



University Students' Attitudes to Shopping Smartphones in Sweden

Factors that influence university students in Sweden to purchase a smartphone

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Abstract

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Title:	University Students' Attitudes to Shopping Smartphones in Sweden: Factors that influence University students in Sweden to purchase a smartphone
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Keywords:	Smartphones, purchase intent, university students, word of mouth, e-word of mouth, brand image, product features, consumer behavior
Research questions:	- What factors influence university students' purchase intent for smartphones? - How do demographic factors impact the attitude of university students when purchasing smartphones?
Purpose:	The purpose of the study is to look into and research what leading factors and characteristics that influence university students to buy a smartphone by analyzing their shopping behavior.
Method:	This research is studied from a quantitative perspective. An online survey was created and distributed to university students in Sweden as part of a Master's thesis in the International Marketing program conducted by two Mälardalen university students. The questionnaire is written in English and consists of 16 statements divided into five categories that represent independent and dependent variables.
Conclusion:	Results indicate that factors such as Social influence, Social marketing, Brand image, and Product features do not visibly affect university students' purchase intentions. The age factor plays a vital role in affecting purchase intention, Additionally, students from various nationalities have a variety of backgrounds and beliefs that influence their purchasing decisions.

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1. Introduction:

In this chapter, background information about the topic is presented, followed by the problematization, and purpose of the study.

1.1 Background

The technology and telecommunications industry is home to the world's largest and wealthiest corporations, where they are in fierce competition as they try to maintain their market leadership (Statista, 2022). According to Statista (2022), as it continues to innovate and arouse, the technology and telecommunications industry moves at a rapid pace, and smarter and more connected technology devices and infrastructure are being developed. Firms are in fierce competition as they try to maintain their market leadership, while also developing innovative products and services (Statista, 2022).

A smartphone is a combination of a mobile phone, advanced computing functions, and connectivity, which was introduced to the consumer in the market in the late 90s (Stat, 2021). Smartphones, which were originally designed to allow people to communicate via phone and email, now allow users to access the internet, send text messages, play games, and make and receive phone calls and emails (Frankenfield, 2022). Until 2007, smartphones became popular after the iPhone unveiling event (Statista, 2021). January 9, 2007, Steve Jobs, Apple's co-founder, announced it onstage at the company's Macworld conference and began unveiling his product: "Every once in a while a revolutionary product comes along that changes everything". Customers queued for days until it finally hit store shelves five months later (Isaacson, 2011; Price & Meisenzahl, 2020). Later on, the Android smartphone was introduced to consumers in late 2008. Since then, the smartphone market is continuously developing and growing in terms of market size, models, and suppliers (Statista, 2021). According to Park and Chen (2007), Smartphone demand has increased with the features and functions they offer in a phone (Park & Chen, 2007).

In 2023, global smartphone shipments are expected to be around 1.48 billion units in total. By the year 2020, 46.45% of the global population had a smartphone. The number of smartphone subscriptions is higher since many people own more than one smartphone. Smartphone users were estimated to have 6.4 billion subscriptions as of 2021, with that number expected to rise to 7.5 billion by 2026 (Statista, 2021).

Consumer behavior interaction for products and brands of mobile phones has been changing according to Kim, Wang, and Malthouse (2015), due to the application development in mobile phones. University students have a high purchase behavior and acceptance of mobile phones (Dahlstrom, Brooks, & Bichsel, 2014). Besides, Smura, Kivi, and Töyli (2009) stated that smartphones have become almost a necessity in daily life for young adults and senior citizens in most developed countries. Additionally, students have been seen as a major contributor to smartphone sales over the past two decades, as smartphones can play an important role in their academic endeavors and social activities (Smura et al., 2009). Smartphones can provide students with instant access to educational materials and platforms at any time, frequent social exchanges, and can be a source of information storage (Elammari & Cavus, 2019). According to Vorderer (2019), in modern society, students and young people have a strong affinity for innovative technologies that can facilitate their daily work. They have developed a major reliance on smartphones for sending and retrieving data, staying always connected to their social or student groups, and being permanently online, through various mobile communication applications, to obtain news and updates in their learning environments (Vorderer, 2019).

According to Morphitou (2014), these mobile devices are leading the new era of mobile living. He reported that with the increased use of smartphones and the advanced mobile technologies used in them, many people around the world consider them a must-have phone. Smartphones are now considered personal assistants and pocket computers, as they are used as a kind of accessible knowledge machine, and everyone carries these devices around with them that can tell them just about anything they want to know (Morphitou, 2014). Smartphones have several advantages, including the ability to access the Internet from anywhere at any time, also, people use smartphones for calls, SMS, emails, social networking, watching videos, Internet browsing, reading e-books, listening to podcasts, blogging, using applications, shopping/banking online, and a variety of other activities (Morphitou, 2014). Moreover, these pocket computers are growing in

popularity, particularly among students, and are now viewed as very trendy and stylish phones to own, as they provide students with new ways of getting information, which may help them learn more effectively (Morphitou, 2014).

1.2 Problematization

The buying decision process of smartphones in terms of motives and choice has been affected according to Ericssonconsumer Consumerlab (2013), and the most affected users are the young generation. Dahlstrom and Brooks (2014) stated according to their studies, that 86 % of mobile phone owners in 2014 were undergraduate students, while it was much lower in the general adult population. The most important customers of information technology services are university students (Dahlstrom & Brooks, 2014) since technology is part of their lives (Dahlstrom, Walker & Dziuban, 2013).

According to Ataman and Ülengin (2003), the mobile phone brand plays a significant role in the purchase behavior of younger consumers, due to rapid mobile phone penetration and preferences. Thus, their perception of the brand image has a significant impact on their purchasing behavior in the marketplace. As reported by Paterson and Low (2011), and Jacob and Issac (2008), smartphone usage increased among university students as recorded in other studies. University students are the market segment that is argued by Haverila (2013), to be the “sweet spot”. In emerging economies, people aged between 18 and 29, which is the age of going to university, are a large portion of early smartphone users (Heinonen & Strandvik, 2007; Rainie & Poushter, 2014). Besides, Sultan, Rohm, and Gao (2009) mentioned that in emerging nations, the adaptations of smartphones by university students are dominant. Further, as stated by Arif, Aslam, and Ali (2016), and according to the results from polls in every country, consumers who are more likely to own a smartphone are under the age of 30, despite the difference in age groups and differences between the countries. Also, it is noted that educational level is related positively to owning a smartphone (Arif et al., 2016). Further, smartphone owners are more likely to have university degrees than those who do not (Arif et al., 2016).

In light of the above, we are interested to carry on this study to examine what factors that impact university students’ purchase intent. According to Osman, Talib, Sanusi, Shiang-Yen, and Alwi

(2012), smartphone technology has an impact on people's behavior and particularly young adults. In addition, there is a lack of knowledge about the behavior and preference of consumers, especially young adults toward smartphone usage (Osman et al., 2012). Accordingly, university students are chosen for the study since they represent a significant market segment. Besides, it is interesting to know and research what factors impact university students' smartphone buying behavior due to its importance in most people's lives, and the fast adaptation to smartphones by university students.

1.3 Purpose of the Study

The purpose of the study is to look into and research what leading factors and characteristics influence university students to buy a smartphone by analyzing their shopping behavior when buying a smartphone. Based on the previous information and considering the lack of study of students' smartphone purchase behavior, the following research questions are developed:

What factors influence university students' purchase intent for smartphones?

How do demographic factors impact the attitude of university students when purchasing smartphones?

This study aims at exploring some leading factors that influence the smartphone purchase choice of university students, most particularly brand image, price, peer influence, and mobile applications (Elammari & Cavus, 2019). Furthermore, Prasad and Jha (2014) mentioned that a clear perception of the consumer purchase cycle and preferences can be an insightful tool for companies to tackle challenges and maximize opportunities in their market. Increasing varieties of smartphones with the rapid growth of shopping is a marketing challenge that needs to understand the decision-making process of consumers, and this research is about university students' smartphone buying decisions.

2. Literature review

In this chapter an overview of existing knowledge and previous research on the chosen topic, and the hypothesis development, such that it is divided into four main sections which are; 2.1 Consumer behavior 2.2 Consumer awareness 2.3 Consumer perception 2.4 Consumer attitude 2.5 Hypothesis development.

2.1 Consumer behavior

Consumer behavior research is the scientific examination of how people buy, use, and dispose of goods, services, ideas, or experiences that fulfill their needs and desires (Kotler & Keller, 2009; Kwon, Trail, and Anderson, 2005). According to Kwon et al. (2005), marketing strategy is affected directly by consumer behavior knowledge. Consumer behavior includes a wide range of research into how consumers make purchasing decisions (Ganlari, Kumar, and Dutta, 2016). Marketers realized that consumer behavior is a continuous process, and not only an interaction between the consumer and the producer during the purchase process; such as giving money and gaining goods or services (Solomon, 2006). Kotler and Keller (2009) stated that researchers are trying hard to study the reason behind the buying of consumers since the reason is found only in the consumer's head. While it is easier to figure out what, how, where, when, and how much people buy, different techniques are used by companies to affect the consumers' decisions, but still, it is hard to predict the consumers' response (Kotler & Keller, 2009). Kotler (2009) stated some factors that influence the consumers which are; economic factors i.e, are the market and economic conditions of a country; technological factors, such as the Research and Development department i.e; which develops smartphones according to usage and needs, and cultural factors which are related to the country's cultural beliefs and practices. Besides, smartphone companies use marketing stimuli to have an impact on consumers to purchase a new smartphone or replace the older one (Kotler & Keller, 2009).

The observable consumer reaction is expressed based on what influence these stimuli exert as an outcome like; product choice, brand choice, dealer's choice, purchase timing, and the purchase amount (Kotler & Keller, 2009). According to Belch and Belch (2009), people's buying decision process is influenced by price, branding, and product performance and design, and is affected if the product meets the consumer's needs. The purchase decision case of a smartphone is affected by

technical factors like camera performance, and integration of hardware and software (Belch & Belch, 2009). According to Maslow's hierarchy, as stated by Thrassou and Vrontis (2009), the majority of people have shifted on to fulfill higher needs like cognition and esteem, while the minority are still focused on the first two levels which are the physiological and safety needs. At the collective level, whether in developed countries or not, there are forces that give a parallel stimulation, and it is related to macroenvironmental factors rather than individual ones (Thrassou & Vrontis, 2009). In a developed country, an average person is allowed to be motivated to satisfy higher needs compared to people in another country, and that refers to the combined impact of personal and macro-environmental conditions (Thrassou & Vrontis, 2009). The motivation level of an individual is pushed higher on the hierarchy, which is related to the factors that distinguish developed countries, mostly through the application of the individual performance of higher collective expectations (Thrassou & Vrontis, 2009).

Moving to the age factor, and according to Frandsen (2009), generation X is born from 1965 to 1980. It is a generation that develops their careers by working for a long time to increase their earnings, also they are defined as being more brand/product loyal than generation Y (Reisenwitz & Iyer, 2009). Further, they are less satisfied than other generations and they are less dedicated to traditional organizations (Krahn & Galambos, 2014). Generation Y according to Tulgan and Martin (2001), was born between 1978 and 1984. They are free by technology, as described by Wallace (2007), adaptable, independent, and creative. Generation Y has the desire to give meaning to their lives by fulfilling themselves, as well as they have the knowledge of new technology and the internet (Parment, 2009). Also, they are the generation of multitasking and multimedia (Reisenwitz & Iyer, 2009). Millennials are from generation Y, and they are people who were born between 1980 and 2000 (Gurău, 2012), such that they are different compared to other generations in their behaviors and values (Eastman & Liu, 2012). According to Zickuhr (2010), the factor that distinguishes Millennials from previous generations, and what motivates their perceptions and expectations, is the technology that plays a crucial role in their lives. According to Parker and Igielnik (2020), generation Z is individuals who are born in 1996 and ahead. They are digital natives and the most educated generation to be in the future, as well as having no or little memory of the world before smartphones (Parker & Igielnik, 2020).

2.2 Consumer awareness

Different types of effective consumers behaviors are influenced significantly by consumers' awareness and knowledge, as illustrated by many studies (McEachern & Warnaby, 2008; Hartlieb & Jones, 2009; Liang & Xianyu, 2008; Donoghue & de Klerk, 2009; Thomas & Mills, 2006; Chartrand, 2005; Coulter et al., 2005; and Dommeyer & Gross, 2003, as cited in Ishak & Zabil, 2012). According to Chartrand (2005), Only awareness can lead to effective consumer behavior. Modification, control, change, and elimination in human decisions and behaviors are led up by consumer awareness both consciously and unconsciously (Chartrand, 2005). According to Rousseau and Venter (1995) (as cited in Makanyeza, 2015), consumer awareness is the consumers' attention to their responsibilities and rights in the marketplace. Zakersalehi and Zakersalehi (2012); Brewer and Rojas (2008); and Rousseau and Venter (1995) (as cited in Makanyeza, 2015) stated that the accelerated flow of goods and services across the national boundaries, due to globalization, leads to the growth of consumer awareness attention in marketing practice and research.

2.2.1 Social Influence

According to Mason, Conrey, and Smith (2007), feelings, behaviors, and beliefs impacted by other people are known as social influence. Such as specific attitude, feeling, thought, and behavior will be adopted by the individual (Mei, Chow, Chen, Yeow, & Wong, 2012). Schiffman, Kanuk, and Wisenbut (2009) noted that consumers are affected by social class, culture, and subculture in the way that they adopt and evaluate products. Even though these factors are less tangible, they are part of one's nature and affect consumers (Wisenbut, 2009). Media, peers, and parents are the social influences that affect customers' purchases both intentionally and unintentionally, by impacting their behavior, thoughts, feelings, and attitudes (Rashotte, 2007; Nelson & McLeod, 2005). According to Bojei and Hoo (2011), consumers' decisions and attitudes toward a brand are based on the impact of people's opinions and social norms. Besides, Kotler and Armstrong (2007) and Klobas and Clyde (2001) mentioned that people around would impact consumers' actions, such that social influence is prevalent and people are not even conscious about it. Moreover, people can reach information about smartphones from current or previous smartphone users through reviews and comments on social media, like Facebook and Instagram, by developing their online social networks (Rahim, Safin, Kheng, Abas, & Ali, 2016). Consumers would look for people's

experiences, suggestions, and advice who already bought and used smartphones. Different types of people are reached like friends, family, spouses, and peers (Kotler & Armstrong, 2007). As implied by Suki and Suki (2013), the young generation, particularly students, rely heavily on those around them to purchase smartphones. Buyers purchase smartphones that are similar to those used by their friends and families after seeking advice and opinions from them (Suki & Suki, 2013).

A positive and significant relationship was indicated between social influence and smartphone purchase intent (Suki and Suki, 2013). Klobas and Clyde (2001) discovered that smartphone dependency is related to the positive effect of social influences (Klobas & Clyde, 2001). Furthermore, Auter (2007) mentioned that social influencers, who are friends and family, are essential in motivating a higher dependency on smartphones. It is reported in a survey of teenagers, that both females and males tend to buy similar clothes to their friends after seeking their advice (Nelson & McLeod, 2005). Additionally, Murali, Laroche, and Pons (2007) mentioned that studies have found that consumers' purchasing decisions are affected by social influence.

2.2.2 Social marketing

“Social marketing is the adaptation of commercial marketing technologies to programs designed to influence the voluntary behavior of target audiences to improve their personal welfare and that of the society of which they are a part “Andreasen (1994, p. 110). According to Kotler and Lee (2008), social marketing is the same as a commercial marketing concept, but it is applied for the benefit of consumers' behavior. Similarly, according to Gordon (2011), practice and thought of social marketing are pointed to individual buyers. Furthermore, social marketers could help consumers to make better decisions by directing the health and social problems reasons by motivating policymakers and mentioning inequalities (Wymer, 2011).

Word of mouth

According to Arndt (1967), word of mouth (WOM) is the process in which the speaker, which is not commercially involved, expresses his or her thoughts in a conversation between two or more people about a brand or product. Likewise, WOM as stated by Buttle (1988), can be expressed by any person that is not paid, excluding advertisers or marketers. On the other hand, the advertising

purpose which is paid by a business is to convince customers to buy a product or service (Buttle,1988).

When a speaker has a positive opinion about a product, people are more likely to buy that product; like if a student expresses his or her opinion positively about a mobile phone, it is likely that his or her friends will buy a similar one and vice versa (Arndt, 1967). Buttle (1988) stated that customers are less likely to share their positive experiences compared to their negative ones regarding a product. Also, he claimed that WOM is considered to be the most powerful factor that affects consumers' behavior according to its impact on people's feelings depending on what they know and do (Buttle, 1988). Moreover, according to Sheth (1971), as cited by Buttle (1998), described WOM as a more important factor than advertising. Explaining that influence, a comment from a trustworthy person has great power compared to advertising (Buttle, 1998). According to Sheth (1971), WOM gives a strong feeling to try and buy a new product, as it increases awareness about an innovation.

According to Chow, Chen, Yeow, and Wong (2012), people use social media applications to stay in touch with their friends and others, thus, people's decisions are influenced by their friends when purchasing a product. A large part of an individual's feeling, attitude, thought, and behavior is influenced by social factors, as a result, individuals may adopt specific thoughts, behaviors, feelings, and attitudes (Rashotte, 2007, as cited in Chow et al., 2012). Additionally, Clark, Doraszelski, and Draganska (2009) noted that WOM highly impacts brand preferences more than intrinsic cues. In the way of WOM, half of the service providers are discovered (East, Hammond & Lomax, 2008). As stated by Kim (2008), the smartphone is similar to other innovative products in that they are "experience good," and consumers must experience or try them to be more ambiguous about them.

Electronic Word of mouth

According to Cheung and Lee (2012), electronic word of mouth (e-WOM) is the new form of communication that was developed from WOM during the IT revolution and has remarkable scalability and speed. According to Chatterjee (2001), an online review is a type of e-WOM, which is the most and widest kind available. A social network is an electronic communication platform

for sharing online feedback about products and shopping experiences (Wong, 2017), where senders and receivers are not familiar with each other (Gupta & Harris, 2010). Du Plessis (2017) found that e-WOM could be in a form of liking, disliking, sharing, or commenting on brand content that is checked by consumers through their newsfeed. Online information such as suggestions, opinions, and experiences regarding product consumption, are easy to be provided by consumers, as they can reach many people around the globe (Wong, 2017; Kucukemiroglu & Kara, 2015).

Consumers evaluate eWOM constructively in the absence of social information, as consumers are exposed to e-WOM through chat rooms, emails, blogs, and other social platforms (Gupta & Harris, 2010; Zhang, et al., 2010). Further, online reviews are based on opinions regarding brands, administration, and products (Lee, Park, & Han, 2008). According to Park, Lee, and Han (2007), online reviewers are buyers who have experienced the products or brands, and it is essential for eWOM to be from real, former, and potential consumers. Wong (2018) stated that consumers' willingness to buy increases when they receive high-quality information through social media, as well as, respondents' purchase intention increases through social media due to the positive effect on respondents' online purchase intentions.

Wong (2018) claimed that some consumers might not acknowledge the reviews of people on services or products, since there is a possibility of not being trustworthy, because of some people who are hired to write fake reviews. Consumers' purchase intention is influenced by positive eWOM, regardless of the findings that indicated that other people's reviews are not believed by some consumers (Wong, 2021). Furthermore, eWOM is practical information from experienced customers to potential customers (Wong, 2018). According to research by Poturak and Turkyilmaz (2018), customers who express their opinions and ideas about what they experience in a product are considered strong WOM.

2.3 Consumer perception

Product knowledge and expertise have a direct impact on how consumers evaluate and receive new information related to a product, thereby, a certain cognitive domain for a particular brand will be created (Alba & Hutchinson, 1987). Hence, knowledge and expertise of the brand are highly related to how consumers evaluate products, assess new information, and extension of these

products, as a result, an awareness of the brand can foster a sense of security and trust (Sheinin, 1998). According to Jamal and Goode (2001), marketing managers should always examine and strengthen the connections between their brand products and what consumers assume or perceive of their brand.

As stated by Traver (2013), brand perception is described as what is really perceived or experienced in particular products by consumers. Perception can be translated as reality, as to what the brand is promising or expected to offer (Traver, 2013). According to Ganlari et al. (2016), perception is the process where individuals receive, organize, and interpret information to form a certain opinion, image, or understanding of items, as consumers can react differently to the same objects as they interpret the information uniquely. Perception plays a vital role in fostering trust, retention, brand impressions, and loyalty, where consumers can share their same motive and be placed in the same situation of purchase. However, they perceive and act differently as their perception of a product or service can vary from one to another (Ganlari et al., 2016).

Belch and Belch (2009) stated that perception is related to the various ways a person can receive external information, and interpret it based on the information resources or centers they already hold. These variations of assumptions can be explained that consumers go through three processes or stages to form an idea or perception of an object, which are selective attention (exposure); that is the process of screening the most relevant stimuli, or spotting the product or service that is closely corresponding to the need or motive, second is selective distortion (interpretation); this process pertains to distorting and interpreting information that matches existing assumptions, and lastly selective retention; this is the final process where consumers store the important information to base their final feelings or impression about the object and neglect the other irrelevant sources (Ganlari et al., 2016).

2.4 Consumer Attitude

“Attitudes are learned predispositions...” (Allport, 1935, p810) as cited in Ganlari et al. (2016), such that attitudes are the consumers’ behavioral act in a particular way in responding to an item or class object in a negative or positive way (Allport, 1935, as cited in Ganlari et al., 2016). It encompasses three information centers: cognitive information, affective and consumer's shopping

past behavior, and predictable intent; in other words, attitude consists of thoughts or beliefs, prejudgments, sentiments, evaluations, and future intentions developed from existing perceptions (Ganlari et al., 2016). All smartphone companies strive to stimulate and retain positive feelings in consumers through their offerings (Ganlari et al., 2016). Multiple factors can affect the consumers' attitude toward smartphone shopping, however, the strength of each factor on consumer attitude can vary due to diverse environmental and individual characteristics (Sata, 2013). According to Karjaluoto, Karvonen, Kesti, Koivumäki, Manninen, Pakola, and Salo (2005), brand, price, and property features are considered the most influential stimulants for mobile consumers. It was confirmed later by a scientific investigation by Saif (2012), which found size, costs, mobile brand designs, and technology affect smartphone consumers' shopping behavior.

2.4.1 Brand image

According to Aaker and Equity (1991), brand image can reflect a brand understanding, such that it helps consumers to collect information, distinguish the brand, construct emotional reactions, and develop clear reasoning for purchase. Establishing brand trust in consumers' minds is one of the strongest marketing tools in building profound and lasting relationships and high purchase retention (Urban, 1996). Roth (1995) strengthens the objectivity of brand image by describing it as the cornerstone of a company's marketing program to sustain competitive advantage and profitability in any industry. Further, Willis (1990) stated that young people value personal styles such as music, fashion, and vehicles as their image in society and mobile phones shall not be an exception.

Kotler (2001) defined brand image as thoughts and sentiments in consumers' memory of a particular thing or object. The brand image indicates how consumers view the product abstractly rather than the actual reality of it, therefore the image addresses more the intangible attributes of the brand (Keller, 2001). In addition, Keller (2002) defined the brand as "a trademark that conveys a promise", this promise can have symbolic and functional attributes, which always stand out in the consumer's perception. Consumers' personalities can be expressed through selecting a specific brand, ringtones, and background pictures, as a mobile phone is considered an essential possession of their daily routines (Bauer, Reichardt, Barnes, & Neumann, 2005). Brand

image is a considerable asset that reflects the quality and certain knowledge base which correlate with the brand (Srinivasan, & Till, 2002). A brand reflects certain impressions and particular associations in the consumer's thoughts and represents a promise to achieve an expected degree of execution from a product or service (Chimboza & Mutandwa, 2008). Consumers can infer the qualities of brands through extrinsic cues of a product, however, brands also reflect an intrinsic identity that is constantly developed by marketing managers to distinguish from competitors (Sung & Choi, 2010). According to Upamanyu and Mathur (2013), brand image is all related to the consumers' perception of the product. Shahzad (2013) also stated that brand image refers to the beliefs which consumers possess about a particular brand, it pertains to the assumption that consumers had formulated from different sources, and is a reflection of the brand's reputation, value, and usability. Furthermore, consumers' satisfaction with a brand constitutes a key factor in obtaining loyalty and building a special bond (Boakye, 2018). In other words, brand image is what the customer perceives about a brand, such that it is a set of thoughts associated with the targeted customers' minds (Boakye, 2018).

Lazarevic (2011) argued that brand image represents the most important factor to reach brand loyalty. A brand must be coherent with the customer's image of themselves, as it addresses the extrinsic values of the product, which includes how the brand meets the customer's social and psychological needs (Lazarevic, 2011). Ching, Chen, and Myagmarsuren (2011) also found that brand image plays a vital role in how customers assess products and motivate them to become loyal, such that, brand image impacts the attitude and behavioral character towards the brand and the company as a whole. Moreover, according to Idoko, Ireneus, Nkamnebe, and Okoye (2013), a brand image can be seen as a communication channel that transmits, explicit, and implicit meanings of the product, thus, it has a unique role in the choice of product. Some brand images can immediately stimulate perceptions in consumers' minds, in a way that motivates or discourage purchase behavior towards a particular brand of product (Idoko et al., 2013).

2.4.2 Product features

Many people will base their smartphone purchases on the technological solutions that these devices can offer and meet their desires (Saif, 2012). As stated by Kotler and Armstrong (2007), Product

features can be described as the characteristics of a product that can meet consumers' preferences through the usability and applications of the product. Technology features such as wireless connectivity, a built-in web browser, application installation methods, a file management system, full programmability, multimedia and capture, high-resolution displays, operating systems (android vs IOS), storage capacity, and movement sensors, can play an essential role in consumer preference (Kotler & Armstrong, 2007). Aside from those software features, some consumers can also be attracted to the hardware attributes such as the design, the touch, the camera, and the weight of the devices (Oulasvirta, 2011; Lay-Yee, Kok-Siew & Yin-Fah, 2013).

A study by Sata (2013) showed that product features are the second most important factor that affects purchase preference after price, and the results of the study also showed that consumers would replace or even change brands if they had been offered better technology. Therefore, Smartphone companies always strive to add features that correspond to the current trends and consumer needs that would be cost-effective and yield high purchase intent (Sata, 2013). These findings were previously corroborated by Blijlevens, Creusen, and Schoormans (2009), who also established that physical appearance is an important factor for purchase in young consumers, and they also emphasized how importantly consumers perceive product attributes, such as style, sophistication, and entertainment. In addition, Kotler and Armstrong (2006) concurred that the vitality of style and design of the product in consumers' minds should incite attraction and increase purchase choice.

2.5 Hypothesis development

Based on the literature review, there are four independent variables, which are social influence, social marketing, brand image, and product features that impact the dependent variable, which is purchase intention. According to Wong (2021), low purchase intention of new products in the market is caused by a lack of awareness. Furthermore, Singh, Hangloo, and Kaur (2012) mentioned that consumers would not buy products based on low purchase intention and product awareness scores for unknown features and benefits.

Dependency on smartphones as stated by Basaglia, Caporarello, Magni, and Pennarola (2009), will increase, if it causes a good impression on others, and accordingly, positive WOM will be led to others. Smartphone users will increase if they embrace and trust positive WOM opinions from influential individuals on smartphones, incorporate them into their beliefs, or imitate them (Basaglia et al., 2009). Besides the WOM, Al Rawashdeh, Emeagwali, and Aljuhmani (2019) stated about eWOM, that consumers' purchase intention is more effective since consumers' uncertainty becomes lower when purchasing products and brands, as a consequence of communication messages. Thus, the following hypotheses have been developed:

H1: Social influence positively affects university students' smartphone purchase intentions.

H2: Social marketing positively influences university students' smartphone purchase intention.

Furthermore, according to Ataman and Ulegin (2003), the purchase behavior of smartphones is highly linked to the consumer perception of the brand due to rapid mobile phone penetration and vast preferences. Thus, mobile phone brands have a significant impact on younger consumers (Ataman & Ulegin, 2003). Rahim et al. (2016) also mentioned that there is a significant relationship between product features and high purchase intention among other factors, such as social influence and brand. This study was echoed by a previous empirical finding by Ling, Hwang, and Salvendy (2006) to a group of college students, which established that mobile phone attributes, such as physical appearance and menu organization, are the most important determinant cause of a purchase preference. Hence the following hypotheses are suggested:

H3: Brand image positively impacts university students' purchase intent.

H4: The functionality of the product positively influences university students' purchase intent.

A conceptual model is developed based on these four hypotheses, which are developed in Figure1. Social influence, Social marketing, Brand Image, and Product features are the independent variables that positively affect the dependent variable Purchase intent.

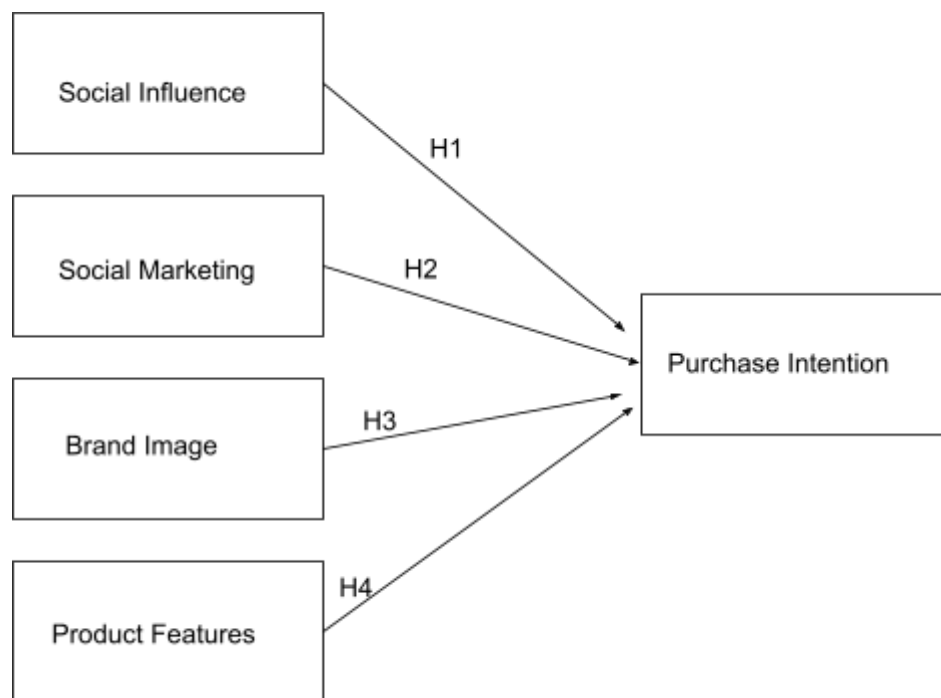


Figure 1: Conceptual model

3. Methodology

In this chapter methods and scientific perspectives used for this research are explained and justified.

3.1 Epistemological approach

According to Bell, Bryman, and Harley (2019), the epistemological approach is a way of studying and understanding reality, especially in business research, such that it provides the answer to how the data should be conducted to answer the research question. Using surveys or other tools in positivism is the most suitable way to conduct data, since the existence of reality is both externally and objectively (Bell et al., 2019). Thus, the chosen approach for this study is positivism. In social science, the positivism approach is generally used (Isaeva, Bachmann, Bristow, and Saunders, 2015), due to the purpose of developing universal laws (i.e. conceptions) by finding the relationship between social reality and influences (Saunders, Lewis, & Thornhill, 2016); Isaeva et al., 2015).

In this study deductive testing is used to approach the relationship between the theory and research, with respect to the hypotheses formed in the study (Bell et al., 2019). According to Bell et al. (2019), the deductive approach is the positivist social science logic, such that natural science general rules are applied to conduct research. Following the same steps as in physical sciences, hypotheses are developed and tested by collecting data to check if they would be falsified or taken as statements that represent reality (Bell et al., 2019).

3.2 Research design

The aim of the study is to examine what leading factors and characteristics influence university students to buy a smartphone by analyzing their shopping behavior during purchase. In this study, we are interested in analyzing the factors that influence university students' smartphone purchase intention. This research is studied from a quantitative perspective, such that it is a strategy that highlights quantification through the collection and analysis of data (Bell et al., 2019). Knowledge objectivism is the belief that this research is directed based on visible relationships and measurable

facts (Isaeva et al., 2015). Hypotheses are accepted to represent true statements about reality provisionally after following the steps to falsify the hypotheses through collecting data and testing them (Bell et al., 2019). The deductive approach is used to develop hypotheses that can be empirically tested based on previous literature (Ghauri, Grønhaug, & Strange, 2020). According to Bell et al. (2019), the deductive approach is usually related to positivism which is a method used for the research to be approached. Thus, the philosophical strategy chosen for this study is positivism.

3.3 Data Collection

The data was collected through an online survey. According to Saunders et al. (2016), the online survey was chosen because of its potential for a wider reach, such that it is the usually used method in the positivist approach, and it is a more varied sample of respondents. An online survey would ensure that the researchers' values will not impose on the results (Saunders et al., 2016). According to Bell et al. (2019), since reality exists externally and objectively, using surveys or other mechanisms to measure or observe directly the phenomena is a suitable way to collect data under positivism study. The literature review was collected from different articles through database searching. Diva-portal, Google Scholar, Research Gate, and Science direct were mainly used. Also, books and scientific websites were also used to provide further information for this study. Most of the previous research was from primary sources. Still, if a primary resource was not available it was referred to the secondary resource where the information was found.

An online survey was created and distributed to university students in Sweden as a study for a Master's thesis in the International Marketing program. The survey was in the English Language and consists of 16 items distributed in five categories that represent independent and dependent variables. The survey targeted university students who are studying in Sweden, and it is about collecting data to test the hypotheses that were previously developed if the independent variable affects their purchase intention positively. We used Whatsapp, and email to send personalized requests to people in our networks (friends, relatives, coworkers, etc...). We requested them to distribute the survey to one or more students to increase the response rate. We also shared it through social media groups to gain more respondents. In addition, reminders were sent especially through emails, since some people may have missed the previous one, and it makes them feel their

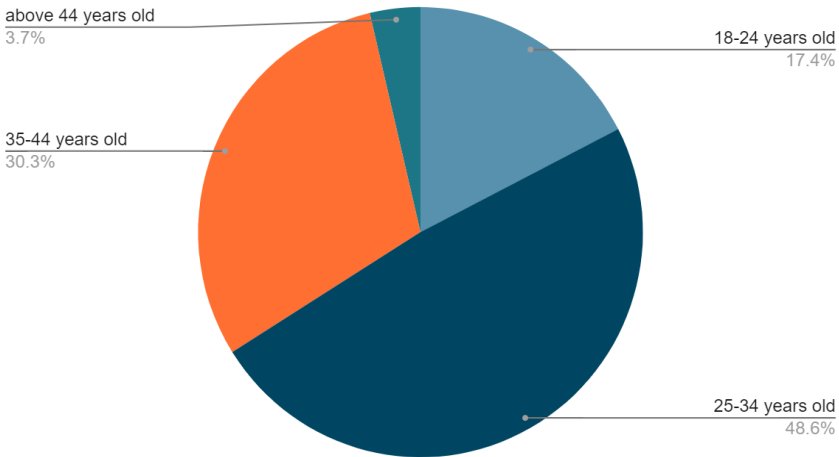
response is important to the research.

Sampling

A convenience sampling method was administered to identify respondents and collect data for this study. Convenience sampling includes whatever amount of available respondents can be easily accessed by the researchers to provide answers to their questionnaires, obtaining the highest rate of responses possible (Bell et al., 2019). According to Peterson and Merunka (2014), although convenience sampling is the most common in the business research field, it is still arguable that the findings of such sampling can not be definitive or generalized. Especially among university students who are assumed to have higher socioeconomic resources than the average population, thus their responses will be more conscious rather than spontaneous (Bell et al., 2019). However, due to time restraints and to reach the highest possible number of students, this sampling technique was used and aimed only at university students in Sweden aged between 18 and 44, who are undergraduate and postgraduate students. The survey was constructed to have no gender or nationality bias, and this selected target sample should possess the information needed for this study.

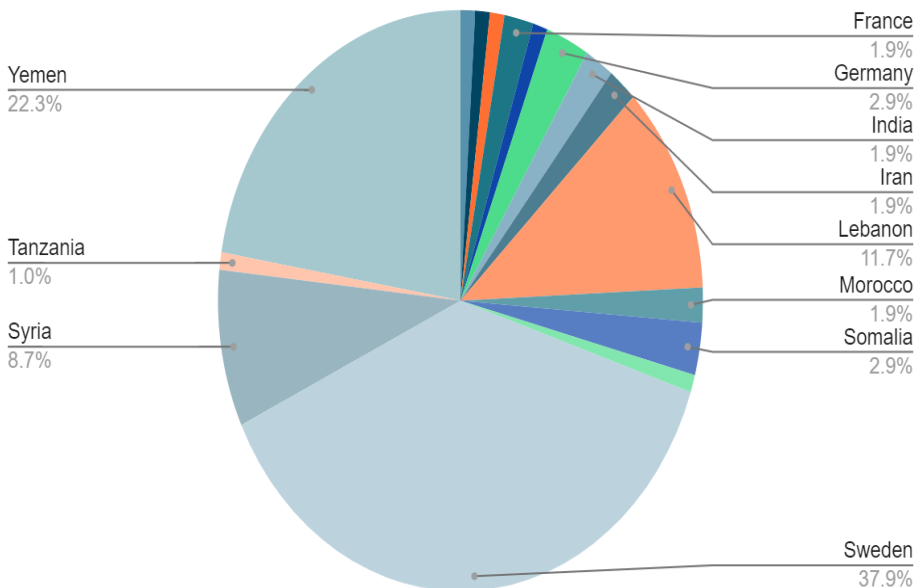
The responses originated from the data set were a total of 115 participants. Nine were not considered since they are not university students in Sweden. Four respondents didn't answer the whole survey. Hence, the total number who answered the survey fully is 102 respondents, which is around 88.7% of the entire sample. Appendix B shows that the respondents consist of 46.1% (53) females, and 48.7% (56) males, such that an error might occur since some participants did not answer it, and the elimination question is; if the respondent is a university student or not, is changed later to be at the beginning. The age of the respondents as shown in the Table of Demographics: age between 25-34 years old is 46.1%, 28.7% of the respondents are between 35-44 years old, and 16.5% of the respondents are between 18-24 years old, while "other" is the students above 44 years old.

Table of Demographics: Age



Moreover, the respondents are from various nationalities as shown in Table of Demographics: Nationalities below, 42.7% are from Europe, with Sweden being the highest percentage with 33.9%. Whereas the rest are from Asia and Africa (57.3%). The complete data is found in Appendix B.

Table of Demographics: Nationalities



3.4 Operationalization

Validated items formed by other researchers were used in the survey to increase the quality of the data and to measure the effectiveness of the independent variables (social influence, social marketing, brand image, and product features) on the dependent variable (purchase intent). 16 items that were distributed between the independent and dependent variables were taken from other articles to ensure validity. Bell et al. (2019) claimed that pretested and measured items for quality increase reliability and validity. Yet, the items were modified to fit the study. Demographic questions were constructed to have more data about the respondents; like age, gender, and nationality, and to ensure reliability, a question, that is answered by yes or no, was added to ask if the respondent is a university student in Sweden. The survey consists of five sections which are about independent and dependent variables. It consists of a total of 16 items which are answered on a scale from 1 to 5, such that 1 represents total disagreement and 5 represents total agreement.

The survey took about 2 minutes to be answered by us. But since we were who set it we estimated the time to answer the survey between 3 - 5 minutes, and the respondents were informed when sending it to them. Four items were used to measure social influence on smartphone purchase intent, to falsify or approve the first hypothesis *H1: Social influence positively affects university students' smartphone purchase intentions*. The items were adapted from Isen, 2011, Denise E.,2005, Nihal, 2011, and Walczuch, 2004 (first found in Kumar, R.,20199).

Social marketing was measured by using three items that were adapted from Alrwashdeh, Emeagwali, and Aljuhmani (2019). Such that, these items are to measure the effect of both WOM and eWOM in social marketing in the current study, and to approve or falsify the second hypothesis *H2: Social marketing positively influences university students' smartphone purchase intention*. Brand Image is measured by using three items taken from Rio, Vazquez, and Iglesias (2001) (first found in Chow et al., 2012). Two items were modified to fit our study while one item is kept as it is. According to Rio et al (2001), the items are created to measure the brand name and product-related benefits. In addition, items are used to support or falsify the third hypothesis *H3: Brand image positively impacts university students' purchase intent*.

Moving to the last hypothesis *H4: The functionality of the product positively influences university students' purchase intent*. Three items were used for measuring product features to test the reality of the hypothesis. Items were taken from Marco (2014) (first found in Chow et al., 2012). All three items are modified to suit our research. Marco (2014) mentioned that items are constructed to measure the attitude of people when using cellular phones. Which in turn helps to develop insights and provide a reason for the behavioral patterns.

Moving to the purchase intent (dependent variable), three items were used in the survey to measure the overall smartphone purchase intent. The first item was taken from Ling (2011) (first found in Kumar & Kaushal, 2016). The second item was adapted from Tom and Kristin (2005) (first found in Kumar & Kaushal, 2016). The third item was adapted from Rodoula (2005) (first found in Kumar & Kaushal, 2016). The operationalization table can be found in Appendix A.

3.5 Data Analysis

The software Statistical Package for the Social Sciences (SPSS) table was employed to analyze data. Personal messages sent to potential participants were used to calculate the response rate, like email, messenger, and WhatsApp messages. Because it is difficult to know how many people are reached by a post on Facebook, or Instagram, they were not included in the calculation, however, personal messages sent through these platforms were included. According to Sekaran and Bougie (2003), the main goal of data analysis is to draw conclusions to test the hypotheses at hand, and this can only be performed by obtaining descriptive data from raw results and then testing the rightness of these data with proper scale measurements.

Spearman rho testing

A Spearman rho test was used to check the correlations between question items in order to establish good constructs (Bell et al., 2019). The test was set at a significance value of $\alpha p < 0.01$. Since question items in the survey are representative of both, independent and dependent variables, the Spearman rho test can be a suitable testing tool to measure the relationships between the variables (Bell et al., 2019). When examining two variables on an ordinal scale, the Spearman rho test is recommended to be used (Ghauri et al., 2020). The Spearman's rho items correlation

coefficient computed value should range between -1 and 1, where a negative sign implies a reciprocal correlation between the variables (Hinton, McMurray & Brownlow, 2014). If correlation coefficient results are closer to 1, it means that there is a strong positive relationship between the variables or constructs; however if they are closer to 0, it indicates a weaker or less significant relationship, and if it closer to -1 it indicates strong negative relationship (Bell et al., 2019).

For example, if the coefficient of the constructs correlation between brand image and purchase intent is positive (between 0 - 1) then the direction of a relationship is parallel, which translates to brand image positively affecting purchase intent, while figures closer to 1 indicate a higher impact of the independent variable (Brand image) on the dependent variable (Purchase intent). Negative results (-1 - 0), on the other hand, point to a reciprocal direction, which indicates that brand image negatively affects purchase intent.

Five constructs were created to be tested. Four of these constructs are independent factors or variables, which are social marketing, social influencing, product features, and brand image. Each of them is examined if they have an association or effect on the dependent variable (purchase intent). The descriptive data of these constructs can be found in table 1 below.

Table 1. Descriptive Statistics for Constructs

		SocialInfluenc e	SocialMarketi ng	BrandImage	ProductFeatur es	PurchaseInte nt
N	Valid	106	105	103	102	104
	Missing	9	10	12	13	11
Mean		14.6321	12.4762	13.3301	12.5098	10.8173
Median		15.5000	12.0000	14.0000	12.0000	11.0000
Std. Deviation		3.84788	2.34969	1.78440	1.59047	2.59860
Minimum		4.00	5.00	7.00	8.00	3.00
Maximum		20.00	15.00	15.00	15.00	15.00

Linear regression

A linear regression test was conducted to test the hypotheses separately and was used to explore the relationship between the dependent and the independent variables (Schneider, Hommel &

Blettner, 2010). Moreover, the test was performed to predict or examine the value of the dependent variable based on the value of the independent variable (Hinton et al., 2014). According to Montgomery, Peck, and Vining (2021), while correlation analysis can measure the association of two variables, linear regression will examine in depth the stipulated hypothesis by quantitatively testing the significance of the relationship or the impact of all independent variables on the dependent variable, and it is a valid tool for predictions. The measurement used in the regression table is “t” statistics which calculates the distribution tests of the sample to obtain the p-value of the set. To determine whether a correlation is statistically valid and represents a significant relationship, depending on the size of the sample. P-value < 0.05 threshold should represent positive correlations between the variables, and the t-values threshold can be higher if the samples are smaller (Montgomery et al., 2021).

Cross-Tabulation

Cross-tabulation was performed to further categorically test the relationship of each demographic feature (nationality and age) with all variables (independent and dependent). The contingency tables will present the association frequency of each age group (18-24, 25-34, 35-44) with each variable. Moreover, the Nationality of all respondents will be analyzed against all variables, to see how the nationality of the respondents will interact or associate with each variable.

According to Bell et al., (2019) cross-tabulation, known as a contingency table, is a flexible frequency table set to examine the relationship or association of two variables while analyzing them at the same time. A chi-square test application is used for cross-tabulation. The Chi-square test determines how the variables in the sample are related, it is also known as a statistical significance test, and it is used by analysts to determine whether the results from a randomly selected sample can be generalized to the entire population (Bell et al., 2019). The purpose of this study is to see if respondents from different countries and age groups differ in their responses to the factors (independent variables) and purchase intent (dependent variables) mentioned earlier. For the test to be statistically significant the significance level (p) is $p < 0.05$.

Cronbach alpha Testing

Cronbach's Alpha testing was performed to examine the reliability and internal consistency of the constructs (Ghauri et al., 2020). According to Bell et al. (2019), the Cronbach alpha test is a well-known internal reliability test, which is a commonly used method to test correlations and groups of items. In addition, it is one of the most known testing tools to measure internal consistency, and reliability, such that it calculates the average of the split half of the reliability coefficients (Rahim et al., 2013). A computed alpha coefficient should range between 0 and 1, while 1 depicts perfect internal reliability, while 0 emphasizes no internal reliability at all (Bell et al., 2019). To obtain an acceptable level of internal reliability, the test scores should be higher than 0.5, however, most researchers consider 0.8 or a slightly lower value, as a rule of thumb for acceptance (Bell et al., 2019).

3.6 Reliability and Validity

Reliability addresses the question of whether the results of a study are repeatable. This term is commonly used to determine the consistency of measures applied to the main concepts in the research, such that Chronbach's alpha reliability coefficient ranges between 0 and 1 (Bell et al., 2019). Reliability within quantitative research is directly related to the consistency of research and its overall findings (Heale & Twycross, 2015). According to Cronbach alpha reliability testing figures, shown in Table 2, all constructs are reliable based on the table results below. Social marketing and social influence item constructs, demonstrate strong Cronbach's alpha coefficients as they were higher than 0.8, which were regarded as highly acceptable as a rule of thumb (Bell et al., 2019). Moreover, purchase intent and brand image construct alpha results also confirm moderate internal reliability as they are 0.513 and 0.681 respectively. As explained earlier, Cronbach alpha testing was used to measure the internal consistency of the construct, and how closely they can relate to one another (Ghauri et al., 2020). Henceforth, there are many causes for the reliability scores of constructs to be below or unreliable, for example, the number of questions in the construct was low, unclear item format or structure, and low correlation of question items of the construct (Jhangiani, Chiang, & Price, 2015).

On the other hand, as stated by Bell et al., (2009), validity is highly valuable for the research

processes and the overall quality of data collection. It pertains to how the question items and constructs were formulated and measured to fit the purpose of the study, in other words, validity deals with the integrity of conclusions that are stipulated from a piece of research (Bell et al., 2019). Three important aspects of validity in this research are applied, face validity, internal validity, and nomological validity. Face validity refers to the measurement aspects of the survey, whether the respondents understand the question items in the survey, and whether the constructs made are corresponding with the purpose stated (Bell et al., 2019). All the items in the survey were formulated from original items obtained from validated academic resources, and it was later refined and carefully reviewed to check if the adjustments are appropriate. The items were later reevaluated to find and remove any overlapping, repetitive, or misguided items. It is important that the questionnaire is constructed in a way that is conceivable to the respondents so that the answers can accurately reflect what the research intends to measure. Internal validity, on the other hand, was also established since primary results found some causal relationships between the variables tested. Internal validity refers to the belief that a causal relationship between two or more variables holds in a conclusion of results, in other words, internal validity addresses the strength of findings that point to a causal connection between variables, a concept that commonly distinguishes quantitative research (Bell et al., 2019).

Finally, the nomological validity pertains to the fact that there is a *nomological thread* throughout the research, in other words, the whole research should hold an internal logic (Bell et al., 2019). This research has been organized to follow a logical thread. The theoretical framework presented in the literature review provided the necessary background for the main objective of the research, and within this context, the hypotheses and conceptual model are developed. Through the empirical findings (data collection and descriptive analysis explained later), the entire research demonstrated a strong connection between all frameworks developed earlier in the research.

Table 2. Cronbach's Alpha of Constructs Reliability testings

variable	Cronbach's Alpha	Number of Items
Social Influence	0.910	4
Social Marketing	0.811	3
Brand Image	0.681	3
Product Features	0.181	3
Purchase Intent	0.513	3

4. Findings and Analysis

In this chapter data analysis and findings will be presented.

4.1 Items correlations

Spearman's rho test is applied to test the correlation between the items of each variable and to evaluate their direction and strength to establish good constructs (Bell et al., 2019). The value of the correlation coefficient ranges between -1 and 1, such that the closer the value to 1 the stronger the relationship between the items (Bell et al., 2019). Items are significant when the significance value (p) is $p < 0.01$, and the closer the coefficient value to 1, the relationship is stronger (Bell et al., 2019).

Table 3a below shows the values of Social Influence (SI). Such that, the value between items SI1 and SI2 is 0.834, 0.812 between SI1 and SI3, 0.587 between SI1 and SI4, 0.713 between SI2 and SI3, 0.641 between SI2 and SI4, 0.587 between SI3 and SI4, and the p-value < 0.001 across all items. This indicates that the relation between the items is positive and the correlation is strong.

Table 3a: Correlations

			SI1	SI2	SI3	SI4
Spearman's rho	SI1	Correlation Coefficient	1.000	.834**	.812**	.587**
		Sig. (2-tailed)	.	<.001	<.001	<.001
		N	106	106	106	106
	SI2	Correlation Coefficient	.834**	1.000	.713**	.641**
		Sig. (2-tailed)	<.001	.	<.001	<.001
		N	106	106	106	106
	SI3	Correlation Coefficient	.812**	.713**	1.000	.587**
		Sig. (2-tailed)	<.001	<.001	.	<.001
		N	106	106	106	106
	SI4	Correlation Coefficient	.587**	.641**	.587**	1.000
		Sig. (2-tailed)	<.001	<.001	<.001	.
		N	106	106	106	106

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

Table 3b below presents the values of the coefficient between the items of the independent variable Social marketing (SM), and the p-values (significance). The coefficient between SM1 and SM2 is 0.661, 0.546 between SM1 and SM3, 0.534 between SM2 and SM3, and the $p < 0.001$ across all items. Thus, all the items have a strong positive relationship.

Table 3b: Correlations

		SM1	SM2	SM3
Spearman's rho	SM1	Correlation Coefficient	1.000	.661**
		Sig. (2-tailed)	.	<.001
		N	106	105
	SM2	Correlation Coefficient	.661**	.534**
		Sig. (2-tailed)	<.001	<.001
		N	105	105
	SM3	Correlation Coefficient	.546**	1.000
		Sig. (2-tailed)	<.001	.
		N	105	105

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

On the other hand, Table 3c, in *Appendix D*, demonstrated a relatively weaker positive correlation of the brand image (BIM) question items, the p -value < 0.001 across all items, as BIM1 and BIM2 scored correlation coefficients of 0.453 the coefficient between BM1 and BM3 is 0.462, while it is 0.463 between BIM2 and BIM3. Since all the coefficient results were less than 0.5, the outcome indicated a weak positive correlation among the items.

Table 3c:Correlations

			BIM1	BIM2	BIM3
Spearman's rho	BIM1	Correlation Coefficient	1.000	.453**	.462**
		Sig. (2-tailed)	.	<.001	<.001
		N	104	104	103
	BIM2	Correlation Coefficient	.453**	1.000	.463**
		Sig. (2-tailed)	<.001	.	<.001
		N	104	104	103
	BIM3	Correlation Coefficient	.462**	.463**	1.000
		Sig. (2-tailed)	<.001	<.001	.
		N	103	103	103

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

Table 3d below displays the correlation coefficient results between all purchase features (PF) items and the significance P-value significance. the correlation coefficient was only 0.079 between PF1 and PF2 items indicating a very low positive correlation, but it was a stronger correlation coefficient of 0.503 between PF1 and PF3, however, the coefficient between PF2 and PF3 is -0.087 implying a negative correlation between these two items. P-value between P2 and P3 is lower than 0.001.

Table 3d: Correlations

			PF1	PF2	PF3
Spearman's rho	PF1	Correlation Coefficient	1.000	.079	.503**
		Sig. (2-tailed)	.	.432	<.001
		N	102	102	102
	PF2	Correlation Coefficient	.079	1.000	-.087
		Sig. (2-tailed)	.432	.	.382
		N	102	103	103
	PF3	Correlation Coefficient	.503**	-.087	1.000
		Sig. (2-tailed)	<.001	.382	.
		N	102	103	103

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

Finally, table 3e found in *Appendix:D* displays the item correlation of the dependent variable Purchase intent (PI). The correlation coefficient between PI1 and PI2 is 0.545, 0.025 between PI1 and PI3, and 0.044 between PI2 and PI3. It can be concluded that there is a strong relation between items 1 and 2 since the correlation coefficient value is close to 1 and the p-value < 0.001. While the relation between items 1 and 3, and items 2 and 3 are negative since the correlation coefficient values are low and the p-value > 0.01.

Table 3e: Correlations

			PI1	PI2	PI3
Spearman's rho	PI1	Correlation Coefficient	1.000	.545**	.025
		Sig. (2-tailed)	.	<.001	.805
		N	104	104	104
	PI2	Correlation Coefficient	.545**	1.000	.044
		Sig. (2-tailed)	<.001	.	.660
		N	104	104	104
	PI3	Correlation Coefficient	.025	.044	1.000
		Sig. (2-tailed)	.805	.660	.
		N	104	104	104

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

4.2 Variables Correlations

Spearman rho test is a measurement scale used to test the direction and strength of the relationship between two variables (Bell et al., 2019). In this research, the Spearman rho test has been used to examine the relationship of four independent variables (social influence, social marketing, brand image, and product features) with a dependent variable (purchase intent). However, the measurement scale for testing constructs correlations shall differ from the scale used for item correlations. R-value results above 0.01 for constructs correlation shall demonstrate a positive correlation (Rahim et al., 2016).

As shown in table 3f below, all the correlation tests of the constructs were statistically valid and presented significantly positive linear correlations. The relationship between social influencing and purchase intent produced the highest positive relationship with a coefficient of $r = 0.205$. Then

comes the relationship between product features and purchase intent which shows also a positive correlation coefficient of $r = 0.129$. The relationship between social marketing and purchase intent, on the other hand, produced a correlation coefficient of 0.091, which demonstrated a moderate positive correlation. Lastly, the correlation coefficients, obtained from the relationship between brand image and purchase intent, scored 0.012, which manifested the weakest impact of all independent variables, thus indicating a low positive relationship between brand image and purchase intent.

Table 3f: Spearman's rho correlations for linear regression (R values)

independent construct	dependent construct	spearman Rho correlation coefficient (r-value)
social influence	purchase intent	0.205**
social marketing	purchase intent	0.091
brand image	purchase intent	0.012
product feature	purchase intent	0.129*

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

4.3 Hypothesis testing

In order to test the hypotheses (*H1, H2, H3, and H4*) and to check if they are significant or not, the following linear regression test using SPSS is performed. Table 4 below shows the regression data, such that the constant value of significance (p) is $p < 0.05$, and the coefficient value (t) is given to be $t = 2.854$. For a hypothesis to be significant, the coefficient value must be $t > 2.854$, and the significance value to be $p < 0.05$.

For *H1, social influence affects university students' smartphone purchase intention*, is rejected, the t value < 2.854 ($t = 1.54$), and the significance level $p > 0.05$ which rejects the hypothesis. For *H2, social marketing positively influences university students' smartphone purchase intention*, the t -value is -0.993 which is less than zero, and $p > 0.05$, thus, the hypothesis is rejected. For *H3,*

Brand image positively impacts university students' purchase intent, the regression received a t-value < 2.854 (-0.498), and $p > 0.05$, hence the hypothesis is not significant. Moving to the last hypothesis H4, *The functionality of the product positively influences university students' purchase intent*, the hypothesis is not supported based on the data received, such that the t value < 2.854 ($t = 1.111$) and $p > 0.05$ ($p = 0.270$).

This indicates that all the independent variables, which are Social influence, Social marketing, Brand image, and Product features, didn't have any positive effect on the dependent variable purchase intention in this study, based on the survey method that has been chosen to collect the data. However, it has been visible that the closest hypotheses to be significant are H1 and H4 since their t-value are the closest to 2.854, and their p-value is closest to 0.05.

Table 4. Linear Regression Results^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
1		B	Std. Error	Beta		
	(Constant)	7.833	2.744		2.854	.005
	SocialInfluence	.108	.070	.160	1.541	.127
	SocialMarketing	-.001	.118	-.001	-.009	.993
	BrandImage	-.074	.149	-.051	-.498	.620
	ProductFeatures	.191	.172	.117	1.111	.270

a. Dependent Variable: PurchaseIntent

4.4 Cross-tabulation

Cross-tabulation has been performed with a chi-square (χ^2) test application. The Chi-square test specifies the relationship between the variables in the sample, also, it is known as a test of statistical significance, such that it is used by the analyst to confirm if the results obtained from the sample, that was selected randomly, could be generalized to the population (Bell et al., 2019). In this study, in order to analyze whether or not respondents from different nations and different age groups differ concerning the factors (independent variables) and the purchase intent (dependent variables) mentioned previously in this study. A cross-table with Chi-square is performed with the different nationalities in the data set, with the independent and dependent variables. The significance value level (p) is $p < 0.05$ for the test to be statistically significant (Bell et al., 2019).

(All cross-tabulation results are found in Appendix E)

In the table (Age * Social Influence) below, Chi-square value = 37.004, and $p = 0.690$, which indicates that the test is not statistically significant since $p > 0.05$.

Age * Social Influence Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	37.004 ^a	42	.690
Likelihood Ratio	36.740	42	.701
N of Valid Cases	106		

a. 55 cells (91.7%) have expected count less than 5. The minimum expected count is .01.

In the table (Age * Social Marketing) below, the Chi-square value = 21.232, and $p = 0.880$, which indicates that the test is not statistically significant since $p > 0.05$.

Age * Social Marketing Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	21.232 ^a	30	.880
Likelihood Ratio	23.110	30	.811
N of Valid Cases	105		

a. 36 cells (81.8%) have expected count less than 5. The minimum expected count is .01.

In the table (Age * Brand Image) below, Chi-square value = 21.640, and $p = 0.421$, which indicates that the test is not statistically significant since $p > 0.05$.

Age * Brand Image Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	21.640 ^a	21	.421
Likelihood Ratio	26.517	21	.187
N of Valid Cases	103		

a. 24 cells (75.0%) have expected count less than 5. The minimum expected count is .01.

In the table (Age * Product Features) below, Chi-square value = 33.528, and $p = 0.014$, which indicates that the test is statistically significant since $p < 0.05$.

Age * Product Features Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	33.528 ^a	18	.014
Likelihood Ratio	32.235	18	.021
N of Valid Cases	102		

a. 21 cells (75.0%) have expected count less than 5. The minimum expected count is .02.

In the table (Age * Purchase Intent) below, Chi-square value = 25.279, and $p = 0.711$, which indicates that the test is not statistically significant since $p > 0.05$.

Age * Purchase Intent Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	25.279 ^a	30	.711
Likelihood Ratio	23.540	30	.792
N of Valid Cases	104		

a. 36 cells (81.8%) have expected count less than 5. The minimum expected count is .01.

Therefore, respondents of different age groups differ insignificantly in their responses. However, the Product features variable is statistically significant with $p < 0.05$. This indicates that there is no relationship in this sample between the variables age and product features only by 5 times of 100 samples.

Moving to the Nationality variable, In the table (Nationality * Social Influence) below, the Chi-square value = 387.222, and $p = 0.559$, which indicates that the test is not statistically significant since $p > 0.05$.

Nationality * Social Influence Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	387.222 ^a	392	.559
Likelihood Ratio	213.065	392	1.000
N of Valid Cases	106		

a. 435 cells (100.0%) have expected count less than 5.
The minimum expected count is .01.

In the table (Nationality * Social Marketing) below, Chi-square value = 296.261, and $p = 0.241$, which indicates that the test is not statistically significant since $p > 0.05$.

Nationality * Social Marketing Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	296.261 ^a	280	.241
Likelihood Ratio	171.512	280	1.000
N of Valid Cases	105		

a. 316 cells (99.1%) have expected count less than 5. The
minimum expected count is .01.

In the table (Nationality * Brand Image) below, Chi-square value =232.473, and $p = 0.017$, which indicates that the test is statistically significant since $p < 0.05$.

Nationality * Brand Image Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	232.473 ^a	189	.017
Likelihood Ratio	145.406	189	.992
N of Valid Cases	103		

a. 222 cells (99.1%) have expected count less than 5. The minimum expected count is .01.

In the table (Nationality * Product Features) below, Chi-square value =196.790, and $p = 0.064$, which indicates that the test is not statistically significant since $p > 0.05$.

Nationality * Product Features Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	196.790 ^a	168	.064
Likelihood Ratio	129.655	168	.987
N of Valid Cases	102		

a. 201 cells (99.0%) have expected count less than 5. The minimum expected count is .02.

In the table (Nationality * Purchase Intent.) below, Chi-square value = 245.434, and $p = 0.933$, which indicates that the test is not statistically significant since $p > 0.05$.

Nationality * Purchase Intent Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	245.434 ^a	280	.933
Likelihood Ratio	172.626	280	1.000
N of Valid Cases	104		

a. 319 cells (100.0%) have expected count less than 5. The minimum expected count is .01.

Therefore, respondents of different nationalities differ insignificantly in their responses. However, the Brand Image variable is statistically significant with $p < 0.05$. This indicates that there is no relationship in this sample between the variables nationality and Brand Image only by 5 times of 100 samples.

5. Theoretical Discussion

In this chapter, the explanation, and interpretation of the analysis findings are discussed.

The study aims to investigate and research what factors and characteristics influence university students' smartphone purchase decisions by analyzing their smartphone shopping behavior. The data was conducted through an online survey and analyzed using SPSS. The correlation between the items of the independent variables Social influence, Social Marketing, and Brand Image are significant and have a strong positive relationship. While the items of the independent variable Product features are not all significant, except for items 1 and 3 they both are significant and have a positive relationship. Likewise, for the dependent variable Purchase intention, only items 1 and 2 are significant and have a positive relationship. Further, a cross-tabulation test was performed using the chi-square test, to specify the relationship between the variables that were previously analyzed.

Social influence effect on purchasing smartphones

As illustrated by many studies, consumer awareness impact significantly different types of effective consumers behaviors (McEachern & Warnaby, 2008; Hartlieb & Jones, 2009; Liang & Xianyu, 2008; Donoghue & de Klerk, 2009; Thomas & Mills, 2006; Chartrand, 2005; Coulter et al., 2005; and Dommeyer & Gross, 2003, as cited in Ishak & M. Zabil., 2012). According to Suki and Suki (2013), the relationship between social influence and smartphone purchase intent was indicated to be significant and positive. But according to the results given by linear regression, H1 is rejected with $p > 0.005$ and $t < 2.854$, which implies that social influence does not positively impact purchase intent. A study by Klobas and Clyde (2001) stated that the positive effect of social influences is related to smartphone dependency. Also, studies have shown that social influence affects consumers' purchasing decisions (Mourali, Laroche, and Pons, 2007). Based on these previous researches, the social influence impact on purchase intent depends on how the consumers are dependent on the smartphone, and what content the awareness holds, either positive or negative, which will lead the consumer to be influenced positively or negatively. In addition, the online survey created to collect data has reached a sample of university students in Sweden. In other words, if the survey could reach a higher number or a bigger sample, maybe the result would

be different. Further, a cross-tabulation test was performed using the chi-square test, to specify the relationship between the variables that were previously analyzed.

Social Marketing Influence on purchasing smartphones

According to previous research, people use social media applications to stay in touch with friends and others, such that their purchasing decisions are influenced by them (Chow et al., 2012). According to Arndt (1967), people are more likely to purchase a product if the speaker expresses positive feelings about it. Consumers' willingness to buy increases when they receive high-quality information through social media, and respondents' purchase intention increases due to the positive effect on respondents' online purchase intentions (Wong, 2018). According to Wong (2021), despite the findings that some consumers do not believe other people's reviews, positive eWOM influences consumers' purchase intentions. Whereas, H2 is rejected based on the linear regression data for two reasons, such that the $t\text{-value} < 0$ and the significance $p\text{-value} > 0.05$. This indicates that social marketing (independent variable) does not positively impact purchase intention.

Further, WOM is the most powerful factor influencing consumer behavior because of its impact on people's feelings based on what they know and do (Buttle, 1988). People are more likely to purchase a product if the speaker expressed positive feelings about it (Arndt, 1967). According to Buttle (1988), customers are less likely to share their positive experiences with a product than their negative ones. Some consumers, according to Wong (2018), may not trust other people's reviews about services or products because some people are hired to write fake reviews. Based on these researches, it implies that social marketing does not necessarily impact purchase intent positively, as it is related and depends on how the consumers are influenced by the users or experienced people. In this study, there is a possibility that the sample of university students in Sweden, who filled out the survey, had bad or negative experiences with smartphones because of social marketing.

Brand image influence on smartphone purchase intent

According to the linear regression retrieved data, the third hypothesis (*brand image influences purchase intent*) was rejected which implies brand image had little or no positive effect on the purchase intent, which does not correspond to the assumptions accumulated from the literature

review resources. Although many studies have confirmed the positive relationship between the two variables, an explanation of this conflicting trend can be that some respondents might have a lack of knowledge, or less association with international brands, which can create feelings of uncertainty, insecurity, and purchase reluctance among potential consumers of these brands (Sheinin 1998).

As indicated in Appendix B, The respondents of this survey came from different economic, demographics, and cultural backgrounds, which can justify why their attitudes to brand image importance would vary from one to another, some of them might regard other factors as more vital. Srinivasan et al. (2002) refer to brand image as a valuable asset that should convey certain knowledge and infer the quality of the product. So, if consumers do not have the appropriate knowledge about the brand image, they will react to it based on their previous experiences with similar brands, and they will not distinguish it from its rivals. In addition, consumers can have a low association with certain brands, if they do not correspond to their needs and satisfaction (Boakye, 2018; Sung & Choi, 2010). Aaker and Equity (1991) have also concurred with this assumption and stated that brand image recognition should assist consumers in collecting information, constructing emotional responses, building associations, and making ultimate purchase decisions.

Failure to understand what certain brands can offer or low product knowledge and expertise of the brand can negatively impact how consumers assess the value of the brand's importance (Alba & Hutchinson, 1987; Traver, 2013). Therefore, We can predict that the majority of the respondents in this survey didn't realize or underestimate the importance of brand image when purchasing a new smartphone. As noted in the sample demographics shown in Appendix B, a high percentage of respondents came from emerging markets in smartphone businesses like Yemen, Lebanon, and Syria, where consumers might be inspired and motivated by big brand image, but their economic priorities will presumably still restrain their intent of purchase. This view also was confirmed through the interactions of all age groups with all brand image items, which indicates that most respondents had a relatively positive view of brand image items but they did not find it an important cause to purchase a smartphone. (Crosstabs results are found in Appendix E)

Product features effect on smartphone purchase intent

Most previous studies confirm innovative features of products play a vital role in consumer's purchase choice (Kotler & Armstrong, 2007). The software attributes such as the operating systems, high-resolution cameras, and hardware features like size and design, would positively affect the purchase intent of mobile users (Oulasvirta, 2011; Lay-Yee et al, 2013; Rahim et al., 2016; Saif, 2012). In addition, Blijlevens et al. (2009) and Mesay Sata (2013) concurred that technology and design features are the most important motivation for consumers after the price of mobile phones, and are positively related to their brand attitude and purchase decision. However, hypothesis, *H4: the functionality of smartphones influences purchase intent*, is rejected.

It can be concluded that there are other factors that affect consumers' purchase intention, like nationality and age. Such that students from nationalities in this study hold different backgrounds and beliefs that affect their purchase intentions. And according to the demographic results obtained from the sample that participated in the study, students were mostly from Europe which is 42.7 % with Sweden being the highest percentage with 37.9% and 44.6 % from the west and middle east of Asia. So, it could be discussed that since the respondents are from both Europe and Asia, the psychic distance could have a role in obtaining such results, although the sample of students is studying in Sweden.

Moving to age, the age group that was mostly included in this sample was between 25 and 34 years old. This age group is considered to be a mix of both Millennials and the Z generation. According to Gurău (2012), Millennials who are considered to be from the Y generation were born between 1980 and 2000. While generation Z according to Parker and Igielnik (2020) was born in 1996 and after. Technology plays an important role in Millennials and motivates their perceptions and expectations (Zickuhr, 2010). On the other hand, generation Z according to Parker and Igielnik (2020), are digital natives and have no memory of the world before smartphones. So, based on the results obtained in cross-tabulation with the Chi-square test, the age variable is statistically significant with product features which include technology.

5.1 Weaknesses and Limitations

The limitation of the study is that the sample could not represent all the university students in Sweden and it is not easy to reach them directly. Although to assure reliability a question was added to ask if the respondents are university students in Sweden, it is hard to confirm that through an online survey. In addition, people, in general, do not respond to surveys easily as it is required to convince them and remind them to answer. Also, some people may consider sending them an email with a survey to fill out without knowing from where their email has been taken as a kind of intrusive action. Further, questions in the survey may be understood differently from one person to another and the answer through scale cannot give the respondent the chance to express his/her opinion clearly. Additionally, purchase intent could be affected by many other factors, like the price that was not considered in this study, and without intention from us, a group of students could be excluded if that factor influenced their purchase intention.

Based on the convenience sample method employed and the specified respondent group targeted for this research, who are only university students, the findings of this study can not be generalized. The various demographics of university students who participated in the questionnaire can not represent the entire student population in Sweden (Bell et al., 2019). According to Hooghe et al. (2010), the generalizability of findings can be thwarted, when university students are chosen as the main respondents in research, as they react differently to interviews or questionnaires and they can exert more mental effort when providing answers from the rest of the populations.

Another limitation is time, as the survey has been distributed and collected only within a short period, there was no chance to have a higher number of respondents. The number of respondents barely exceeded 100, which was the minimal number needed to conduct an analysis. In addition, some product features items could have been replaced or modified to be more validated to summon more decisive answers, as few respondents ended the survey without answering them properly.

6. Conclusion

In this chapter the study is summarized and linked together, followed by future research recommendations.

The main purpose of the study is to investigate and research what factors and characteristics influence university students' decision to purchase a smartphone by analyzing their smartphone shopping behavior. The University students are chosen for the study because they represent a significant market segment. Furthermore, given the importance of smartphones in university students' lives and their rapid adaptation to smartphones, it is interesting to learn and research what factors influence their purchasing decisions. The research is done based on the following two research questions:

What factors influence university students' purchase intent for smartphones?

How do demographic factors impact the attitude of university students when purchasing smartphones?

Regarding the factors that influence university students' smartphone purchase intention, and based on quantitative analysis, results indicate in this study, that the factors, which are Social influence, Social marketing, Brand image, and Product features, do not visibly affect university students' purchase intentions. And to answer the second research question concerning the impact of demographic factors on university students' attitudes. It can be concluded that demographic factors in this study, such as nationality and age, influence consumers' purchase intentions. As a result, students from various nationalities in this study have a variety of backgrounds and beliefs that influence their purchasing decisions. Also, the age factor plays a vital role in affecting purchase intention as mentioned earlier in the discussion.

From this point, recommendations for future studies and research could be conducted through a qualitative method or approach to examine more specific perceptions and factors that affect university students' purchase intent. Thus, through a qualitative method, there is a chance for interviews where students could talk and express more deeply what impact their purchase intention, and new factors could be added to the list. Moreover, different sampling techniques,

larger respondent groups, and alternative research designs will likely generate more definitive findings and further exploratory results (Bell et al., 2019). The factors considered in this study are not supported to influence university students' purchase behavior, so more factors like price compatibility and durability can still be examined in future studies.

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Appendices

In this section, all data and survey operationalization tables are provided.

Appendix A: Operationalization table

Modified Items	Original Items
Social influence Item 1 (SI1): Friends and family are very helpful to me in making decisions when buying a smartphone. Item2 (SI2): Friends and family give me valuable advice when buying a smartphone. Item3 (SI3): I trust my friends and family about their opinions and advices on smartphones Item4 (SI4): I will purchase a smartphone that my friends and family recommend to me.	Friends and family are very helpful to me in making decision of buying smartphone. Adapted from (Isen, 2011) first found in Kumar, R., (2019). Friends and family give me valuable advice when buying a smartphone. (Denise E.,2005) first found in Kumar, R., (2019). I trust my friends and family about their opinions and advices of smartphone. Adapted from Nihal, 2011) first found in Kumar, R., (2019). I will purchase a smartphone because my friends and family recommend to me. Adapted from (Walczuch, 2004) first found in Kumar, R., (2019).
Social marketing Item1 (SM1): To make sure that I buy the right products or brands, I often read online reviews of products and brands written by other fellow members in social networks and consult my family and friends. Item2 (SM2): To choose the right products or brands, I often check online reviews of products and brands provided by other fellow members on social networks. Item3 (SM3): The information that is spread	To make sure that I buy the right products or brands, I often read online reviews of products and brands written by other fellow members in social networks. Adapted from Alrwashdeh et al (2019) To choose the right products or brands, I often consult online reviews of products and brands provided by other fellow members in social networks. Adapted from Alrwashdeh et al (2019) The information that I spread in social networks regarding the products and brands

regarding products and brands usually influences my opinion to purchase.	usually influences the opinion of other members. Adapted from Alrwashdeh et al (2019)
Brand Image Item1(BIM1) : I prefer to buy a well-known internationally recognized smartphone. Item2 (BIM2): I prefer to buy my favorite brand of smartphones. Item3 (BIM3): I consider smartphone brand name influences my smartphone purchase choice.	I prefer to buy a well-known internationally recognized smartphone. Rio et al (2001), first found in Chow et al (2012) I will only buy my favorite brand of smartphones. Adapted from Rio et al (2001), first found in Chow et al (2012) Brand name is a major factor that will influence my decision towards purchasing a smartphone. Adapted from Rio et al (2001), first found in Chow et al (2012)
Product Features Item1 (PF1): I choose a smartphone based on its operational systems. Item2 (PF2): The design and fashion of smartphones influence my purchase choice. Item3 (PF3): I prefer only to buy a smartphone that has technological features that meet my needs.	I use a smartphone due to its operational systems (android , IOS). Adapted from MACRO (2014), first found in Chow et al (2012) I like the design of smartphones Adapted from MARCO (2014), first found in Chow et al (2012) A)Smart phone internet accessibility is speedier than a handphone . Adapted from(Lay-Yee et al 2013) B) Smart phones have more application than a basic hand phone. Adapted from MARCO (2014), first found in Chow et al (2012)

<p>Purchase intent</p> <p>Item1 (PI1):I intend to purchase a new Smartphone in the near future</p> <p>Item2 (PI2): I search for information about new smartphones from time to time.</p> <p>Item3 (PI3): Having a smartphone is very important for my daily life.</p>	<p>I intend to purchase Smartphone in the near future (Ling, 2011) first found in (Kumar & Kaushal, 2016).</p> <p>I search for information about Smartphone from time to time. Adapted from Tom and Kristin (2005) first found in (Kumar & Kaushal, 2016)</p> <p>Purchasing of Smartphone is beneficial for my daily life. Adapted from Rodoula (2005) first found in (Kumar & Kaushal, 2016).</p>

Appendix B: Demographics

Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		6	5.2	5.2	5.2
	Female	53	46.1	46.1	51.3
	Male	56	48.7	48.7	100.0

Age

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		6	5.2	5.2	5.2
	18-24 years old	19	16.5	16.5	21.7
	25-34 years old	53	46.1	46.1	67.8
	35-44 years old	33	28.7	28.7	96.5

Nationality

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		12	10.4	10.4	10.4
	Azerbaijan	1	.9	.9	11.3
	Denmark	1	.9	.9	12.2
	Finland	1	.9	.9	13.0
	France	2	1.7	1.7	14.8
	Georgia	1	.9	.9	15.7
	Germany	3	2.6	2.6	18.3
	India	2	1.7	1.7	20.0
	Iran	2	1.7	1.7	21.7
	Lebanon	12	10.4	10.4	32.2
	Morocco	2	1.7	1.7	33.9
	Somalia	3	2.6	2.6	36.5
	Spain	1	.9	.9	37.4
	Sweden	39	33.9	33.9	71.3
	Syria	7	6.1	6.1	77.4
	Syria and Sweden	2	1.7	1.7	79.1
	Tanzania	1	.9	.9	80.0
	Yemen	23	20.0	20.0	100.0

Appendix C: Descriptive Statistics

Table 1. Descriptive Statistics for Constructs

		SocialInfluenc e	SocialMarketi ng	BrandImage	ProductFeatur es	PurchaseInte nt
N	Valid	106	105	103	102	104
	Missing	9	10	12	13	11
Mean		14.6321	12.4762	13.3301	12.5098	10.8173
Median		15.5000	12.0000	14.0000	12.0000	11.0000
Std. Deviation		3.84788	2.34969	1.78440	1.59047	2.59860
Minimum		4.00	5.00	7.00	8.00	3.00
Maximum		20.00	15.00	15.00	15.00	15.00

Table 3. Spearman's Rho Correlations for Linear Regression

			SocialInfluenc e	SocialMarketi ng	BrandImage	ProductFeatur es	PurchaseInte nt
Spearman's rho	SocialInfluence	Correlation Coefficient	1.000	.396**	.083	.016	.205*
		Sig. (2-tailed)	.	<.001	.404	.874	.037
		N	106	105	103	102	104
	SocialMarketing	Correlation Coefficient	.396**	1.000	.307**	.285**	.091
		Sig. (2-tailed)	<.001	.	.002	.004	.360
		N	105	105	103	102	104
	BrandImage	Correlation Coefficient	.083	.307**	1.000	.238*	.012
		Sig. (2-tailed)	.404	.002	.	.017	.904
		N	103	103	103	101	103
	ProductFeatures	Correlation Coefficient	.016	.285**	.238*	1.000	.129
		Sig. (2-tailed)	.874	.004	.017	.	.196
		N	102	102	101	102	102
	PurchaseIntent	Correlation Coefficient	.205*	.091	.012	.129	1.000
		Sig. (2-tailed)	.037	.360	.904	.196	.
		N	104	104	103	102	104

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

* . Correlation is significant at the 0.05 level (2-tailed).

Table 4. Linear Regression Results^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	7.833	2.744		2.854	.005
	SocialInfluence	.108	.070	.160	1.541	.127
	SocialMarketing	-.001	.118	-.001	-.009	.993
	BrandImage	-.074	.149	-.051	-.498	.620
	ProductFeatures	.191	.172	.117	1.111	.270

a. Dependent Variable: PurchaseIntent

Appendix D: Correlations

Table 3a: Correlations

			SI1	SI2	SI3	SI4
Spearman's rho	SI1	Correlation Coefficient	1.000	.834**	.812**	.587**
		Sig. (2-tailed)	.	<.001	<.001	<.001
		N	106	106	106	106
	SI2	Correlation Coefficient	.834**	1.000	.713**	.641**
		Sig. (2-tailed)	<.001	.	<.001	<.001
		N	106	106	106	106
	SI3	Correlation Coefficient	.812**	.713**	1.000	.587**
		Sig. (2-tailed)	<.001	<.001	.	<.001
		N	106	106	106	106
	SI4	Correlation Coefficient	.587**	.641**	.587**	1.000
		Sig. (2-tailed)	<.001	<.001	<.001	.
		N	106	106	106	106

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

Table 3b: Correlations

			SM1	SM2	SM3
Spearman's rho	SM1	Correlation Coefficient	1.000	.661**	.546**
		Sig. (2-tailed)	.	<.001	<.001
		N	106	105	105
	SM2	Correlation Coefficient	.661**	1.000	.534**
		Sig. (2-tailed)	<.001	.	<.001
		N	105	105	105
	SM3	Correlation Coefficient	.546**	.534**	1.000
		Sig. (2-tailed)	<.001	<.001	.
		N	105	105	105

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

Table 3c:Correlations

			BIM1	BIM2	BIM3
Spearman's rho	BIM1	Correlation Coefficient	1.000	.453**	.462**
		Sig. (2-tailed)	.	<.001	<.001
		N	104	104	103
	BIM2	Correlation Coefficient	.453**	1.000	.463**
		Sig. (2-tailed)	<.001	.	<.001
		N	104	104	103
	BIM3	Correlation Coefficient	.462**	.463**	1.000
		Sig. (2-tailed)	<.001	<.001	.
		N	103	103	103

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

Table 3d: Correlations

			PF1	PF2	PF3
Spearman's rho	PF1	Correlation Coefficient	1.000	.079	.503**
		Sig. (2-tailed)	.	.432	<.001
		N	102	102	102
	PF2	Correlation Coefficient	.079	1.000	-.087
		Sig. (2-tailed)	.432	.	.382
		N	102	103	103
	PF3	Correlation Coefficient	.503**	-.087	1.000
		Sig. (2-tailed)	<.001	.382	.
		N	102	103	103

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

Table 3e: Correlations

			PI1	PI2	PI3
Spearman's rho	PI1	Correlation Coefficient	1.000	.545**	.025
		Sig. (2-tailed)	.	<.001	.805
		N	104	104	104
	PI2	Correlation Coefficient	.545**	1.000	.044
		Sig. (2-tailed)	<.001	.	.660
		N	104	104	104
	PI3	Correlation Coefficient	.025	.044	1.000
		Sig. (2-tailed)	.805	.660	.
		N	104	104	104

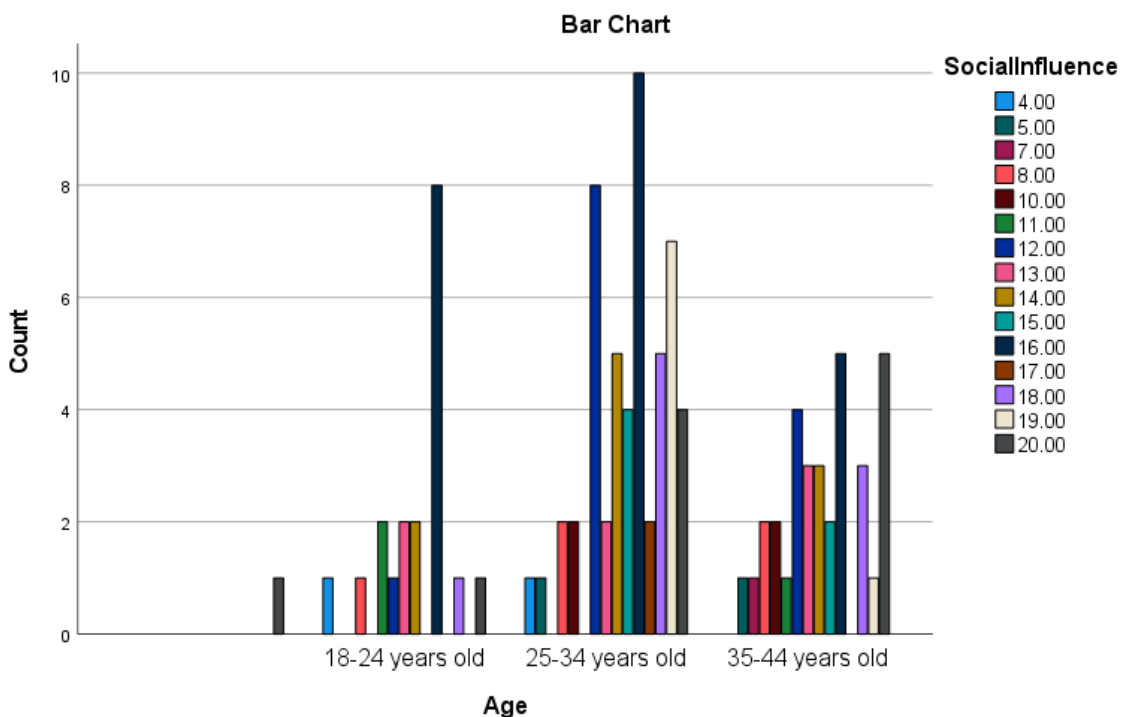
** . Correlation is significant at the 0.01 level (2-tailed).

Appendix E: Crosstabulation

Age * Social Influence Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	37.004 ^a	42	.690
Likelihood Ratio	36.740	42	.701
N of Valid Cases	106		

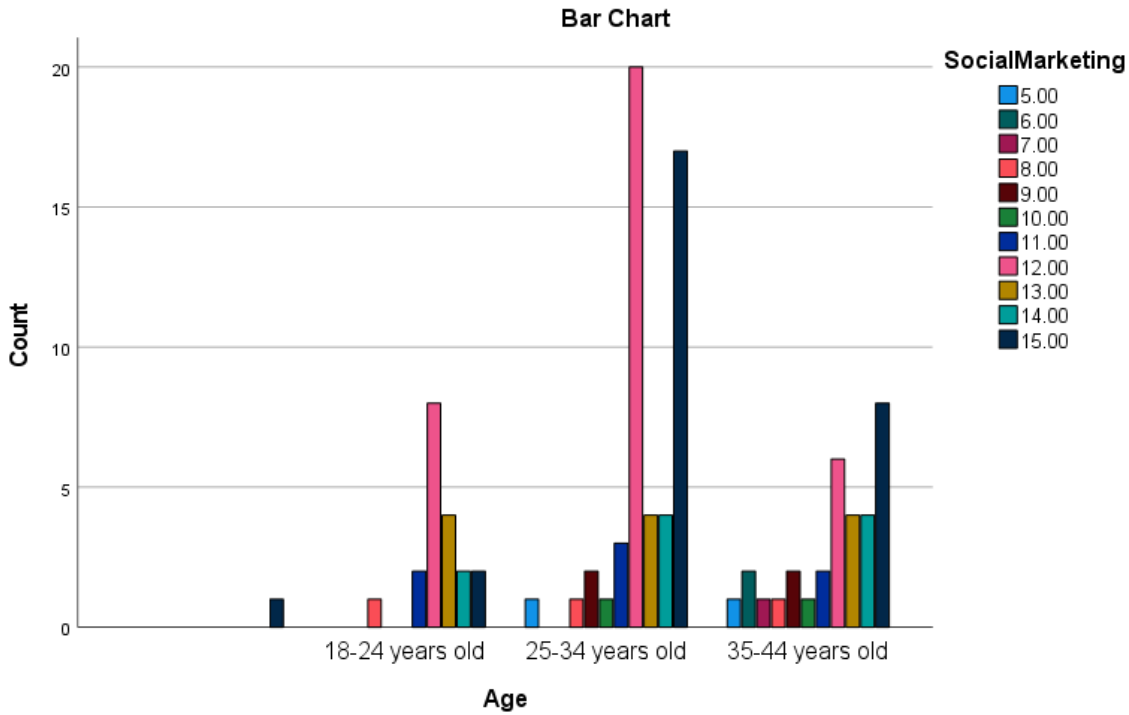
a. 55 cells (91.7%) have expected count less than 5. The minimum expected count is .01.



Age * Social Marketing Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	21.232 ^a	30	.880
Likelihood Ratio	23.110	30	.811
N of Valid Cases	105		

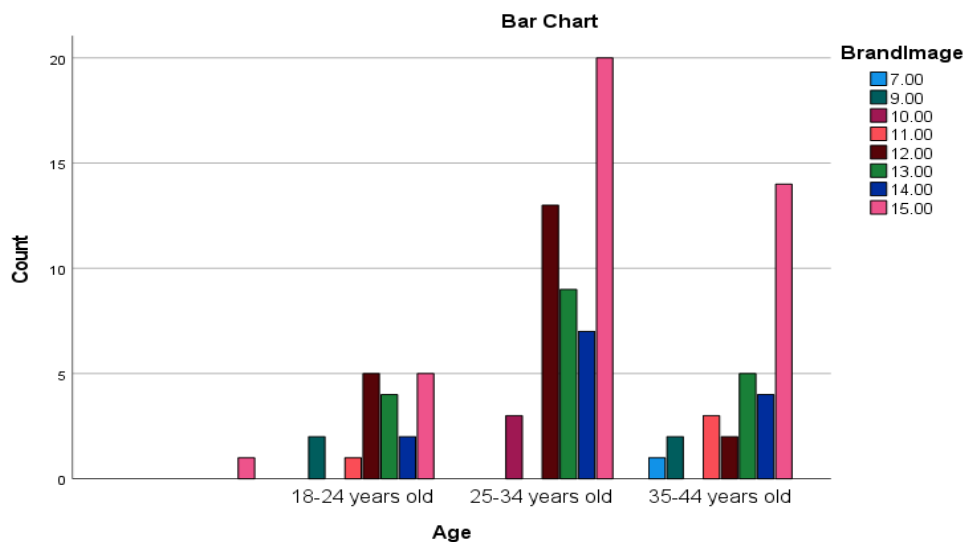
a. 36 cells (81.8%) have expected count less than 5. The minimum expected count is .01.



Age * Brand Image Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	21.640 ^a	21	.421
Likelihood Ratio	26.517	21	.187
N of Valid Cases	103		

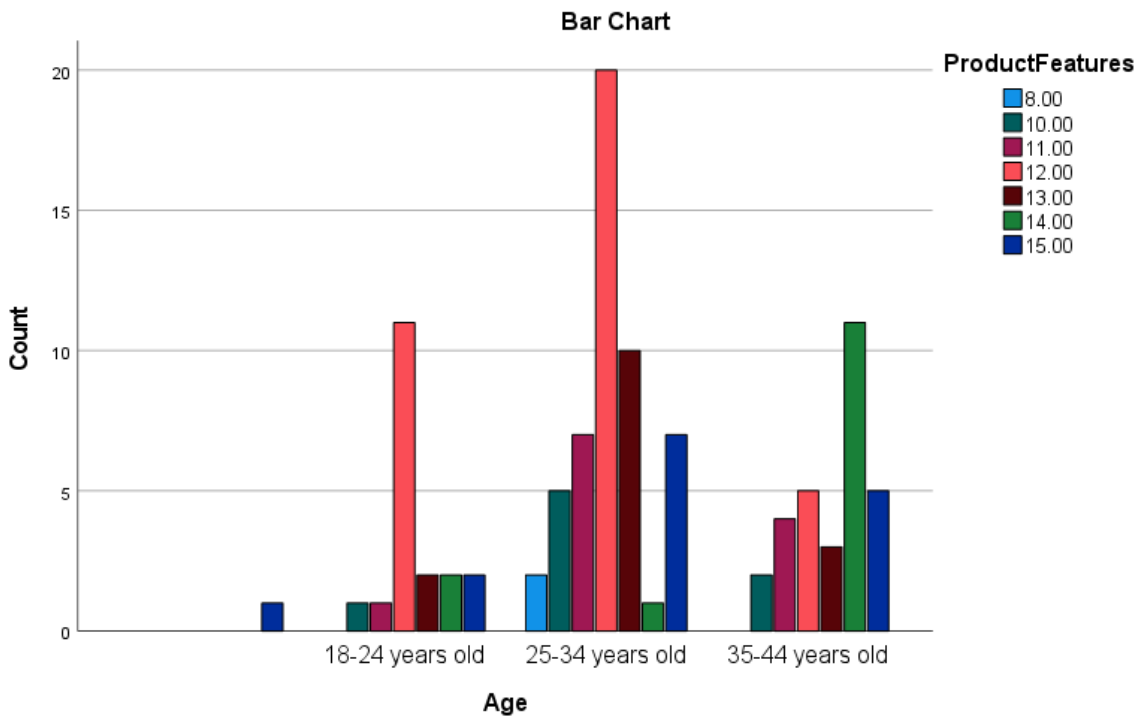
a. 24 cells (75.0%) have expected count less than 5. The minimum expected count is .01.



Age * Product Features Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	33.528 ^a	18	.014
Likelihood Ratio	32.235	18	.021
N of Valid Cases	102		

a. 21 cells (75.0%) have expected count less than 5. The minimum expected count is .02.

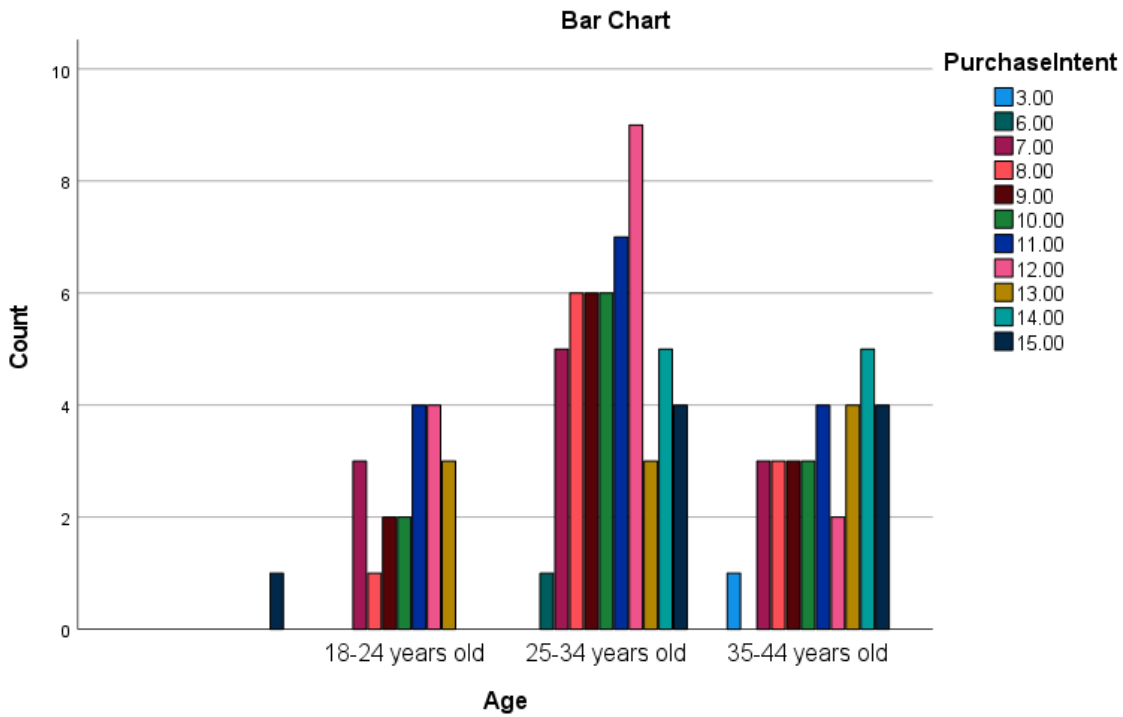


Age * PurchaseIntent

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	25.279 ^a	30	.711
Likelihood Ratio	23.540	30	.792
N of Valid Cases	104		

a. 36 cells (81.8%) have expected count less than 5. The minimum expected count is .01.

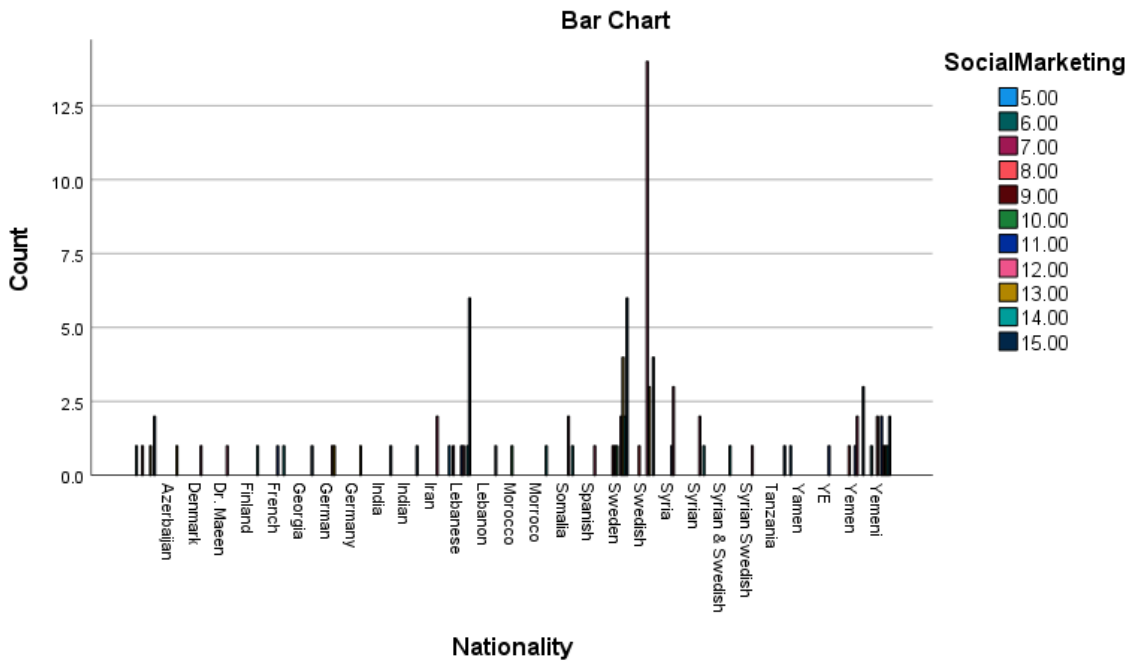


Nationality * SocialInfluence

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	387.222 ^a	392	.559
Likelihood Ratio	213.065	392	1.000
N of Valid Cases	106		

a. 435 cells (100.0%) have expected count less than 5.
The minimum expected count is .01.

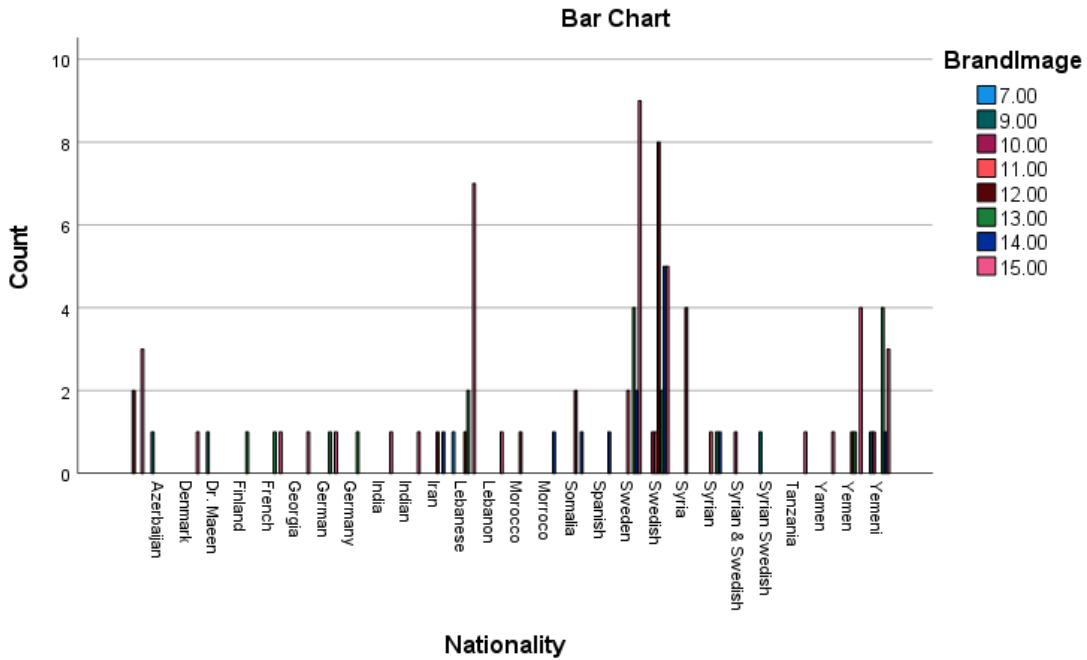


Nationality * BrandImage

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	232.473 ^a	189	.017
Likelihood Ratio	145.406	189	.992
N of Valid Cases	103		

a. 222 cells (99.1%) have expected count less than 5. The minimum expected count is .01.

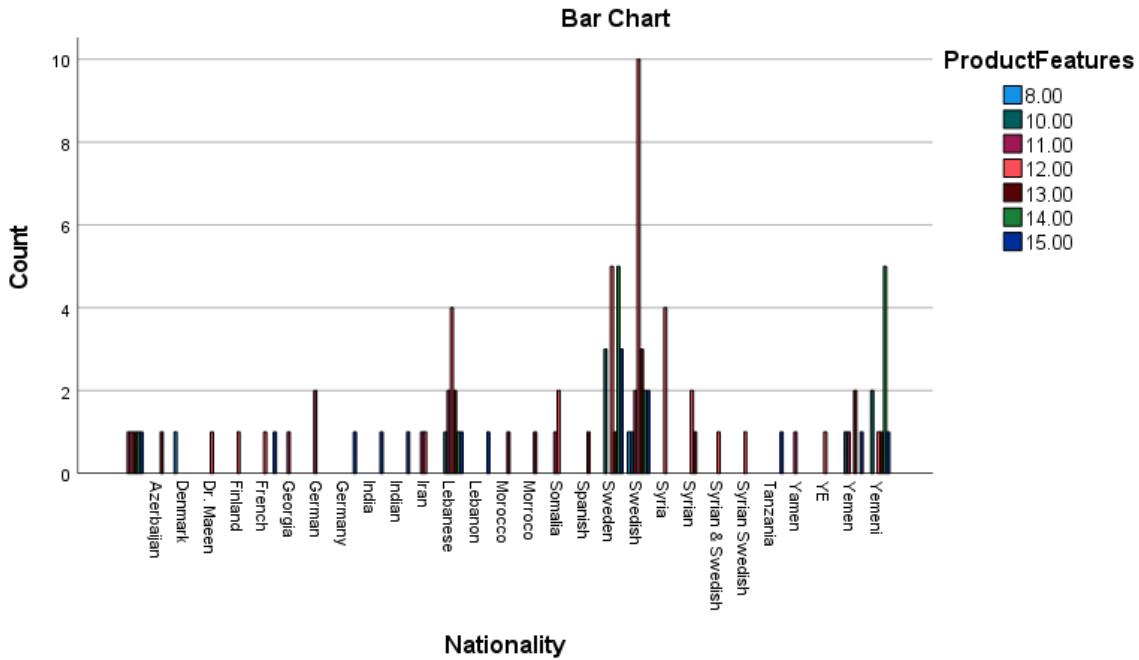


Nationality * ProductFeatures

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	196.790 ^a	168	.064
Likelihood Ratio	129.655	168	.987
N of Valid Cases	102		

a. 201 cells (99.0%) have expected count less than 5. The minimum expected count is .02.

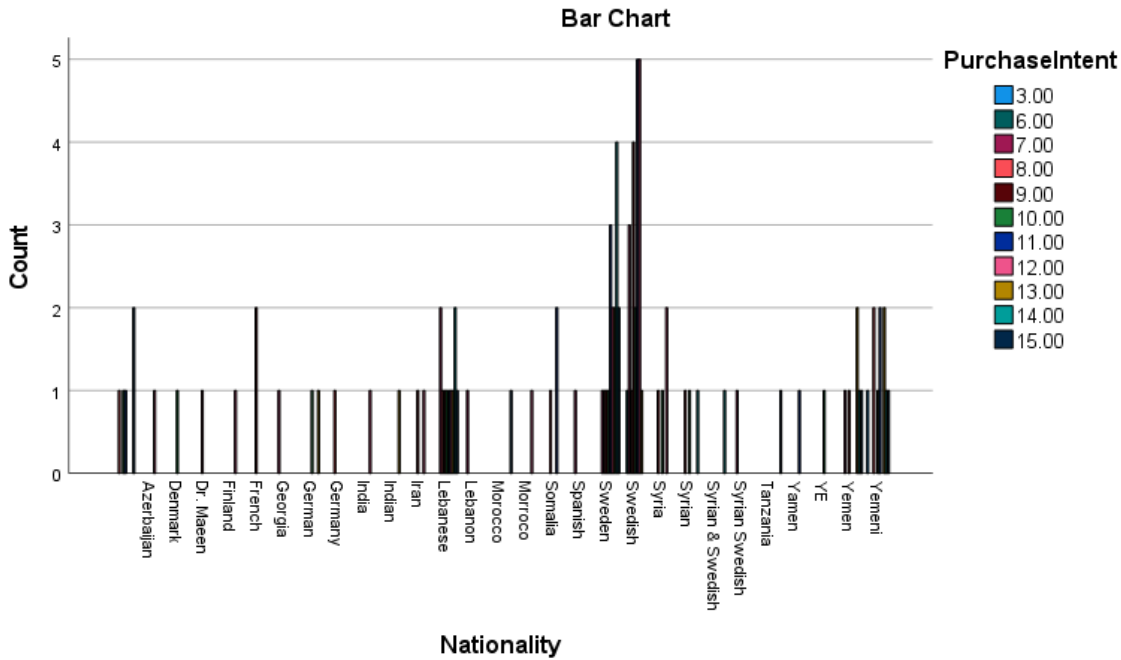


Nationality * PurchaseIntent

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	245.434 ^a	280	.933
Likelihood Ratio	172.626	280	1.000
N of Valid Cases	104		

a. 319 cells (100.0%) have expected count less than 5.
The minimum expected count is .01.



Age * Social Influence items (SI1, SI2, SI3, SI4) corsstab.

SI1 Crosstab.

Friends and family are very helpful to me in making decisions when buying a smartphone.

		1	2	3	4	5	Total
Age	Count	0	0	0	0	1	1
	% within Age	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
	% within Friends and family are very helpful to me in making decisions when buying a smartphone.	0.0%	0.0%	0.0%	0.0%	3.6%	0.9%
	18-24 years old	Count	1	3	4	9	19
		% within Age	5.3%	15.8%	21.1%	47.4%	100.0%
		% within Friends and family are very helpful to me in making decisions when buying a smartphone.	12.5%	33.3%	16.7%	24.3%	17.9%
	25-34 years old	Count	3	4	12	17	53
		% within Age	5.7%	7.5%	22.6%	32.1%	100.0%
		% within Friends and family are very helpful to me in making decisions when buying a smartphone.	37.5%	44.4%	50.0%	45.9%	60.7%
	35-44 years old	Count	4	2	8	11	33
		% within Age	12.1%	6.1%	24.2%	33.3%	100.0%
		% within Friends and family are very helpful to me in making decisions when buying a smartphone.	50.0%	22.2%	33.3%	29.7%	28.6%
Total	Count	8	9	24	37	28	106
	% within Age	7.5%	8.5%	22.6%	34.9%	26.4%	100.0%
	% within Friends and family are very helpful to me in making decisions when buying a smartphone.	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

SI1 Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	9.126 ^a	12	.692
Likelihood Ratio	9.103	12	.694
N of Valid Cases	106		

a. 12 cells (60.0%) have expected count less than 5. The minimum expected count is .08.

SI2 Crosstab.

Friends and family give me valuable advice when buying a smartphone.

		1	2	3	4	5	Total
Age	Count	0	0	0	0	1	1
	% within Age	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
	% within Friends and family give me valuable advice when buying a smartphone.	0.0%	0.0%	0.0%	0.0%	3.7%	0.9%
	18-24 years old						
	Count	1	2	5	10	1	19
	% within Age	5.3%	10.5%	26.3%	52.6%	5.3%	100.0%
	% within Friends and family give me valuable advice when buying a smartphone.	20.0%	16.7%	21.7%	25.6%	3.7%	17.9%
	25-34 years old						
	Count	2	6	11	16	18	53
	% within Age	3.8%	11.3%	20.8%	30.2%	34.0%	100.0%
	% within Friends and family give me valuable advice when buying a smartphone.	40.0%	50.0%	47.8%	41.0%	66.7%	50.0%
	35-44 years old						
	Count	2	4	7	13	7	33
	% within Age	6.1%	12.1%	21.2%	39.4%	21.2%	100.0%
	% within Friends and family give me valuable advice when buying a smartphone.	40.0%	33.3%	30.4%	33.3%	25.9%	31.1%
Total	Count	5	12	23	39	27	106
	% within Age	4.7%	11.3%	21.7%	36.8%	25.5%	100.0%
	% within Friends and family give me valuable advice when buying a smartphone.	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

SI2 Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	10.171 ^a	12	.601
Likelihood Ratio	11.201	12	.512
N of Valid Cases	106		

a. 12 cells (60.0%) have expected count less than 5. The minimum expected count is .05.

SI3 Crosstab.

I trust my friends and family about their opinions and advices on smartphones

		1	2	3	4	5	Total	
Age	Count	0	0	0	0	1	1	
	% within Age	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%	
	% within I trust my friends and family about their opinions and advices on smartphones	0.0%	0.0%	0.0%	0.0%	3.0%	0.9%	
	18-24 years old	Count	1	3	0	11	4	19
		% within Age	5.3%	15.8%	0.0%	57.9%	21.1%	100.0%
		% within I trust my friends and family about their opinions and advices on smartphones	50.0%	33.3%	0.0%	26.2%	12.1%	17.9%
	25-34 years old	Count	1	3	11	20	18	53
		% within Age	1.9%	5.7%	20.8%	37.7%	34.0%	100.0%
		% within I trust my friends and family about their opinions and advices on smartphones	50.0%	33.3%	55.0%	47.6%	54.5%	50.0%
35-44 years old	Count	0	3	9	11	10	33	
	% within Age	0.0%	9.1%	27.3%	33.3%	30.3%	100.0%	
	% within I trust my friends and family about their opinions and advices on smartphones	0.0%	33.3%	45.0%	26.2%	30.3%	31.1%	
Total	Count	2	9	20	42	33	106	
	% within Age	1.9%	8.5%	18.9%	39.6%	31.1%	100.0%	
	% within I trust my friends and family about their opinions and advices on smartphones	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	

SI3 Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	13.351 ^a	12	.344
Likelihood Ratio	16.865	12	.155
N of Valid Cases	106		

a. 12 cells (60.0%) have expected count less than 5. The minimum expected count is .02.

SI4 Crosstab

I will purchase a smartphone that my friends and family recommend to me.

		1	2	3	4	5	Total
Age	Count	0	0	0	0	1	1
	% within Age	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
	% within I will purchase a smartphone that my friends and family recommend to me.	0.0%	0.0%	0.0%	0.0%	7.7%	0.9%
	18-24 years old	Count	1	1	7	9	19
		% within Age	5.3%	5.3%	36.8%	47.4%	100.0%
		% within I will purchase a smartphone that my friends and family recommend to me.	14.3%	12.5%	18.9%	22.0%	17.9%
	25-34 years old	Count	2	3	22	21	53
		% within Age	3.8%	5.7%	41.5%	39.6%	100.0%
		% within I will purchase a smartphone that my friends and family recommend to me.	28.6%	37.5%	59.5%	51.2%	50.0%
	35-44 years old	Count	4	4	8	11	33
		% within Age	12.1%	12.1%	24.2%	33.3%	100.0%
		% within I will purchase a smartphone that my friends and family recommend to me.	57.1%	50.0%	21.6%	26.8%	31.1%
Total	Count	7	8	37	41	13	106
	% within Age	6.6%	7.5%	34.9%	38.7%	12.3%	100.0%
	% within I will purchase a smartphone that my friends and family recommend to me.	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

SI4 Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	15.098 ^a	12	.236
Likelihood Ratio	12.050	12	.442
N of Valid Cases	106		

a. 13 cells (65.0%) have expected count less than 5. The minimum expected count is .07.

Age * Social Marketing items crosstab.

Age * SM1 Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	19.668 ^a	12	.074
Likelihood Ratio	21.660	12	.042
N of Valid Cases	106		

a. 13 cells (65.0%) have expected count less than 5. The minimum expected count is .02.

Age * SM1 Crosstab

To make sure that I buy the right products or brands, I often read online reviews of products and brands written by other fellow members in social networks and consult my family and friends.

		1	2	3	4	5	Total
Age	Count	0	0	0	0	1	1
	% within To make sure that I buy the right products or brands, I often read online reviews of products and brands written by other fellow members in social networks and consult my family and friends.	0.0%	0.0%	0.0%	0.0%	2.1%	0.9%
	% of Total	0.0%	0.0%	0.0%	0.0%	0.9%	0.9%
	18-24 years old	Count	0	1	3	8	19
	% within To make sure that I buy the right products or brands, I often read online reviews of products and brands written by other fellow members in social networks and consult my family and friends.	0.0%	12.5%	27.3%	21.1%	14.9%	17.9%
	% of Total	0.0%	0.9%	2.8%	7.5%	6.6%	17.9%
	25-34 years old	Count	0	3	1	24	53
	% within To make sure that I buy the right products or brands, I often read online reviews of products and brands written by other fellow members in social networks and consult my family and friends.	0.0%	37.5%	9.1%	63.2%	53.2%	50.0%
	% of Total	0.0%	2.8%	0.9%	22.6%	23.6%	50.0%
	35-44 years old	Count	2	4	7	6	33
	% within To make sure that I buy the right products or brands, I often read online reviews of products and brands written by other fellow members in social networks and consult my family and friends.	100.0%	50.0%	63.6%	15.8%	29.8%	31.1%
	% of Total	1.9%	3.8%	6.6%	5.7%	13.2%	31.1%
Total	Count	2	8	11	38	47	106
	% within To make sure that I buy the right products or brands, I often read online reviews of products and brands written by other fellow members in social networks and consult my family and friends.	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	% of Total	1.9%	7.5%	10.4%	35.8%	44.3%	100.0%

Age * SM2 Crosstab

To choose the right products or brands, I often check online reviews of products and brands provided by other fellow members on social networks.

		1	2	3	4	5	Total
Age	Count	0	0	0	0	1	1
	% within To choose the right products or brands, I often check online reviews of products and brands provided by other fellow members on social networks.	0.0%	0.0%	0.0%	0.0%	2.2%	1.0%
	% of Total	0.0%	0.0%	0.0%	0.0%	1.0%	1.0%
	18-24 years old	Count	0	0	2	10	7
	% within To choose the right products or brands, I often check online reviews of products and brands provided by other fellow members on social networks.	0.0%	0.0%	25.0%	22.7%	15.2%	18.1%
	% of Total	0.0%	0.0%	1.9%	9.5%	6.7%	18.1%
	25-34 years old	Count	1	1	4	24	23
	% within To choose the right products or brands, I often check online reviews of products and brands provided by other fellow members on social networks.	33.3%	25.0%	50.0%	54.5%	50.0%	50.5%
	% of Total	1.0%	1.0%	3.8%	22.9%	21.9%	50.5%
	35-44 years old	Count	2	3	2	10	15
	% within To choose the right products or brands, I often check online reviews of products and brands provided by other fellow members on social networks.	66.7%	75.0%	25.0%	22.7%	32.6%	30.5%
	% of Total	1.9%	2.9%	1.9%	9.5%	14.3%	30.5%
Total	Count	3	4	8	44	46	105
	% within To choose the right products or brands, I often check online reviews of products and brands provided by other fellow members on social networks.	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	% of Total	2.9%	3.8%	7.6%	41.9%	43.8%	100.0%

Age * SM2 Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	9.233 ^a	12	.683
Likelihood Ratio	9.955	12	.620
N of Valid Cases	105		

a. 14 cells (70.0%) have expected count less than 5. The minimum expected count is .03.

Age * SM3 Crosstab

		The information that is spread regarding products and brands usually influences my opinion to purchase.				Total
		2	3	4	5	
Age	Count	0	0	0	1	1
	% within The information that is spread regarding products and brands usually influences my opinion to purchase.	0.0%	0.0%	0.0%	2.7%	1.0%
	% of Total	0.0%	0.0%	0.0%	1.0%	1.0%
	18-24 years old	Count	0	2	14	19
		% within The information that is spread regarding products and brands usually influences my opinion to purchase.	0.0%	13.3%	28.6%	18.1%
		% of Total	0.0%	1.9%	13.3%	18.1%
	25-34 years old	Count	2	6	26	53
		% within The information that is spread regarding products and brands usually influences my opinion to purchase.	50.0%	40.0%	53.1%	50.5%
		% of Total	1.9%	5.7%	24.8%	50.5%
	35-44 years old	Count	2	7	9	32
		% within The information that is spread regarding products and brands usually influences my opinion to purchase.	50.0%	46.7%	18.4%	30.5%
		% of Total	1.9%	6.7%	8.6%	30.5%
Total	Count	4	15	49	37	105
	% within The information that is spread regarding products and brands usually influences my opinion to purchase.	100.0%	100.0%	100.0%	100.0%	100.0%
	% of Total	3.8%	14.3%	46.7%	35.2%	100.0%

Age * SM3 Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	12.964 ^a	9	.164
Likelihood Ratio	14.147	9	.117
N of Valid Cases	105		

a. 9 cells (56.3%) have expected count less than 5. The minimum expected count is .04.

Age * BM1 Crosstab

		I prefer to buy a well-known internationally recognized smartphone.				Total
		2	3	4	5	
Age	Count	0	0	0	1	1
	% within I prefer to buy a well-known internationally recognized smartphone.	0.0%	0.0%	0.0%	1.4%	1.0%
	% of Total	0.0%	0.0%	0.0%	1.0%	1.0%
	18-24 years old	Count	1	1	7	10
		% within I prefer to buy a well-known internationally recognized smartphone.	50.0%	11.1%	29.2%	14.5%
		% of Total	1.0%	1.0%	6.7%	9.6%
	25-34 years old	Count	0	5	12	35
		% within I prefer to buy a well-known internationally recognized smartphone.	0.0%	55.6%	50.0%	50.7%
		% of Total	0.0%	4.8%	11.5%	33.7%
	35-44 years old	Count	1	3	5	23
		% within I prefer to buy a well-known internationally recognized smartphone.	50.0%	33.3%	20.8%	33.3%
		% of Total	1.0%	2.9%	4.8%	22.1%
Total	Count	2	9	24	69	104
	% within I prefer to buy a well-known internationally recognized smartphone.	100.0%	100.0%	100.0%	100.0%	100.0%
	% of Total	1.9%	8.7%	23.1%	66.3%	100.0%

Age * BM1 Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	6.200 ^a	9	.720
Likelihood Ratio	7.052	9	.632
N of Valid Cases	104		

a. 11 cells (68.8%) have expected count less than 5. The minimum expected count is .02.

Age * BM2 Crosstab

		I prefer to buy my favorite brand of smartphones.				Total
		2	3	4	5	
Age	Count	0	0	0	1	1
	% within I prefer to buy my favorite brand of smartphones.	0.0%	0.0%	0.0%	1.6%	1.0%
	% of Total	0.0%	0.0%	0.0%	1.0%	1.0%
	18-24 years old	Count	1	1	8	9
		% within I prefer to buy my favorite brand of smartphones.	33.3%	16.7%	24.2%	14.5%
		% of Total	1.0%	1.0%	7.7%	8.7%
	25-34 years old	Count	1	3	14	34
		% within I prefer to buy my favorite brand of smartphones.	33.3%	50.0%	42.4%	54.8%
		% of Total	1.0%	2.9%	13.5%	32.7%
	35-44 years old	Count	1	2	11	18
		% within I prefer to buy my favorite brand of smartphones.	33.3%	33.3%	33.3%	29.0%
		% of Total	1.0%	1.9%	10.6%	17.3%
Total	Count	3	6	33	62	104
	% within I prefer to buy my favorite brand of smartphones.	100.0%	100.0%	100.0%	100.0%	100.0%
	% of Total	2.9%	5.8%	31.7%	59.6%	100.0%

Age * BM2 Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	3.167 ^a	9	.957
Likelihood Ratio	3.460	9	.943
N of Valid Cases	104		

a. 10 cells (62.5%) have expected count less than 5. The minimum expected count is .03.

Crosstab

		BMI3				
		2	3	4	5	Total
Age	Count	0	0	0	1	1
	% within BMI3	0.0%	0.0%	0.0%	2.0%	1.0%
	% of Total	0.0%	0.0%	0.0%	1.0%	1.0%
	18-24 years old	Count	1	1	11	6
		% within BMI3	33.3%	7.7%	30.6%	11.8%
		% of Total	1.0%	1.0%	10.7%	5.8%
	25-34 years old	Count	1	7	17	27
		% within BMI3	33.3%	53.8%	47.2%	52.9%
		% of Total	1.0%	6.8%	16.5%	26.2%
	35-44 years old	Count	1	5	8	17
		% within BMI3	33.3%	38.5%	22.2%	33.3%
		% of Total	1.0%	4.9%	7.8%	16.5%
Total	Count	3	13	36	51	103
	% within BMI3	100.0%	100.0%	100.0%	100.0%	100.0%
	% of Total	2.9%	12.6%	35.0%	49.5%	100.0%

Age * BMI3 Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	7.864 ^a	9	.548
Likelihood Ratio	8.186	9	.516
N of Valid Cases	103		

a. 9 cells (56.3%) have expected count less than 5. The minimum expected count is .03.

Age * PF1 Crosstab

		I choose a smartphone based on its operational systems				Total
		2	3	4	5	
Age	Count	0	0	0	1	1
	% within I choose a smartphone based on its operational systems	0.0%	0.0%	0.0%	2.4%	1.0%
	% of Total	0.0%	0.0%	0.0%	1.0%	1.0%
	18-24 years old	Count	0	2	11	6
		% within I choose a smartphone based on its operational systems	0.0%	25.0%	22.4%	14.3%
		% of Total	0.0%	2.0%	10.8%	5.9%
	25-34 years old	Count	2	4	28	18
		% within I choose a smartphone based on its operational systems	66.7%	50.0%	57.1%	42.9%
		% of Total	2.0%	3.9%	27.5%	17.6%
	35-44 years old	Count	1	2	10	17
		% within I choose a smartphone based on its operational systems	33.3%	25.0%	20.4%	40.5%
		% of Total	1.0%	2.0%	9.8%	16.7%
Total	Count	3	8	49	42	102
	% within I choose a smartphone based on its operational systems	100.0%	100.0%	100.0%	100.0%	100.0%
	% of Total	2.9%	7.8%	48.0%	41.2%	100.0%

Age * PF1 Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	7.193 ^a	9	.617
Likelihood Ratio	8.080	9	.526
N of Valid Cases	102		

a. 10 cells (62.5%) have expected count less than 5. The minimum expected count is .03.

Age * PF2 Crosstab

		The design and fashion of smartphones influence my purchase choice.				Total
		2	3	4	5	
Age	Count	0	0	0	1	1
	% within The design and fashion of smartphones influence my purchase choice.	0.0%	0.0%	0.0%	2.9%	1.0%
	% of Total	0.0%	0.0%	0.0%	1.0%	1.0%
	18-24 years old	Count	1	3	8	7
		% within The design and fashion of smartphones influence my purchase choice.	8.3%	25.0%	17.8%	20.6%
		% of Total	1.0%	2.9%	7.8%	6.8%
	25-34 years old	Count	9	4	22	17
		% within The design and fashion of smartphones influence my purchase choice.	75.0%	33.3%	48.9%	50.0%
		% of Total	8.7%	3.9%	21.4%	16.5%
	35-44 years old	Count	2	5	15	9
		% within The design and fashion of smartphones influence my purchase choice.	16.7%	41.7%	33.3%	26.5%
		% of Total	1.9%	4.9%	14.6%	8.7%
Total	Count	12	12	45	34	103
	% within The design and fashion of smartphones influence my purchase choice.	100.0%	100.0%	100.0%	100.0%	100.0%
	% of Total	11.7%	11.7%	43.7%	33.0%	100.0%

Age * PF2 Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	6.780 ^a	9	.660
Likelihood Ratio	7.101	9	.627
N of Valid Cases	103		

a. 8 cells (50.0%) have expected count less than 5. The minimum expected count is .12.

Age * PF3 Crosstab

		I prefer only to buy smartphone that has technological features that meet my needs.					Total
		1	2	3	4	5	
Age	Count	0	0	0	0	1	1
	% within I prefer only to buy smartphone that has technological features that meet my needs.	0.0%	0.0%	0.0%	0.0%	2.1%	1.0%
	% of Total	0.0%	0.0%	0.0%	0.0%	1.0%	1.0%
	18-24 years old	Count	0	0	3	10	19
		% within I prefer only to buy smartphone that has technological features that meet my needs.	0.0%	0.0%	30.0%	24.4%	18.4%
		% of Total	0.0%	0.0%	2.9%	9.7%	18.4%
	25-34 years old	Count	2	2	4	27	52
		% within I prefer only to buy smartphone that has technological features that meet my needs.	100.0%	66.7%	40.0%	65.9%	50.5%
		% of Total	1.9%	1.9%	3.9%	26.2%	50.5%
	35-44 years old	Count	0	1	3	4	31
		% within I prefer only to buy smartphone that has technological features that meet my needs.	0.0%	33.3%	30.0%	9.8%	48.9%
		% of Total	0.0%	1.0%	2.9%	3.9%	22.3%
Total	Count	2	3	10	41	47	103
	% within I prefer only to buy smartphone that has technological features that meet my needs.	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	% of Total	1.9%	2.9%	9.7%	39.8%	45.6%	100.0%

Age * PF3 Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	21.406 ^a	12	.045
Likelihood Ratio	24.185	12	.019
N of Valid Cases	103		

a. 13 cells (65.0%) have expected count less than 5. The minimum expected count is .02.

Age * PI1 Crosstab

		I intend to purchase new Smartphone in the near future					Total
		1	2	3	4	5	
Age	Count	0	0	0	0	1	1
	% within I intend to purchase new Smartphone in the near future	0.0%	0.0%	0.0%	0.0%	4.0%	1.0%
	% of Total	0.0%	0.0%	0.0%	0.0%	1.0%	1.0%
	18-24 years old	Count	2	4	7	5	19
	% within I intend to purchase new Smartphone in the near future	16.7%	17.4%	29.2%	25.0%	4.0%	18.3%
	% of Total	1.9%	3.8%	6.7%	4.8%	1.0%	18.3%
	25-34 years old	Count	7	12	12	10	52
	% within I intend to purchase new Smartphone in the near future	58.3%	52.2%	50.0%	50.0%	44.0%	50.0%
	% of Total	6.7%	11.5%	11.5%	9.6%	10.6%	50.0%
	35-44 years old	Count	3	7	5	5	32
	% within I intend to purchase new Smartphone in the near future	25.0%	30.4%	20.8%	25.0%	48.0%	30.8%
	% of Total	2.9%	6.7%	4.8%	4.8%	11.5%	30.8%
Total	Count	12	23	24	20	25	104
	% within I intend to purchase new Smartphone in the near future	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	% of Total	11.5%	22.1%	23.1%	19.2%	24.0%	100.0%

Age * PI1 Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	11.927 ^a	12	.452
Likelihood Ratio	12.403	12	.414
N of Valid Cases	104		

a. 11 cells (55.0%) have expected count less than 5. The minimum expected count is .12.

Age * PI2 Crosstab

		I search for information about new Smartphone from time to time.					Total
		1	2	3	4	5	
Age	Count	0	0	0	0	1	1
	% within I search for information about new Smartphone from time to time.	0.0%	0.0%	0.0%	0.0%	4.5%	1.0%
	% of Total	0.0%	0.0%	0.0%	0.0%	1.0%	1.0%
	18-24 years old	Count	3	6	4	5	19
	% within I search for information about new Smartphone from time to time.	15.8%	20.7%	26.7%	26.3%	4.5%	18.3%
	% of Total	2.9%	5.8%	3.8%	4.8%	1.0%	18.3%
	25-34 years old	Count	9	16	7	11	52
	% within I search for information about new Smartphone from time to time.	47.4%	55.2%	46.7%	57.9%	40.9%	50.0%
	% of Total	8.7%	15.4%	6.7%	10.6%	8.7%	50.0%
	35-44 years old	Count	7	7	4	3	32
	% within I search for information about new Smartphone from time to time.	36.8%	24.1%	26.7%	15.8%	50.0%	30.8%
	% of Total	6.7%	6.7%	3.8%	2.9%	10.6%	30.8%
Total	Count	19	29	15	19	22	104
	% within I search for information about new Smartphone from time to time.	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	% of Total	18.3%	27.9%	14.4%	18.3%	21.2%	100.0%

Age * PI2 Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	12.974 ^a	12	.371
Likelihood Ratio	13.098	12	.362
N of Valid Cases	104		

a. 10 cells (50.0%) have expected count less than 5. The minimum expected count is .14.

Age * PI3 Crosstab

		Having a smartphone is very important for my daily life.					Total
		1	2	3	4	5	
Age	Count	0	0	0	0	1	1
	% within Having a smartphone is very important for my daily life.	0.0%	0.0%	0.0%	0.0%	1.3%	1.0%
	% of Total	0.0%	0.0%	0.0%	0.0%	1.0%	1.0%
	18-24 years old	Count	0	0	2	1	16
		% within Having a smartphone is very important for my daily life.	0.0%	0.0%	66.7%	5.3%	20.5%
		% of Total	0.0%	0.0%	1.9%	1.0%	15.4%
	25-34 years old	Count	0	1	1	11	39
		% within Having a smartphone is very important for my daily life.	0.0%	33.3%	33.3%	57.9%	50.0%
		% of Total	0.0%	1.0%	1.0%	10.6%	37.5%
	35-44 years old	Count	1	2	0	7	22
		% within Having a smartphone is very important for my daily life.	100.0%	66.7%	0.0%	36.8%	28.2%
		% of Total	1.0%	1.9%	0.0%	6.7%	21.2%
Total	Count	1	3	3	19	78	104
	% within Having a smartphone is very important for my daily life.	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	% of Total	1.0%	2.9%	2.9%	18.3%	75.0%	100.0%

Age * PI3 Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	12.086 ^a	12	.439
Likelihood Ratio	12.718	12	.390
N of Valid Cases	104		

a. 15 cells (75.0%) have expected count less than 5. The minimum expected count is .01.

