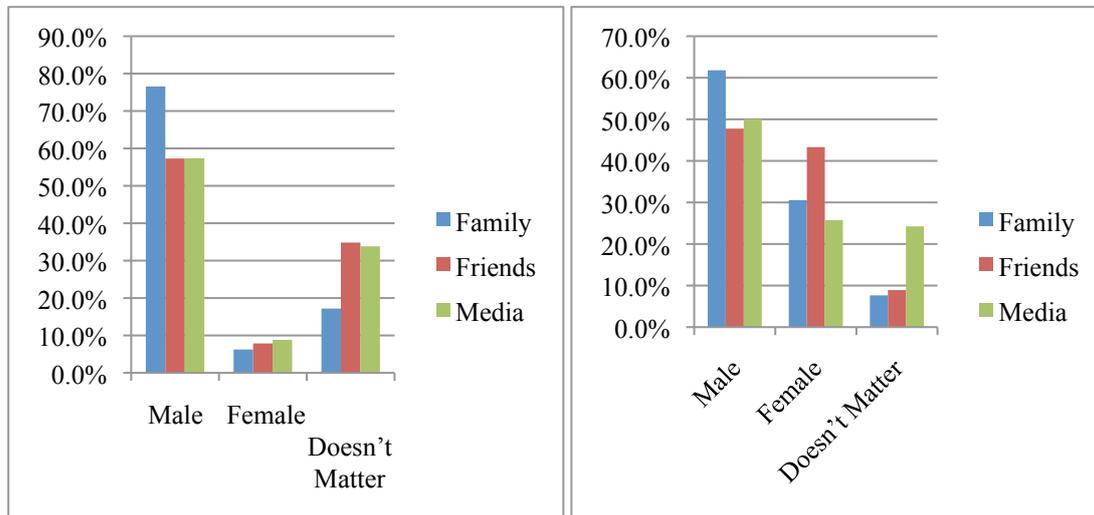
Appendix 3 – Gender & Gender Graph Comparison

Reference group influences on purchase decision-making

Information seeking stage of male respondents VS. female respondents

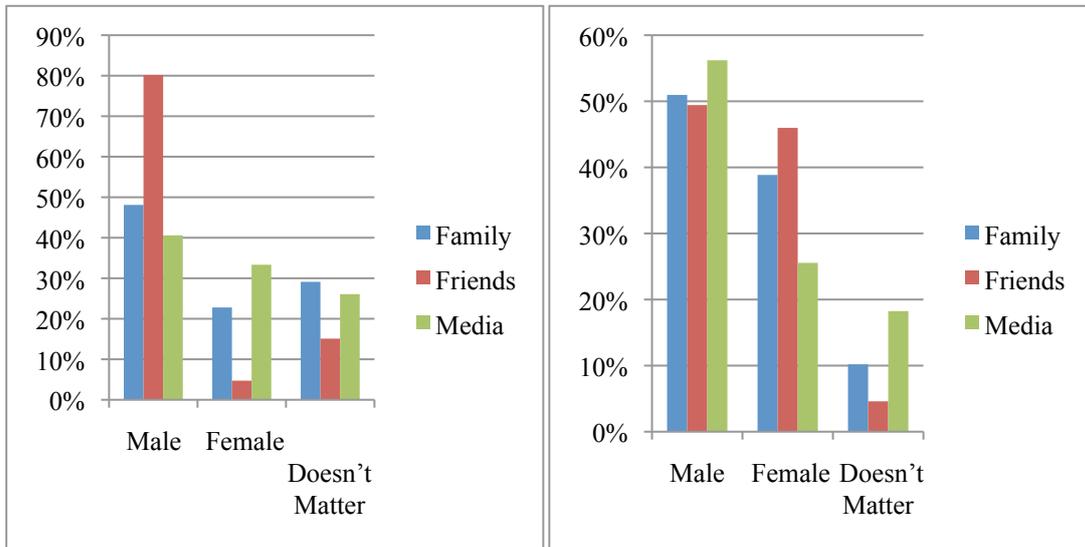


Decision Making Stage of male respondents VS. female respondents

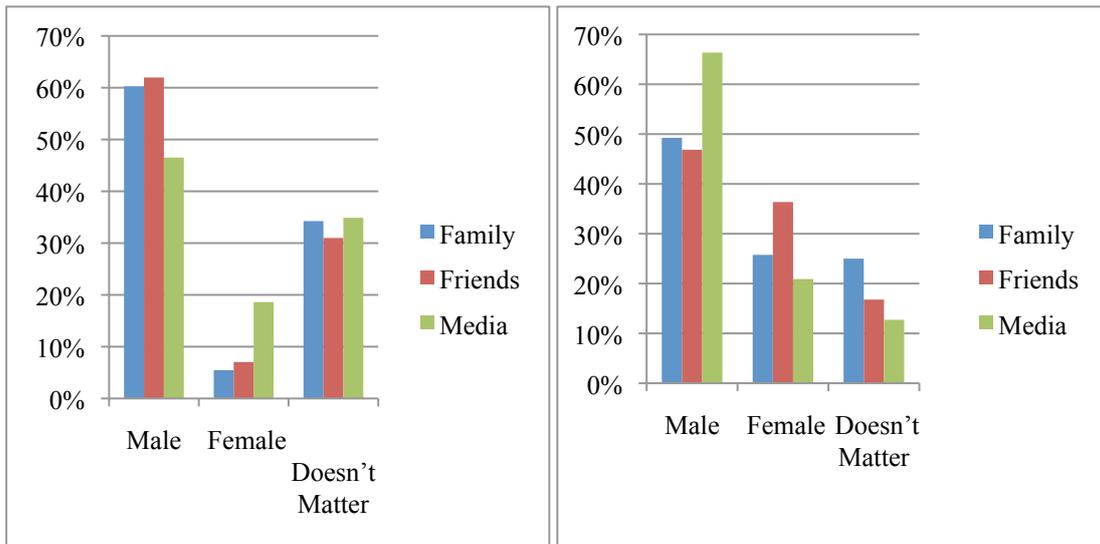


Different influences of different reference groups

Informational influence toward male respondents VS. female respondents



Utilitarian influence toward male respondents VS. female respondents



Value-expressive influence toward male respondents VS female respondents

