

CONSUMER M-SHOPPING SIMILARITIES AND DIFFERENCES  
BY LIFE STAGE

by

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## **DEDICATION**

For my father, Derrick McDonald, who was dedicated to my education and personal growth and grandmother, Brenda McDonald, who instilled the faith to persist. I know that both of you are proud of me. I love you.

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## **ABSTRACT**

M-shopping, or transactions processed on mobile devices, now makes up more than a third of all business-to-consumer transactions in e-commerce (Hubert et al., 2017).

Although m-shopping can be completed from any mobile device, m-shopping activities are performed on smartphones in most cases, and businesses have responded by creating digital interfaces tailored to the smartphone. However, academic literature fails to address the specifics of m-shopping activities as well as the distinction between m-shopping and e-shopping. This research utilizes qualitative methods to explore participants' mobile shopping experiences on smartphones. Previous research has suggested that shopping activities in traditional stores differ between user groups (Dholakia, 1999). Mobile shopping activities may also vary depending on the customer's characteristics (Fuentes and Svingstedt, 2017). Leaning on these two perspectives, this study investigates the differences and similarities between and within different life stage groups. Identifying these similarities and differences informs retailers' efforts to target and design for various user groups. This literature contributes to the retail, m-commerce, and consumer behavior literature by exploring m-shopping activities, perceptions, and differences within life stage groups. Findings of this research include information on frequency and attitudes of m-shopping among users based on life stages, which may affect the way a consumer approaches m-shopping activities, and the perceived risks that each life stage group holds.

## I. INTRODUCTION

Consumers experience constant connection to other consumers and the world through their smartphones. E-commerce enables consumers to make transactions over the internet. One form of this connection is m-commerce business activities conducted on mobile devices (San-Martin et al., 2014). M-commerce sales in the use has seen exponential growth. The market made \$41.71 billion in revenue in 2013. This grew to 207.15 billion in revenue in 2018. Just in five years, m-commerce has over five times the revenues of 2013 in America (Statista, 2020). Consumers pay bills, acquire loans, check credit, and shop on their phones. One of the most important m-commerce activities for the future of retailing is m-shopping: consumer shopping while using a mobile device such as a smartphone (Marriott et al., 2017). M-shopping is a special case of e-shopping, or shopping conducted via the internet on computers. M-shopping carries potentially unique advantages, disadvantages, and risks. Unlike other shopping channels, a mobile phone is always with consumers and is intimately connected to consumers' everyday lives. This constant connection to businesses has exposed consumers to new opportunities and risks that are not completely understood, particularly from consumers' perspectives (Marriott et al., 2017; Wang et al., 2015). While retailers must understand consumers' m-shopping activities to provide seamless and user-friendly m-shopping experiences, policymakers need to better understand m-shopping to protect consumers' privacy, information, and consumer rights.

Constant connection, particularly through mobile devices, has made the consumer less of a mystery for businesses who now enjoy unprecedented access to consumers' information. For consumers, such access comes at a price. For example, consumer data of



well-trusted brands, such as Apple and Target, have been compromised by hackers (Harris & Perlroth, 2014; Byford, 2015). Consumer data, which is sometimes captured without consumers' explicit knowledge, is an important policy issue. In fact, it has prompted congressional hearings to discuss retailers' and other businesses' terms and conditions, data sharing, and ad-serving policies and methods. While movement toward protecting consumers is important, little is known about what consumers consider pertinent to needed protections when they are m-shopping. In fact, little is known about general consumers' behaviors or perceptions while m-shopping (Marriott et al., 2017).

Although 85% of consumers' moments with their smartphone are spent on different types of apps, shopping apps only account for 5% of these moments (Faulds et al., 2017). This means that consumers find utility in apps on their phones, but shopping apps are lacking in some way. It is crucial to have a digital interface that is both useful and appealing to the consumer. Currently, 47% of the top retailers have mobile apps, and there are many shopping related apps within both the Apple and Google app stores (Johnson, 2018). In this research, we expose what is most useful to consumers at their life stages and what benefits they perceive so organizations can ensure their m-shopping platforms are meeting and exceeding customers' expectations. This research fills gaps in existing knowledge by answering the following questions: 1) which activities do consumers in different life stages perform when m-shopping and 2) what are consumers' perceptions of m-shopping advantages, disadvantages, and risks? Using qualitative methods, we reveal consumers' m-shopping activities along with perceived advantages, disadvantages, and risks to offer a holistic and robust understanding of consumer m-shopping. This understanding can inform retailers, consumer advocates, and

policymakers about needed organizational policy and public policy from consumers' points of view.

## II. LITERATURE REVIEW

Research has revealed individual, contextual, and social variables that impact consumers' e-shopping experiences; however, consumers' e-shopping perceptions, motivations, and activities may be different than those for m-shopping (Marriott et al., 2017; Raphaeli et al., 2017). Despite extant research on computer-based shopping, research that explores consumers' perceptions of the advantages, disadvantages, and risks associated with m-shopping is limited. Instead, m-shopping research has focused on the adoption of m-shopping channels, specifically smartphones (Hubert, et al., 2017; Sohn, 2017; Groß, 2018). Consumers are found to adopt m-shopping based on ease-of-use, usefulness, and enjoyment perceptions (Groß 2018; Holmes et al., 2014; Hubert et al., 2017). Mobile interfaces that provide clear and concise information, high fault tolerance, and diverse formats increase the likelihood of m-shopping channel adoption (Hu & Fang, 2017). Further, when consumers perceive m-shopping interfaces as visually pleasing and easy to navigate, they express higher m-shopping adoption and purchase intentions (Kapoor & Vij, 2018). Additionally, the perception of higher security is positively related to m-shopping adoption (Chi, 2018). Relative price and consumer knowledge of target products are also related to m-shopping intentions (Lissitsa & Kol, 2019); for example, consumers exhibit higher intention to purchase via m-shopping for movie tickets (low-price, high-knowledge) than for perfume or designer clothes (high-price, low-knowledge). Finally, brand trust, in the product and retailer, is a key factor in m-shopping intentions and ultimate m-shopping adoption (Dogbe et al., 2019; Kapoor & Vij, 2017); unknown brands, on the other hand, are associated with higher financial and privacy risk and lower purchase intent via m-shopping. These aspects of the m-shopping channel

explain consumer adoption, but they do not explain consumers' shopping activities or their perceptions of the advantages, disadvantages, and risks associated with m-shopping.

### ***E-commerce***

E-commerce has been extensively studied due to its ability to remotely conduct business. Some of these factors studied may also be applied when studying m-commerce. E-commerce and e-shopping research has drawn extensively on the technology acceptance model (TAM), mentioned over 700 times across several academic journals. Utilizing the TAM model, researchers have used many tools to understand consumer perceptions, attitudes, and purchase intentions when e-shopping (Richards, 2005; Hausman & Siekpe, 2009; Ganesh et al., 2010; Duarte et al., 2018; Davis et al., 2017; Hausman & Siekpe, 2009; Passyn et al., 2011).

Both user and computer factors impact consumers' attitudes towards websites and experiences of flow while on a website (Hausman & Siekpe, 2009); these factors increased positive managerial outcomes such as traffic to the website and purchase intentions. Research examining the role of atmospherics on the internet found many users did not pay much attention to the aesthetics of a site; yet, they visited sites for the entertainment value and increased involvement led to an increase in purchase intentions (Richard, 2005). Research also reveals that users' hedonic responses have a largely positive impact on attitudes, purchase, and return intentions because of their emphasis on entertainment and usefulness values (Hausman & Siekpe, 2009). These studies lack inclusion of the mobile interface and how studied attributes could affect this unique use case.

Other characteristics such as gender and age have also been used to gain understanding of the differences and similarities in consumers' attitudes, perceptions, and purchase intentions while shopping online (Davis et al., 2017; Passyn et al., 2011). Gender has been established as a determiner of shopping activities in brick and mortar retail stores. More recently, research has exposed the effect of gendered behavior on e-shopping motivations and purchase intentions; online women desire more utilitarian value than offline (Davis et al., 2017). However, other research found that women shop online for leisure whereas men shopped with more utilitarian purchase intentions (Passyn et al., 2011). Although gender is a limited demographic to determine consumer behavior, the aforementioned research shows that even difference in gender has an effect on observed online consumer behavior. Age is a factor in risk awareness and purchase intentions; older consumers had concerns about online privacy and had frustrations about the online shopping experience (Passyn et al., 2011). However, specifically with mobile shopping applications, older consumers elicited positive perceptions, satisfaction, and overall experience when using m-shopping applications in comparison, younger consumers had lower intentions to use mobile shopping applications and retention rates (Natarajan et al., 2018). Factors such as gender and age are important; however, they are not as predictive of attitudes and behavior as other marketing segmentation like psychographics or life stage (Kuppelwieser, 2016). Life stages are the points or beats in life the average person hits which usually changes their behaviors, desires, and/or needs. After a young adult has finished college, it is normal for them to find a career and start a family. Normally, after a young adult has finished college, they will find a career and start a family. That person would probably have different behaviors, desires, and needs

as a young adult in college than when they are an adult with a family. Some key differences would include how many people are in their household, their income levels, and their goals. Moreover, as revealed above, findings are mixed, indicating a need for more research.

There are specific benefits that users gain or perceive when e-shopping (Ganesh et al., 2010; Duarte et al., 2018). When segmented based on e-shopping activities, consumers valued the ability to search easily, compare prices, higher entertainment, and higher product selection when e-shopping (Ganesh et al., 2010). Although Ganesh and colleagues' (2010) study included diverse participants, life stage factors were not a part of the segmentation criteria, ignoring a potential influential variable. When exploring the benefits of convenience and how they affect consumers' e-shopping intentions, an important advantage especially for young consumers was the ability to shop at any time and from where they are without putting in more effort (Duarte et al., 2018). Duarte and colleagues' (2018) study does not define what device, mobile or computer, that consumers utilize while shopping. As such, questions remain at the intersection of consumers' life stages and their m-shopping experiences.

### ***M-Shopping***

M-shopping research thus far has primarily focused on the adoption of m-shopping, rather than consumers perceptions of and attitudes toward the m-shopping channel from the consumer's point of view (Hubert et al., 2017; Sohn, 2017; Groß, 2018). Research suggests that visual, navigational, and informational attributes are influential to consumers' m-shopping intentions (Kapoor & Vij, 2017). Usefulness has been a key variable in m-shopping adoption research; "usefulness perceptions describe the degree to

which consumers believe that using mobile online stores enhances their shopping task performance” (Sohn, 2017 p. 24). Sohn (2017) reveals that as consumers’ perceived usefulness for information increased so did perceived usefulness of purchasing with the mobile retailer. Regarding consumers switching to m-shopping from physical stores, positive consumer perceptions of the m-shopping platform holistically has a positive effect on how attractive a consumer perceives a mobile store (Chang et al., 2017); unfortunately, the study does not explore specific platform characteristics. Overall, increased m-shopping frequency has a positive impact on purchasing behavior online (Wang et al., 2015); this reveals the importance of motivating consumers to utilize m-shopping.

Although there has been an increase during the past few years on m-shopping and m-commerce research, the research continues to lack many elements that are crucial to conducting business such as target market segmentation and consumer activities performed while m-shopping. This limitation can likely be attributed to the association m-shopping has with e-shopping and the two channels being viewed by researchers as the same rather than being a different shopping experience. Using clickstream data, research has shown mobile sessions were more task-oriented while sessions on the PC were more exploratory (Raphaeli et al., 2017). This counters the idea that all shopping activities on the internet are the same. However, Raphaeli and colleagues’ (2017) study uses clickstream data, but consumers’ attitudes and perceptions were not included; these are important to understand how they influence consumer shopping behaviors.

While exploring the relationship between mobile benefits, perceived risk, and perceptions regarding particular m-shopping characteristics, it was found that customers

who do not find the necessity to learn the technical aspects of m-shopping to achieve satisfaction and the acceptance of m-shopping were associated with ease of use and usefulness perceptions (Hubert et al., 2017). Hubert and colleagues (2017) suggest future m-shopping studies consider other benefits, like time, convenience and mobility, of m-shopping when studying consumers' perceptions. Processing fluency, or the ease with which information is processed this manipulates the perceptual quality, has shown to enhance the pleasure that is perceived by a consumer during e-shopping, thus increasing both support and purchase intentions (Sohn, 2017). It is to be assumed that different consumers have different levels of “technological savviness,” or different mobile, technical skills. These different levels of “technological savviness” could affect their usage of mobile devices along with what tasks they can complete on their devices.

Further, it is suggested that “technologically savviness” is defined by age cohort (Ansari et al., 2012; Hu & Fang 2017). Ansari and colleagues’ (2012) study focused on teenagers and drew the conclusion that the respondents were using technology according to their lifestyles and individual needs. Other studies operate on the assumption that age is a predictor of adoption: the older people grow, the slower they are to adopting new technologies. Hu and Fang (2017) link this to the adoption of m-shopping, stating that older consumers are slower at adopting m-shopping activities into their shopping habits. Their study found that mobile interfaces that provide clear and concise information, high fault tolerance, and diverse forms will increase the adoption of m-shopping for Baby Boomers. As for younger generations, Generations X, Y, and Z view different retail channels, such as physical stores, online stores, and mobile stores, as distinct entities which have their benefits and risks and use various channels dependent on the channels'



perceived benefits and risks (Boardman & McCormick 2018). According to Lissitsa and Kol (2019), Generation X and Y, overall, have higher self-reported mobile shopping intentions compared to Baby Boomers and Generation Z (Lissitsa & Kol 2019). However, this research revealed little statistical difference based on generational cohort concerning purchase intentions; purchase intentions for all cohorts were more related to risk and other product characteristics.

Findings related to younger consumers' m-shopping intentions are echoed in other studies that explore m-shopping and age (Hu & Fang 2017; San-Martin et al., 2015). San-Martin and colleagues (2015) used perceived entertainment and subjective norms as determinants of satisfaction and propensity to spread positive word of mouth about m-shopping dependent on age. The study observed that young adults have a more positive attitude towards innovation and are thus more willing to accept new channels like m-shopping (San-Martin et al., 2015). The study also gives a managerial suggestion to segment the marketing of m-shopping depending on the age of the m-shopper (San-Martin et al., 2015). Research has suggested a negative relationship between the age of the consumer and their interest in tech-services (Oumlil and Williams, 2000). More specifically, the older the consumer, the less interested in tech-services. Because of the date of the study, although not particularly old, technology is saturated in the daily activities of many people, regardless of age. But it is to be argued that the interactions with said technology, specifically mobile tech, would be different depending on age to an extent. However, there are other factors such as gender, lifestyle, education, and income that influence shopping behaviors and are worth exploring in m-shopping as well.

### ***Multichannel***

Multichannel shopping can be utilized by consumers when a company provides alternative ways to obtain its products. With recent innovations, businesses have the flexibility to offer their products through many channels without having large operations. There are certain advantages and disadvantages within a multichannel system, and consumers would have certain preferences for each channel dependent upon these perceived advantages and disadvantages (Kollmann et al., 2012). For example, consumers with a priority of convenience and lower priority of both risk aversion and service orientation may use an online channel rather than a traditional brick and mortar channel (Kollmann et al., 2012). During the purchasing process, consumers now have the option to complete the entire buying journey using only one or multiple channels. Because there are perceived advantages to each channel, consumers can utilize different channels at different stages of the buying process. Schroder and Zaharia (2008) found that when customers chose to spread their buying activities across channels, there were preferred activities such as completing the information search online.

Multichannel retail research explicitly allows for the assumption that consumers differentiate their behavior based on retail channels. However, more research is needed that distinguishes shopping tasks in different channels to predict channel choice (Sohn, 2017). For example, Fuentes and Svingstedt (2017) identified specific activities that were performed by young adults while m-shopping. This exposes the importance of conducting further research to understand m-shopping practices across consumer groups (Fuentes, Svingstedt, 2017). The current study follows this recommendation to conduct research focused on m-shopping activities conducted by various user groups. This research also

investigates m-shopping benefits, disadvantages, and risks broadly perceived by life stage groups.

### ***Life Stage and M-Shopping***

Different consumers have differing levels of mobile technology skills which can affect their engagement in m-commerce activities (Marriott et al., 2017; Nunan & Di Domenico, 2019). Research suggests that technology skill and adoption is at least partially dictated by consumers' age and people use technology based on lifestyle and individual needs (Ansari et al., 2012; Nunan & Di Domenico, 2019; Hu & Fang, 2017). Further, consumers in different generational cohorts view different retail channels – physical stores, online stores, and mobile stores – as distinct entities each having their own advantages and risks (Boardman & McCormick 2018; Nunan & Di Domenico, 2019). Generation X and Y consumers have self-reported higher m-shopping purchase intentions when compared to Generation Z and Baby Boomers, though this is changing (Lissitsa & Kol 2019). This makes sense, as younger consumers tend to adopt technology sooner than their elder counterparts (Fuentes & Svingstedt, 2017; Hu & Fang, 2017; San-Martin et al., 2015). However, since age is only one aspect of technology adoption, various personality characteristics and social contexts are also important to technology usage (Marriott et al., 2017). As such, it is important to understand the influence of other factors such as lifestyle, education, family status, and income on m-shopping. One way to capture some of these variables in research is to examine m-shopping perceptions and behaviors based on consumers' life stage (Ansari et al., 2012; Lissitsa and Kol, 2019).

Because the current study explores the similarities and differences among life stage groups, the study needs to review other m-shopping research which segments

research participants. Segmentation, or grouping, can be completed in many ways; the most relevant that the current study utilized was the grouping by life stage rather than other factors such as frequency or age (Parment, 2013; San-Martin et al., 2015; Groß, 2018). One's activities, interests, attitudes, and values are what defines their life stage (Moschis, 1996). For example, although mature singles and adults with families share the same age bracket, mature, single adults do not have children while adults with families are people with children; however, they can be married or unmarried. Although the most common way to segment consumers in both research and business is by age or age cohort, Kuppelwieser's (2016) study stresses the importance to be cautious when applying chronological age for research because of the limitations it puts on the study. Instead of using age to divide participants by default, the study suggests researchers to be more purposeful with the segmentation of respondents (Kuppelwieser, 2016). The current study groups are based on life stage because the researchers believe that life stage will influence the activities performed while m-shopping and that this partitioning will yield more useful information to managers (Maison, 2014; Maison, 2019).

Although basic demographics such as age, gender, and income have been used in research and business practices to segment consumers, behaviors and lifestyle are better indicators for gathering attitudes, perceptions, and intentions in qualitative studies (Maison, 2019). Although sampling people by specific age is easier, people of different ages may have more in common if they are within the same life stage and less in common if they are the same age but in a different life stage. Someone who is 25 and someone who is 35 may have more in common if they both have children under five (Maison, 2014). This approach is taken with the perspective that each life stage group may

participate in m-shopping differently because of their life differences. The given thesis considers users' life stages when exploring their m-shopping patterns” or “In the given thesis, users' life stages are considered when exploring their m-shopping patterns.

Studies conducted that distinguish users and non-users of mobile interfaces for purchasing have defined users as people who have made one purchase or more and non-users as those who have never purchased from their mobile device (Agrebi, Jallais 2015; San Martin & López-Catalán, 2013; Marriott et al, 2017). This is a narrow way of defining these two groups: if someone makes one mobile purchase, their intentions of making another one would not be the same as someone who has made multiple mobile purchases (Marriott et al, 2017). In this research, m-shopping also includes all stages of the purchasing process, and although the customer does not purchase through their mobile device, it does not mean that they have not m-shopped. From information search to comparing pricing to store locating, a mobile device can aid at all stages of the purchasing process. This study includes those who have used their mobile devices during any stage of the purchasing process.

### III. METHODS

#### *Research Design*

Since the phenomena being studied in this research is largely underexplored, the best research method is qualitative research (Creswell and Poth 2018). Qualitative research allows discovery of new phenomena, context, and relationships (Creswell and Poth 2018). More specifically, this study utilizes in-person interviews and focus groups to gain insight about this phenomenon and processes contained in the phenomenon. Taking a phenomenological approach to understand key aspects of consumers' lived experiences m-shopping, this research was conducted to describe the meaning for several people and their lived experiences of mobile shopping. When using this technique, researchers can use philosophically rooted strategies to allow respondents to reflect on their past experiences to describe the phenomenon in detail (Bhattacharya, 2017).

The research questions were confirmed as being best studied using phenomenology since the research questions were about the respondents' experiences and behaviors. Before proceeding with the data collection, being prepared for the interviews and encounters with people experiencing the phenomena was crucial. As Calcagno (2018) stated in their analysis of Edith Stein's contributions to the phenomenology framework "phenomenology requires a phenomenological account of the psyche in order to better understand consciousness as well as its capacity to experience and live reality." To prepare for the data gathering process, the researcher bracketed out their personal experiences with the phenomenon, as advised by LeVasseur (2003). Bracketing, the suspending of one's own perspective and feelings, is important for researchers to be able

to explore others' explanations of a phenomenon. This will allow the researcher to collect and analyze the data without inserting their own bias.

The research follows the procedures of studying a phenomenon in an emergent and iterative way (Belk et al., 1988). By designing the study to be iterative, the researchers are able to follow the data gathered. As new concepts and themes appear, the researcher can expand or redirect the exploration of additional data (Rayburn, 2015). An emergent design allows for a more natural account of respondents' lived experiences (Creswell and Poth 2018). Data collection involved using in-depth interviews, focus groups, and digital short-answer surveys completed in several rounds. This allowed the researcher to conduct early analysis of data to inform later rounds. This process ensured data collection continued until a point of thematic saturation; in other words, until no new themes or experiences were revealed in participants' narratives.

### ***Data Collection***

Data was collected from individuals with experience, both recent and non-recent, shopping on their smartphones (n= 86; 62.5% female; 48.8% Caucasian, 24.4% African American, 20.9% Hispanic, 3.5% Asian American, 2% Other/No Answer). Purposeful sampling was utilized to select those with the characteristics identified for participation in the study (Creswell and Poth, 2018). This sampling technique along with opportunity sampling were used to identify consumers who would fit into the life stage categories and have experience with m-shopping (Creswell and Poth, 2018). Categories are young adults, mature singles, adults with families, and empty nesters. The categories further defined young adults as people between the ages of 18-31 that are married or unmarried (n= 26), mature singles as people between the ages of 32-52 with no children that are

unmarried (n= 8), adults with families as people between 32-52 that are married with or without children or single/divorced with children (n= 36), and empty nesters as people 52 and older with children over 18 that are married or unmarried (n= 16). Potential participants were contacted via email and phone for in-person interviews. To capture life stage groups that were more difficult to contact, the interviewer took a more direct approach to ensure the participant fit the life stage group and conducted intercept interviews at local coffee shops. During the interviews, it was important for the interviewer to have an awareness about their own experiences and perceptions to lead the conversation and empathize and fully engage with research participants (Calcagno, 2018). After analyzing the first round of interviews, an online digital short answer survey adapted from the interview script was distributed. The digital surveys were sent by email and text message to respondents who were likely to have engaged in mobile shopping. Multiple item questions were used to determine the life stage group of the respondent. Because the survey was adapted from questions in the in-person interviews, the wording of the questions was refined to be comprehensive and effective for respondents to provide answers to the question without leading or presuming (Bell & Waters, 2014). The survey yielded similar responses as the in-person data collected and was able to capture more data in a shorter time period. Both the script and short-answer survey can be found in the Appendix. After the digital surveys were collected and analyzed, focus groups were conducted to validate and triangulate findings from the first two rounds of data collection.

The primary data collection technique was interviews; a semi-structured approach was used. A basic research protocol, with probing questions, was used to direct interviews. The protocol for gathering data was to first ensure that the participant was



willing to be a part of the study and understood the context of which they were answering questions. A consent form, which was adapted from Texas State University's online resources of research consent forms, was given to each participant to read on their own and then was read aloud to them before the interview was conducted. Interviews were recorded and transcribed. The transcriptions were held in a locked and secure room.

Data collection leaned on a structured approach which allowed for cross group comparison while utilizing probing questions allows deeper dives into individual cases with the phenomenon (Creswell and Poth, 2018). As such, the interviewer used probing questions to reach full understanding of answers given and to have the interviewee to provide long and detailed answers (H. Rubin & I. Rubin, 1995). The interviewer also encouraged participants to speak candidly in their responses to avoid superficial or guided answers. The in-person interviews ranged from 12 to 40 minutes long with the average of about 19 minutes long. Interviews were conducted with 26 individuals, falling within the recommendations for phenomenology data collection (Creswell and Poth, 2018). Some participants with shorter interviews were revisited after all interviews were conducted to ask additional questions for themes that developed in later interviews. Follow-up questions also helped to gather more thoughtful answers and helped to complete narrative (H. Rubin & I. Rubin, 1995).

After the first round of in-person interviews were conducted, the digital survey was sent out via email and text message for respondents that met the criteria to participate in the study. The survey, built on Qualtrics, was able to capture participant responses using multiple choice for limited response questions including demographics and open-ended questions for questions that would have unlimited responses. The respondents'

age, child status, and marital status were gathered for the researcher to group the data into the life stage categories. Additionally, gender, race, and ethnicity of respondents were gathered to view the diversity of respondents (n=46). After collecting, analyzing, and comparing the data to the first round of collections, the researcher determined that a third round of interviews need to be conducted to fully explore themes that surfaced from the first and second intervals of data collection.

Focus groups were conducted with the life stage groups to further explore themes and collect new insights that might surface. Focus groups were formed to group life stage groups and allow them to interact and yield information regarding m-shopping in a cooperative manner. Respondents in the focus groups belonged to the same user group and had four to six people. The focus group participants were compensated for their time with refreshments before the interview was conducted. This seemed to make the respondents more comfortable with each other and the interviewer. This produced an environment for each respondent to feel able to speak candidly about their individual experiences and build upon experiences of others when they had common experiences. Recorded interviews were transcribed verbatim for data analysis. The interview protocol was adapted from the protocol of the in-depth interviews, survey, and analysis of the data collected up until that point to refine interview questions. Additional probing methods were used to gather additional information. Interviewees' race or ethnicity and gender were recorded along with a pseudonym. Participants' demographics can be found in Table 01 of the Appendix.

## ***Data Analysis***

The data analysis of the transcribed interviews was conducted using a data analysis spiral technique paired with the coding process found in grounded theory (Creswell and Poth, 2018, Straus & Corbin, 1990). This spiral consists of six steps: (1) data collection, (2) data managing, (3) memoing, (4) classifying data, (5) interpreting and describing, and (6) representing and visualizing (Creswell and Poth, 2018). These steps were approached in spiral opposed to a linear way, visiting some steps multiple times and in different orders while attempting to analyze the data to develop themes and dimensions. After gathering and managing the data, a list of significant statements from each interview and survey were drawn, and then statements that repeated and overlapped were identified. These statements were then grouped into themes using the coding process. The coding process gave the data structure by separating the data into categories and themes and further analyzing them under subcategories. This process allowed for a holistic view of the emerging themes while maintaining the subtle distinction found in the perceptions and activities by each respondent. The themes that emerged gave an understanding of similarities within and differences between groups. These themes were described in terms of the phenomenon and the agency that these categories had within the phenomenon (Atkins, 2018). Themes found can be seen in the categorization of the findings section and Table 03; these are organized based on four broad categories – activities, benefits, disadvantages, and risks. These themes were centered around m-shopping and consumers' experiences and attitudes towards the shopping channel. Once completed, further coding was completed by an advising researcher to verify themes. Then, a structural description of the phenomenon for each life stage group and each

theme was written to reflect on the direct quotes and examples of the phenomenon. This description detailed what respondents experienced and how the respondents experienced the phenomenon. This description can be found in the Findings section.

## IV. FINDINGS

### *Young Adults - Activities:*

The activities that young adults engaged in while m-shopping included impulse shopping, ad prompted shopping, browsing, in-store shopping aid, information search, need recognition, and multichannel shopping. Many of the respondents said that impulse purchases, or purchases that they did not intend to make, was one of the most frequent m-shopping use cases. When asked to describe her m-shopping experience, Kelly described it as “spur-of-the-moment.” These impulse mobile purchases for young adults could be prompted by in-app ads and word of mouth. Young adults cited their peers who are also m-shoppers that prompted them to impulse shop:

*I remember one time I impulse bought an oil diffuser. I was at my friend's apartment. She had one. It was really cool and I was just looking at options online and it was like you could buy this diffuser and we could bundle these specific oils and it'll be sent to your apartment and it will be there in 3 days. - Molly*

In this quote, we can see that young adults’ social groups influence their purchasing decisions. It also shows that mobile store features such as “people also bought” can persuade a consumer to buy more than they intended to purchase.

Although many of the young adults experienced aversion to downloading shopping specific apps, social media apps, such as Instagram and Facebook, promoted targeted ads that prompted them to m-shop. Even though the shopping apps that the young adults actually had “[made] it very easy to shop online,” young adults noted disadvantages like limited storage, low utility, and unwanted notifications with specific shopping apps. Many young adults, instead, used their mobile browser when performing

m-shopping activities and reserved app downloads to those that they would use frequently.

Browsing, digital window shopping, was another common activity that young adults mentioned performing while m-shopping; many browsed around four times a week with purchase intent. Other young adults describe browsing as a relaxing activity. This type of browsing is executed with no purchase intent but rather for leisure or out of boredom. Once a purchase was made, it was described as a quick process:

*They just already know what they want to buy. Their mind is set. The people who take their time to buy stuff are definitely not going to buy it on their phone - Kelly*  
*...but on my phone it seems like even less steps and within like 30 seconds I spent like \$70. – Molly*

Both of these statements from young adults show that purchasing on their smartphones was quick and intentional after browsing. This highlights a difference between traditional shopping and m-shopping: traditional shopping is usually a planned event and can take quite some time, but m-shopping is a speedier process for young adults. However, browsing does not always end in an immediate purchase.

*I'm going to piggy back like with "the Instagram." I have a lot of collections on what to buy for my pleasure. I guess just for fun or for you know, etc. And although I do not buy it then and there, I do have a list to shop for. - Karen*

Karen here shows the way some young adults browse and find an item that they desire but may not purchase right away, cataloging it for when they are ready for the purchase instead. Other young adults depict recognizing a need, finding a product that fills that need, and adding that product to a collection of needs for later purchase.

*Typically, whenever I see something I need or I'm just out and about and it's very convenient at least bookmark it or just buy right there and then - Cole*

*Just when I noticed that I don't have something that I could use. I'll make a note of it and with my friend real quick and continue on whatever else I was doing -*

*Dexter*

M-shopping is a quick and easy process for this life stage group and so they can quickly take note of a purchase intention and continue with their activity.

Another activity mentioned by the young adults interviewed was quick information search. Although the information search on the mobile device was not as in depth or extensive as on a PC, this life stage group used their smartphones to find information such as product availability, pricing, and product reviews. This information could be in-store or at their homes:

*... when I'm doing actual shopping in the store to get a cheaper price online or availability at other stores. – Elsie*

*I do that at Petco all the time. Apparently, Petco will price match their own website price because their website is always lower than the store. – Mia*

*I will pull out my phone and look if they don't have it in stock. I'll do that before I go ask someone because I feel like that's faster and generally computers have the information instantaneously. – Molly*

When using their phone in-store for information search, young adults have characterized this action as using their smartphones as an in-store shopping aid. Although they have the access to sales associates, they consult their smartphones for information such as price, availability, and variety. Price comparison is completed by young adults on the same

store's mobile app or site to check for price discrepancy online or cross brand price comparison. For availability, some young adults utilized the app's bar scanner to quickly find the product on the app and store policy to get free shipping if it was not available in store. Young adults also use their smartphones to check for a larger variety online for example:

*Being a plus size woman, a lot of the times stores will not have clothes for me, except online, they don't have a 32 pair of jeans, they only have 31's in stores. I'm gonna try on the jeans and be upset at the store and then go online - Jacinta*

*Target is a perfect example. Target has a mobile app and say you're looking for a size that you don't find your size while you're on-the-go, you can always try to find it on the app and they will honor that and they will send it to you – Emma*

Young adults have found that stores' online stock has more variety and a higher chance of availability than in store. These quotes by Jacinta and Emma highlight these discrepancies with a store's online and in-store stock.

Lastly, some young adults described using stores multi-channel options to make online purchases and pick up the purchase from the store rather than shopping at the physical store. Those who engaged in this activity felt that this was convenient for purchasing groceries which they felt was a longer purchasing process. One interviewer said, "I'm a very busy person and priority is not shopping in the store anymore, it's just one of those things I honestly avoided and at this point in my life." Many in this life stage balance work, school, and/or marriages, so it gives them the ability to prioritize tasks. Some also use it as a way to budget or as a tool because of a lack of transportation.



*Yeah because I work a lot and so does he [her partner] and we have school and we have too much going on so we literally don't have time in our time to take an hour of our day to go to the store plus it saves us money I can see exactly how much it is and I can add it on or take it off – Mia*

*I do get groceries on my phone sometimes just because it's more convenient as I don't drive. So it saves me a lot of time from that to find a ride and then just get delivered to me. - Dexter*

For some of our participants, there are items they will not buy online. For example, there are some young adults who said they would perform store pick up but not for groceries specifically. Young adults do not usually mention their peers within the same life stage group who engage in grocery multi-channel shopping.

*I don't really buy um, grocery items online. I know a lot of people do, I do not. - Jacinta*

*I'd rather go to my local HEB to buy there and I'm also a believer that Amazon might drive other retailers to the ground so I do want to support my local business Every once in awhile - Joe*

#### ***Mature Singles - Activities:***

Mature singles mentioned browsing, straight rebuying, multi-channel shopping, occasion specific shopping, assisting, and ad prompted purchasing as m-shopping activities they perform. More than new purchases, mature singles suggested that they browsed more than actually bought items on their mobile devices. One mature single, Lily, said, “up to 3 times a month just purchases. I browse a lot.” This illustrates that purchases for mature singles are often less than they actually browse. When browsing, a

typical behavior was to put the items in their virtual cart or on a wish list with the intent to purchase in the future.

Many purchases made are either in large orders or are straight rebuys. Straight rebuy is defined as repurchasing an item via mobile device that the consumer has previously purchased in-store. New purchases are made with caution; as one mature single said, “But if I feel the need to look up something, I'd do it and then just put it in my cart until the end of the day and then I really decided if I wanted it or not.” The mature singles were more comfortable repurchasing an item that they already owned because they were more familiar with the item. Mature singles also used word of mouth to inform their purchasing decisions. Using their friends’, family’s, or coworkers’ recommendations, the respondents reported feeling more comfortable making a quick purchase from their phone because of the credibility of the person giving the recommendation.

Ads that prompted mature singles to engage in m-shopping were often through opt-in emails. When asked about ads on their smartphones, Lily replied, “Normally I hit it from my email, the link from the email on the website because they were advertising a sale and I shop there so much it sent me it.” Many of the mature singles reported a level of annoyance or irritation with their opt-in ads when they became excessive. Rather than opting out of the emails, they reported creating a separate folder where these types of emails could be redirected. Claire's reason for this was to come to the folder when she felt like shopping. Usually the email ads would have deals or coupons that the customer could use when online shopping. Ads on social media sites like Facebook got little to no engagement from mature singles. If they did interact with the ad, they would do so with a

level of caution because Facebook ads often advertised brands that the respondents were unfamiliar with.

Many of the mature singles used company apps such as H-E-B, Walmart, or Chipotle to make purchases from their phone and pick their order up from the physical store. This allowed them to shorten the shopping process and receive instant gratification by being able to pick it up from the store. There was also a level of trust with this shopping technique because they could easily return the item to the physical store.

Mature singles discussed assisting their parents and other relatives who were not as familiar with m-shopping. They did this by either purchasing the item for the family member or answering any questions they had about the mobile purchasing process. Brandy described doing this for her mom.

*I usually help my mom with purchasing things if she needs help. I'll go ahead and just do for her, um one because I know she gets frustrated and annoyed with the apps. Like "I'm good, it is easier, I will help you out.*

Mature singles who did not m-shop often spoke about using it to shop for gifts for their relatives' and friends' birthdays and during the holiday season.

*I'd say when I do buy it's mainly birthdays and Christmas gifts, um. To buy for myself. I don't do it too often. It just depends maybe there's something interesting.*  
*- Brandy*

This action was performed because mature singles viewed purchasing items online easier to directly ship to the recipient of the gift.

***Adults with Families- Activities:***

Adults with families mention m-shopping activities such as browsing, subscriptions, price match, multi-channel shopping, and ad prompted purchasing. The

adults with families describe mobile browsing for both the intent to purchase and leisure purposes. One respondent said that she was “...browsing for something ... or just for fun sometimes.” This displays respondents in the life stage group get both hedonic and utilitarian values from browsing via mobile device.

Much like other life stage groups, this group engages in price matching, price comparing, and information search activities. These activities are usually performed in the browser and not in an app. Like other life stage groups, having too many apps on their phones appears to be a concern. Those who used brand specific shopping apps, like RetailMeNot or grocery store apps like Walmart and HEB, used them for coupons with to engage in multi-channel shopping. During the focus groups, Nicole described this experience with the [department store] app:

*So I go to my [department store] app and I start putting in my frequent items... then I go and start using the search bar and searching for more things. Ads pop-up, so I'm cataloging that for later to say well maybe I want to check that out or whatever but typically just five, ten minutes shopping experience. I know what I want. I know what's on my list and shopping online on my phone or online helps me to not overspend on groceries because I'm not walking aisle to aisle and so that's why I specifically really like it for groceries because my kids are not involved in it.*

This experience highlights some of the benefits perceived of mobile shopping for groceries and describes a shopping experience that was similar to other families that participate in multichannel shopping. Some respondents make this mobile grocery

shopping a group activity by asking other household members what they would like to add to the order.

Subscriptions, or a standing order from a specific brand or store, was an m-shopping activity mentioned by adults with families. Some subscriptions involved getting the same product at the same time. Other subscriptions involved getting new products and sampling different brands:

*I do have a [Makeup Retailer] ,also [Subscription Service], subscriptions for myself because I do like makeup. I do like makeup but I'm not a makeup expert, and there's so many thousands of brands out there, so the subscription provides me with trial sizes – Emily*

There were some drawbacks of these type of subscription services which made some respondents hesitant to use a delivering service like it again:

*I found myself in crisis mode several times waiting on the schedule between delivery and product that had an ongoing order...I ended up either having way too much dog food at my house or driving into town like late at night for a small bag. – Lawrence*

The recognition of a family member's or the respondent's own need prompted most of their m-shopping activities. If married, the partner who was most comfortable m-shopping would do that activity for the family. Families with children often talk about monitoring their m-shopping purchases and ordering items upon request from their kids. Kim explained that although her children are younger, her kids could easily make purchases if they were not monitored because m-shopping was very easy and her payment method was saved on frequently shopped websites.

Respondents during the focus group described using their mobile devices to shop most when they were at work or during down time because of the ease and privacy. Ads from emails or social media sites were mentioned as something that also prompted m-shopping:

*I will get an email say from like [Sport's Brand] saying "oh, it's Labor Day sale or and you can take 25 percent off." So some kind of prompts, like an email to say "hey there's a sale or there's this deal going on" and that spark the interest. So let's check it out. - Patrick*

The ads would inform the respondents about sales or deals, much like mature singles, which prompted them to browse and/or purchase. Unlike mature singles, adults with families did not mention being overwhelmed by these types of advertisements and often spoke of them as being informative and helpful during the shopping experience.

***Empty Nesters - Activities:***

Although smartphone was not their preferred channel to shop, empty nesters interviewed had engaged in different m-shopping activities including multichannel shopping, ad prompted purchasing, and store specific m-shopping. Most empty nesters mentioned using their smartphone while using another channel such as an e-store or in-store.

*I've used it (smartphone) occasionally what I finally shop... or know what I am looking for that's where I go over to my laptop to buy it because it has a bigger screen - Daniel*

Usually when multichannel shopping, people in this user group would use their smartphones in initial interest for the item and turn to other channels for information search and purchasing the product. Information search during m-shopping was similar in

this life stage group to others in that they searched on the browser and utilized consumer reviews before purchasing. Some respondents found it was beneficial to m-shop for their groceries and pick them up from the physical store. Those who participated in this activity had jobs and found that the time saved doing this was worth the cost. They also found that there were sales and cheaper prices online that were not available in-store. Others said that they do not participate in these types of activities and strictly shop through one channel:

*I am rarely in store but when I am I don't price match. I thought about it. I got one of those apps that allows you to scan the barcode and it tells you all about the product and if there is somewhere else cheaper but I don't really have any use for that but I don't use it as much I probably have used it twice so I need to delete it. I don't like downloading too many apps to my phone that I rarely use because I rarely know where my phone is. I don't know where it is now. – George*

This story from George also typifies the other respondents in his life stage group and other life stage groups who do not value apps that they rarely use. Ads on Facebook or another social media platform prompted respondents in this group to engage in m-shopping. Respondents describe negative feelings towards email ads that they were unaware that they have opted into. Stores that the respondents were familiar with were ones that they were more likely to shop on while on their smartphones. Factors such as trust and familiarity affected the likelihood of the consumers that were interviewed in this user group.

When m-shopping, the respondents were shopping with purchase intentions for a specific item. This product was usually one that they have used and were fond of but

could not get it from local retailers. This type of use case was depicted in Matt's response when asked why he uses his smartphone to shop, and he said "[i]tems I can't find necessarily in stores. Like I actually bought vindaloo very, very spicy Indian food." The specific items could also be items for a family member or friend and were m-shopped via a wish list or registry.

If the respondents had trouble while m-shopping they would solicit the help of their children or co-workers to help with the tasks. Much like other married couples, one partner tends to m-shop more than the other, but they did not seem to monitor each other's purchases.

***Young Adults - Perceived Benefits:***

Benefits such as convenience, purchasing privacy, greater variety, accessibility, and ease of use were mentioned by young adults interviewed as key benefits to using their smartphones to shop. These benefits were mentioned to contribute to an increase in purchasing frequency:

*I did have a peer last semester that she said that she was addicted to shopping on her [phone] and that the phone was an easy contributor because it was so easy to purchase – Derrick*

This statement shows how people within this user group and their peers view m-shopping as an "easy" activity to engage in because of the familiarity with the technology. When asked why she used her smartphone to shop, Elsie replied, "it's convenient I have it with me all the time." This quote highlights the continuous access to the technology because of its portability. Although some young adults preferred other channels to shop, many young adults interviewed mentioned their friends when asked about m-shopping frequency:



*I have friends that I know who will buy things on their phone or almost exclusively buy things online even their groceries – Molly*

And young adults interviewed with lower frequency of m-shopping activities, like once a week, believed that they would not be a good representation of the normal amount in their life stage group.

Respondents felt that with more sensitive items, they had more privacy when shopping via their mobile device rather than in-person, which allowed them to avoid shame or judgement from other shoppers. Respondents found that when comparing a retailer's physical inventory and inventory on its website, there would be greater variety on the site, which prompted them to m-shop the retailer more frequently than in-store shopping. Jacinta details this experience with a clothing retailer:

*Being a plus size woman, a lot of the times stores will not have clothes for me, except online, they don't have a 32 pair of jeans, they only have 31's in stores. I'm gonna try on the jeans and be upset at the store and then go online. - Jacinta*

Other respondents had similar experiences and felt that variety when m-shopping was a benefit of engaging in this activity. Respondents also found that the flexibility of m-shopping was a benefit that was not found in other channels. Respondents recalled the ability to shop in one moment and pause the process to pick it up later was attributed to a convenience factor that was not something that can be executed when shopping in-person or on a laptop. Also, they spoke about being able to engage in multi-channel shopping easily with the use of their phone and the other channels available. An example of this is a story detailed by Romeo:

*Yeah, now I work backwards sometimes. I'll go to the store trying it, feel it and then go back home or just I'll actually walk out the store on my phone after leaving the Levi's store and purchasing walking back to the car. - Romeo*

This story depicts that there is no "right" order of the shopping process when using the mobile device, and this flexibility is a benefit perceived by this life stage group.

For sites that young adults use to frequently shop, apps were seen as better than the browser because they offered different benefits. This view was for the limited shopping apps they had on their phones. Benefits to using a retailer's app included that it was simple to use, faster, more adaptable to the phone, and offered in-app deals. These benefits made owning the app outweigh the mentioned disadvantage of clutter for young married adults. This mainly applied to retailers or services frequently shopped by the user.

***Mature Singles - Perceived Benefits:***

Mature singles first mentioned convenience as the primary benefit to m-shopping. Other benefits mentioned about m-shopping were framed in contrast to traditional or in-store shopping.

*I don't like people so I don't like to go in person. I don't like crowds. I don't like, I don't want anything to do with that. I don't want people asking me can they help me with stuff and leave me alone. - Lily*

*Uh, benefits? I mean, I guess I don't have to deal with unfriendly staff at a store.*

*Um, you know, I know what I'm looking for and if I don't, I can take my time –  
Martin*

These statements show that m-shopping has benefits that outweigh the those that come with in-store shopping for some mature singles. Other benefits include familiarity, more

options, avoiding crowds or unfriendly staff, and price comparing easily. Because many of the mature singles interviewed carried their phone with them most of the day, they have become familiar with the digital layout and navigation of most apps and websites on it. Brandy illustrated this familiarity with the Amazon app:

*So that actual purchase process was easy because Amazon. I am familiar with it. I've used it several times. I have no issue with it so I was comfortable buying it and the whole process was good for me.*

The respondents recalled finding more options on their retailers' mobile websites or app than in store. Lance said, "And they may have more options in store versus online too," showing that overwhelmingly this was the case but only for some retailers.

The benefit of avoiding crowds became more important for the focus group interviewed because it was during the height of the COVID-19 pandemic in the United States. This was a recognized benefit before, but because of the heightened risk perceived by shopping in-store due to the virus, they found that this benefit drew them to m-shop more frequently. Price comparison was performed easily by the respondents because they could just jump from tab to tab instead of visiting different stores. Other benefits included autofill to be able to easily put in all customer information on the phone rather than filling all of the information needed to complete their mobile purchase manually.

***Adult with Families - Perceived Benefits:***

Respondents in this life stage group when asked why they m-shopped described that it was out of convenience or to avoid what they perceive as the in-store shopping experience:

*It also frees up more time to spend with the family instead of juggling kids for one store to the other we could just say this is your outside time going to from the car*  
- Emily

*I married a lady that absolutely hate shops. She cannot stand to be in a store and me neither. I don't like it. This is just like boom, easy right in my hand, right from the house. Plus, I live on six acres in the rural Canyon Lake area, so it's a 45-minute drive to anywhere other than a small store. – Lawrence*

Other benefits included the portability of the smartphone, availability, budgeting purposes, and the simplicity of ordering. One respondent tells a story of how he was introduced to m-shopping while on deployment for the military:

*I got addicted to it on a deployment I was on years ago and that was like how I actually, my first experience mobile shopping was I was in Iraq and my daughter's birthday was coming up and so I had delivered back to the house, like a new pair of pajamas and all the little things that dad usually gets her for her birthday while I was over there. And then I was like, that was so easy. So then like the next week I was like sending flowers to my mom and then that was so it just kept escalating and now I don't like to mess with shopping, I don't want to go in a store, I don't want to. It's not that I'm lazy so my time is worth more. And I'm forgetful. – Lawrence*

This story illustrates some of the key benefits seen by individuals interviewed in this life stage group. With the portability and convenience of their smartphone, respondents discussed benefits like being able to shop anywhere privately. One respondent talked about how she now is able to shop everywhere even when it is not generally socially

acceptable, like at church or at work. Some respondents spoke of how they used m-shopping as a budgeting tool by getting only the items they needed and not overspending. Usually when shopping at the physical store, the respondent or a member of their family may succumb to in-store marketing tactics that prompt impulse shopping. M-shopping with the same retailer can allow the respondent to remain focused on the planned purchase.

***Empty Nesters- Perceived Benefits:***

When asked about the m-shopping benefits, like other life stage groups, empty nesters specified the convenience of using their smartphones to shop and make comparing products easier. Some of the respondents recalled shopping with their partner. One of them is price comparing on their mobile device and while the other shopping in-store. Acting as a team to price match. It seemed that of the respondents interviewed who were in a partnership, one was more prone to m-shopping than the other person. Although it was mentioned that they prefer in-store shopping, empty nesters recognized that the benefits of m-shopping such as convenience will drive people to that option more than other shopping channels. One respondent in the focus group stated, "I see it's going away [in-store shopping] and I'm going to be forced to do this mobile stuff and I'm not happy about it." This attitude, much like the laggards or skeptics, show a reluctant attitude towards but acceptance of the future of retail.

Empty nesters who were in the workforce, however, saw the benefits of m-shopping for straight rebuys, such as their groceries, to save time. This was not a benefit for those who were retired because the benefit of social interaction and browsing to pass time was not available to the same extent through mobile channels. They also found that having more options and ease of search were benefits of m-shopping. Moesha, a

respondent in the focus group, said , "I haven't run to 50 stores and it's right there and compared everything, you know, and look price wise, quality wise, the stars." The "stars" she is referring to is the rating of an item by customers using a five-star system. Many of the empty nesters found that reviews were a benefit on a mobile site in determining quality and purchase intent. Empty nesters found that the mobile device being on a cellular network was a benefit when m-shopping. This was because where there was no Wi-Fi or a weak internet connection; their phone was much faster than their laptops or PCs.

***Young Adults- Perceived Disadvantages:***

There were specific disadvantages to m-shopping that young adults identified to explain why they would prefer engaging in e-shopping and traditional in-store shopping. When discussing their preference of using a PC for shopping Kelly stated,

*I do web browsers I prefer buying stuff on my laptop preferably most of the time.*

*You're able to view the whole website and everything that you need to know.*

This is because, as other young adults interviewed mentioned, their PCs had larger screens and made multitasking easier with multiple tabs available on their browsers. E-shopping was seen as a better option when in the information search and evaluation of alternatives stages of shopping. This is also because of this life stage's attitude towards their laptop verses their mobile devices. Young adults view their laptop or PC as a device for work or more focused tasks. One task that all of the young adults interviewed would rather perform in-store rather than on mobile or internet channels was shopping for clothes.

*Because I can't try it on I mean I have before with shirts but I can't ever get shorts or jeans because I'd rather try it on and see how the material feels and how it fits - Tiffany*

*I like to know what I'm getting ... in person ... I can use my senses - Molly*

Both statements show that the user group feels that you can use more of your senses while in store. This is seen as a drawback with the mobile device because you can only use two senses with it: sight and sound. One-way retailers try to close the gap between virtual and reality by providing reviews and in-depth descriptions of the product which is useful to this life stage group.

Other disadvantages of m-shopping perceived by young adults included additional cost to m-shopping and uncertain shipping times. Shipping cost and mandatory tipping were seen as disadvantages to mobile shopping because these costs are easily avoided when in-store shopping. Dexter detailed this experience with shipping costs:

*Shipping for items is always kind of annoying it's like yeah, it costs this much online and cost the same amount in store, but I don't have a car to get it in store, so I'll just get [it] mail[ed] to me and end up paying you know too much money for something that probably didn't cost that or shouldn't have cost that much.*

These costs would have the respondents typically think more deeply about their purchases to evaluate if the additional costs of m-shopping the particular item were worth it. Additionally, although most retailers gave a time frame for delivery, shipping uncertainty was seen as a disadvantage to using the channel, especially if the item was viewed as something that the person urgently needed.

***Mature Singles - Perceived Disadvantages:***

Many of the perceived disadvantages of m-shopping for the mature singles life stage group were in comparison to traditional, in-store shopping. These advantages of in-store shopping compared to m-shopping were the ability to grocery shop, quality guarantee, and instant gratification.

Although there are stores that offer mobile purchasing of groceries and in-store pickup, mature singles interviewed valued the in-store process of purchasing groceries. Martin explained that he liked shopping for groceries and that it was more active than shopping for them on his phone. This attitude towards grocery shopping shows that there are some hedonic benefits to in-store shopping for this life stage group. For some retail stores, there were more options in-store compared to those available online, so this was perceived as a disadvantage of m-shopping. Another benefit that mature singles specified was the feeling of instant gratification from getting the product right after purchasing it in-store. When m-shopping, people in this user group felt that waiting three to four days did not give them this same gratification. Some opted to multichannel shop by purchasing online and picking up the item from the store to get the benefits of both channels and avoid the perceived disadvantages.

Respondents in this life stage group highlight the attribute of quality guarantee when in-store shopping which was perceived as missing from m-shopping:

*Big ticket items that cost a lot of money, you're getting more of the experience of buying it...You're knowing that someone is backing it up, not, you know, not just a username on the Internet and someone that can ensure it. - Martin*

This statement shows the importance of having someone in-store assuring the quality of a product when someone in this life stage group is evaluating the product. A part of product



evaluation is the use of several senses, including touch, smell, and sight. These senses are either non-existent or hindered when m-shopping. Mature singles recalled not being able to smell a fragrance or touch a garment as disadvantages when m-shopping. Because the screen is small and photos are two dimensional, respondents felt that their use of sight to measure the quality or size of a product was limited when m-shopping.

Other perceived disadvantages included navigation issues, a difficult return process, and receiving the wrong item from a retailer. Monica mentioned her experience with poorly designed apps or mobile websites as a disadvantage to the m-shopping experience because it made website navigation difficult. Respondents emphasized the importance of an easy return process and had the perception of an item being difficult or expensive to return as a disadvantage. Other respondents spoke of receiving the incorrect item either because of a communication issue or false advertising of the product and spoke of these experiences as drawbacks of m-shopping.

***Adults with Families - Perceived Disadvantages:***

Disadvantages of m-shopping that were perceived by this life stage by this life stage user group were also frequently compared to advantages of other channels. Again, preferred activities for in-store shopping included grocery and clothing shopping. When interviewing Emily, she expressed concerns that other parents had about shopping for clothes online:

*Clothes it's a sizing thing because siz[ing] always vary even whenever you go to the store because different brands size things differently especially when you're buying for kids it's just like they grow so fast and you don't know what size they are so I always take them with me to go clothes shopping – Emily*

This comment shows that interviewees in this group find that sizing for themselves and their kids vary from brand to brand. They find it easier to check for differences in-person rather than online. Another interviewee, Patrick, explained the difference between buying a book and buying clothes on his smartphone:

*Because a book I'm not so much concerned with, it's more of I just need to use this book for a particular class. Right. Whereas clothing is something that needs to be you. It's a little bit more personal as far as wanting it to look a certain way or fit a certain way or feel a certain way. – Patrick*

Clothing is seen as something that has to do with self-image for adults with families, so it is important for them to be able to assess the quality and fit themselves rather than vicariously through a description. The importance of making their own assessments in-person also translated to picking out groceries. A majority of the adults with families interviewed mentioned groceries as something that they would not purchase on their smartphones. Although, there were some that saw the benefits of m-shopping these items.

Respondents in this life stage group valued the ability to multitask on their PCs, describing that as they e-shopped, they could also be performing other activities on their PC. Although the size of the PC was a drawback, it was also seen as an advantage over the smartphone when wanting to get in “super organized mode” as one interviewee said. The smaller screen on mobile devices is a disadvantage to respondents.

***Empty Nesters - Perceived Disadvantages:***

The disadvantages perceived by this life stage group were screen size, unfamiliarity, purchasing specific items, and the experience. Interviewees in this user group believed that e-shopping and in-store shopping were easier to do because of their familiarity with those channels. In addition to this, shopping on their PCs had the

advantage of a larger screen for an easier shopping process compared to the mobile device. When comparing it to the mobile channel, Daniel explained “it's your mobile device size it's not the full website size on the home screen,” showing that the smartphone was at a disadvantage for this group when comparing screen size or viewability. When speaking about her peers' hesitation to m-shop Mary says. “I think they'll be more hesitant because they're not as savvy with a smartphone and all the apps and stuff like that.” This shows that both Mary and people in her life stage group felt less familiar or uncomfortable m-shopping because of a lack of knowledge or savviness with their smartphones.

Some respondents were also hesitant to purchase groceries from their smartphones because they want to personally assess the quality of the products that they would be consuming. Daniel summarized this feeling when he said, “Groceries, I would never shop online for because I like going to the store and buy it. I like to look and make sure it's not expired.” This depicts the importance of being able to assess products, specifically groceries, directly and personally for this life stage group. They also mentioned other items that they would be hesitant to m-shop: plants and expensive items like houses, TVs, and cars. Many respondents specifically enjoyed the in-store shopping experience, and the benefits of m-shopping did not outweigh this experience. Tia in the focus groups describes this:

*I love to go through grocery stores because I love to run into all kinds of people I know, study people, all of that. I like studying people and you know, so I really prefer to go to the grocery store because you know, I really love to shop. I even*

*love to shop and not even buy anything. I can just do that like I can go to a thrift store just look.*

This quote shows that the shopping experience for this life stage group is not strictly utilitarian but hedonic in that they get pleasure from all the elements of the in-store experience. The lack of human interaction during the m-shopping or e-shopping experience is a strong disadvantage to this life stage group. The relationship between the customer and sales associate is valued. Appropriate assistance and interactions with the sales associate are seen as benefits to in-store shopping.

***Young Adults - Perceived Risks:***

There are risks to m-shopping that young adults acknowledge, and most of these risks were/are product quality related. Some respondents questioned the quality of an item, if it was accurately advertised, and the authenticity of the item. Because they were not able to evaluate the item with all of their senses, respondents viewed this as a risk when shopping from different retailers. For retailers such as [Major online retailer], which is a hub for different retailers and wholesalers, respondents did not trust all the listings because the website did not regulate the seller's promotional images or customer service. This absence of regulation made [Major online retailer] and others like it perceived by this life stage group as risky. Lastly, when shopping pre-used luxury items, there was a perceived risk of the authenticity of the item and trust in the seller.

When asked if they saw risks when m-shopping, specifically, most respondents said that they did not perceive any risks with shopping on their smartphones. Emma stated that "It's one of those things, because it hasn't happened, I don't have a negative experience then I still want to do it." This quote shows that since people in this user group have not experienced any negative experience m-shopping, they do not associate

risks with m-shopping. One interviewee, however, mentioned the risk of cyber security and privacy and attributed that risk to why they “rarely” purchased on their smartphone but then went on to take back that statement because they did perform m-shopping activities on apps and websites they trusted or were familiar with.

***Mature Singles - Perceived Risks:***

The risks that were associated with m-shopping included package theft and online scams, such as phishing scams. Because most packages ordered from their mobile device are delivered to the doorstep of the purchaser, some of the respondents in this life stage were mindful of the risk of having their package stolen from their doorstep. This risk is not necessarily directly linked to the mobile channel but to the surroundings of the participant instead. Other risks such as scams, specifically phishing scams, were mentioned when asked about risks that they associated with m-shopping. Phishing scams or illegitimate sites are sites that steal information from the shopper using deceptive techniques. Respondents described websites from social media sites, like Facebook, and websites that have no physical address or contact information as riskier than those that they are familiar with. They also perceive higher priced items as a higher risk when ordering from their mobile device, opting to purchase in-person or from their laptop before using their mobile device. Overall, many of the mature singles interviewed automatically feel that m-shopping is perceived as more risky than other channels such as in-store shopping or e-shopping.

***Adults with Families - Perceived Risks:***

Risks that were perceived within this life stage group were identity theft, poor quality, seller credibility, and accidental purchases. Identity theft was seen as the greatest

risk of m-shopping. This life stage group mentioned watching the news and seeing what can happen when m-shopping on unsecure networks.

*The actual purchasing part of it, I just feel more safer... Added security features like I know my laptop comes with its own security program and is constantly updating – Blake*

This statement illustrates the risk associated with m-shopping is one that is resolved with added security programs.

Poor item quality is also a risk that concerns m-shoppers in this life stage group. Respondents made the assumption that mobile stores would have lower prices than brick and mortar stores. The lower prices indicate the possibility of poor quality to these users, which makes them hesitant to follow through with the purchase of a product. This can also be attributed to the seller's credibility. Lawrence expressed this concern when he stated, "I've never met this person that I'm buying from. I don't know, you know, their, their track history." Not having a personal connection to the seller makes participants in this life stage group more hesitant to make m-shopping purchases. This risk is greater when the item is perceived as expensive.

Lastly, because of the ease of purchase of m-shopping, there could be accidental purchases made by the adults or children of the family. Many of the respondents spoke of their kids or teenagers purchasing items either on purpose, without the respondent's permission, or accidentally because they did not know they were shopping. This risk has been addressed by the parents, because parents do not want their children to make purchases without their permission and do not want their kids to purchase particular items.

***Empty Nesters - Perceived Risks:***

The m-shopping risks that were perceived as the most important to this group were identity theft, cookies/activity tracking, profiling, unsolicited emails, and social disconnection. The risk of identity theft, similar to the adults with families life stage group, was only seen when shopping on their mobile devices because they felt that there was a lack of security when using their smartphones.

*I don't do financial transactions on my phone but I do it on my stupid laptop which is the same thing so I'm like why I'm having trouble with that connection I don't know - Naomi*

This quote from one of the interviewees illustrates this perception of the security of their phones versus their PCs. This risk perception could be because of familiarity with one channel versus the other. Many in this life stage group claimed that their low frequency of m-shopping activities was attributed to not being “technologically savvy.” Additionally, the extreme use of cookies and tracking user activity is a risk of m-shopping perceived by the respondents. Respondents have negative feelings towards the use of these tools. A few respondents detail this feeling:

*"I don't really understand but I know it's like sharing my stuff so those are the type of things. I don't like [them]." - Jane*

*"At a coffee shop in Gruene that I never got to okay. I met somebody for coffee over there. I paid for my coffee with my card. Didn't sign anything didn't sign up for anything except that you know, yeah, you know how you do you sign for the purchase I get an email receipt from the coffee shop" - Tia*

*"They are profiling us. All of us are being profiled whether we can just like worry about it or yeah..." - Patricia*

All respondents of the empty nester focus groups and other respondents from interviews seemed very concerned about this and felt that their privacy was being invaded with the use of these marketing tools. Additionally, email marketing from companies that respondents did not opt into was looked at as a breach of privacy as well and was unwanted. Patricia of the focus group said that she spent days deleting 20,000 emails from businesses. Tia warned that "unsubscribing doesn't mean that you have unsubscribed" which describes how the respondent feels that businesses do not stop email marketing once opting out. This life stage group also views the lack of human connection as a risk because they view this as valuable to a person's life. Tia goes on to say "I still prefer the interaction and I feel like with tech we're getting less and less relational and interactive and getting more dependent on our phones." This further shows how important relationships and human interaction are and how worrisome the risk of a growing dependence on technology is to this life stage group. In the end, many stated that if m-shopping were their only channel of shopping, they would use it but prefer the other channels for other reasons, including risks. Some say that they will be forced to use the mobile channel eventually.



## V. DISCUSSION AND IMPLICATIONS

### *Managerial Implications*

Understanding how different life stage groups use mobile technology for shopping and their attitudes about these activities is vital to the success of retailers. Currently, many companies have not made their web interfaces adaptive to mobile phones based on the flawed assumption that consumers use e-channels and m-channels the same way. This study counters this assumption, showing that consumers perform specific activities on their smartphones while reserving other activities for the computer and even for in-store shopping. As such, managers should ensure the m-shopping interface, app, or browser, is user-friendly. An example that many participants offered, regardless of life stage, was Amazon. Amazon's app has desirable characteristics such as easy navigability, relevant content, and competitive pricing, which makes it an attractive interface for use on smartphones for all consumer groups. Amazon meets and exceeds most m-shoppers' expectations which makes them inclined to use this app. A retailers' app and mobile browser should be highly integrated and at least meet the consumer's expectations of the m-shopping experience. These expectations are different depending on the life stage of the consumer.

When designing mobile interfaces, companies should also keep in mind their target markets' needs and wants from the site or app. Specific activities are performed more in one life stage and less in another, and these differences are important when designing m-shopping interfaces. For example, young adults interviewed impulse shopped frequently and completed mobile purchases quickly. These activities can be found in Table 02 in the Appendix. Furthermore, it is important for organizations to

understand which items their consumers are likely to purchase on their smartphones. Participants expressed hesitation toward m-shopping for items such as clothes, groceries, and relatively expensive products. Retailers must consider these hesitations when deciding on design and display elements of m-shopping platforms and how to engage consumers in integrated m-shopping and in-store shopping experiences. Multi-channel shopping allows the consumer to reap benefits from several channels. Encouraging multi-channel shopping when appropriate can positively benefit consumers from all life stage groups. Finally, m-shopping was perceived to have different hedonic and utilitarian advantages, depending on the life stage group to which the participant belonged. For example, some adults with families interviewed made planned purchases with their family when shopping for groceries on their mobile device. This allowed them to meet the needs of every family member while sticking to their budgets. However, advantages mentioned most frequent were convenience, price advantage, ease of purchase, and portability. Familiarity with m-shopping seemed to increase the usage of the channel and decrease risk aversion. Life stage groups who were less comfortable with m-shopping leaned on those in their lives who had a better understanding of the process. Exemplar quotes of these perceptions including advantages and benefits, disadvantages, and risks can be found in Table 03. These advantages should be highlighted to encourage m-shopping activities wherever possible as they increase consumer m-shopping value.

### ***Theoretical Implications***

In the past, m-shopping literature has suggested general ideas about the activities specific groups, young and old shoppers, have participated in while m-shopping and their perceptions and attitudes on (Fuentes & Svingstedt, 2017; Lissitsa & Kol 2019). With

the current qualitative study, the research was able to further the knowledge of m-shopping and fill several gaps in the current literature. Differences and similarities have been found among user groups in a physical shopping setting (Dholakia, 1999). The current research identifies this in the mobile setting. This study depicts the differences in the PC and mobile channels. Between each life stage group, there were clear similarities and distinct differences in the activities they perform while m-shopping. Like Natarajan and colleagues' findings, this research found that when comparing the life stage groups there were differences in how they viewed mobile shopping apps (2018). Younger life stage groups preferred m-shopping via browser while older life stage groups had positive attitudes towards their mobile shopping apps. By concentrating on respondents' perceptions and actions and linking this with their life stage groups, differences and similarities emerged within the life stage groups (Kuppelwieser, 2016).

In the study, there were several perceived benefits and disadvantages to mobile shopping some of which were mentioned in the literature (Duarte et al., 2018). One benefit that was consistent across all life stage groups was convenience; this factor was the greatest perceived benefit to mobile shopping. Similar perceptions, attitudes, and activities were echoed within and between life stage groups. Although many of the activities were similar within different life stage groups, motivations and attitudes towards the activities performed were different. Largely, however, the similarities within the life stage groups remained because the respondents' lifestyles were similar. When discussing the benefits, disadvantages, and risks, many participants framed their attitudes and perceptions with those they have with the in-store and internet channels. This framing allowed this study to further Raphaeli and colleagues' (2017) research on

consumers perceived benefits and disadvantages to mobile shopping compared to e-shopping and traditional shopping by providing qualitative data to provide meaningful insights about consumers' feelings. Additionally, more insight was gathered about multichannel shopping and the use cases for the behavior for each life stage group (Kollmann et al., 2012). This included when they would multichannel shop and how multichannel shopping allowed the respondents to reap the benefits of several channels in one purchase. It is known that there are risks that consumers perceive when m-shopping which affects their m-shopping habits (Marriott et al., 2017). The current research details specific risks associated with m-shopping.

### ***Public Policy Implications***

Considering risks associated with m-shopping, organizations should explore ways to mitigate consumers' concerns of perceived risks - such as information security, privacy, and identity theft - in the purview of retail organizations. Offering security assurance or privacy protection is a path forward to alleviating consumers' concerns. Companies should be aware of their target markets' risk perceptions since these are different across life stages, and perceived risks can prevent consumers from m-shopping if not managed proactively. To mitigate risks and disadvantages while maintaining advantages, there are some public policy implications to this research.

Most life stage groups mentioned their concern or acknowledged the risk of exposing their data, such as financial information, to malicious hackers or websites. For young adults and young marrieds, this risk was acknowledged but was minimal when weighed against the advantages of m-shopping. Other life stage groups already let this concern limit their m-shopping. Empty nesters seemed to be the most concerned about

the risks of m-shopping. As more data breaches occur, anxiety surrounding data and privacy loss will turn into fear and may cause more consumers to limit m-shopping. The implicit of explicit nature of consumers' concerns should not prevent organizations and lawmakers from protecting consumers from these threats . Consumers have a right to privacy and privacy protection. Along with federal, state, and local government agencies, special interest groups, such as the Retail Industry Leaders Association (RILA) and the Global System for Mobile Communications Association, have called for public policy to protect consumer privacy. RILA and other business-centered associations understand the importance of empowering consumers with information that will allow them to be active participants in the digital marketing process.

M-commerce marketing tools such as the utilization of customer locations, cookies, and difficult opt out options concerned consumers, especially in the empty nester life stage group, about the use of their data and the privacy of their connection while m-shopping. Although the sharing and selling of consumer data is a normal practice in the marketing industry, respondents of the study were unaware of this practice; they felt their privacy was being invaded when companies they had not patronized before had their personal information, such as their email and location. Respondents' attitudes about email marketing ranged from occasionally helpful to annoyance to paranoia. Respondents often felt that the use of email marketing was excessive and difficult to opt out of. Making matters worse, many respondents did not recall opting into the email subscription. Additionally, a commonly used data collection tool, cookies, is not fully understood by consumers. Respondents likened the tool to companies spying on them to collect consumer preferences. Policies that encourage companies to be transparent with

their consumers about the use of their data could decrease this concern. Furthermore, allowing the customer to have more control of their privacy by allowing the consumers to clearly opt-in to the use of cookies and marketing deliverables in their email. These types of policies could allow customers to feel that they have protection over their online experiences and control of their personal data.

Beyond the risks consumers specifically mentioned, it is important to note one benefit of m-shopping that raises some concerns. A benefit of m-shopping that has potential negative financial implications for consumers is convenience and the resultant ability to impulse shop. Participants noted impulse shopping is easy because they always have their phones in hand. Ease of use, instant gratification due to shortened wait times for packages, and targeted ads help consumers purchase things they may not need. This is problematic when consumers move to over consuming and overspending. Financial literacy programs are a possible solution to reduce problematic m-shopping (Lam & Lam, 2017). Currently such programs are being implemented into the public education curriculum; programs for adult consumers may be helpful as well. Equipping people with the knowledge and tools they need to be better consumers can have major financial and social advantages.

The current study furthers the knowledge of mobile shopping activities performed by consumers and explores differences and similarities among consumers by segmenting by life stage groups. This research explores the risks, benefits, and disadvantages that the consumer may perceive while m-shopping. Future research may use this study as a starting point to build quantitative studies to further the generalizability of the findings. Additionally, other segmentation techniques can be used to explore other differences and

similarities among groups. For example, people from different income levels, lifestyles, or regions may m-shop differently. The current study had several limitations that could be improved in other iterations of the research. Limitations of this study include the sample size, which, given more time, could be larger to gather more information. The respondents were also from the same area which may have skewed the findings.

## APPENDIX SECTION

### *Interview Script*

#### **Consent and introduction:**

*Investigator will read verbal consent form.*

Do you have any additional questions about the consent form?

Do you agree to the terms of the consent form?

“Thank you for agreeing to speak with me today.”

“This study is being conducted on the behalf of myself, Imani McDonald, to gather users m-shopping behaviors. M-shopping is the activities that you as a shopper would engage in while shopping on your smartphone. The underlying assumption is that these activities can vary per user and it is my goal to understand how you use your phone while m-shopping. We want to hear from you to inform us about what your m-shopping habits are and why you do them. We think that this information will be vital to the knowledge of m-shopping. I would like to remind you that to protect the privacy of interview members, all transcripts will be coded with pseudonyms. This interview will be about 30 minutes long and we will audiotape the discussion to make sure that it is recorded accurately.”

“Do you have any additional questions about the interview to be conducted before we begin?”

#### **Interview:**

Which user group do you believe you belong in?

- *Young Adults: defined as people between the ages of 18-31*
- *Young Married Adults: defined as people married between the ages of 18-31 with no children*
- *Mature Singles: defined as people between the ages of 31-52 with no children and are not married.*
- *Adults with families: defined as people between the ages of 31-52 married or not married with or without children.*
- *Empty Nesters: defined as people between the ages of 31-52 with children who do not live with them anymore or are over 18.*
- *Retired Adults: defined as people older than 52 and are retired.*

Have you used your smartphone to shop?

Walk me through the last thing you purchased on your phone.

Does your environment influence the way you m-shop?

What are some benefits to m-shopping?



Do you prefer m-shopping to other forms of shopping?

What are some disadvantages to m-shopping?

What are some risks you perceive?

Are there any items you would not purchase on your phone? Why?

**Closing:**

Is there anything you would like to add? Or Have we missed anything important during the interview?

Thank you for participating in the interview. If you have any additional questions you can contact me or my supervisor.

***Survey Items***

Question #	Question Type	Question
Q1	Open-ended	When and how do you use your mobile device (phone or tablet) to shop?
Q2	Open-ended	Why do you use your mobile device (phone or tablet) to shop?
Q3	Open-ended	What are the benefits of using your mobile device (phone or tablet) to shop?
Q4	Open-ended	What are the disadvantages of using your mobile device (phone or tablet) to shop?
Q5	Open-ended	What else do we need to know about your experience using your mobile device (phone or tablet) to shop?
Q6	Demographic	Race/Ethnicity
Q7	Demographic	Gender
Q8	Demographic	Age
Q9	Demographic	Marital Status
Q10	Demographic	Do you have children
Q11	Demographic	Income
Q12	Multiple Choice	Please indicate the brand of mobile device (phone or tablet) you use for mobile shopping.
Q13	Multiple Choice	Please indicate the specific device you most often use for mobile shopping.

*Tables*

**Table 01 – Interview/Focus Group Participants**

<b>Life Stage</b>	<b>Pseudonym</b>	<b>Gender</b>	<b>Race/Ethnicity</b>
<b>Young Adults</b>	Molly	Female	Caucasian
	Kelly	Female	Latin American
	Tiffany	Female	Latin American
	Elsie	Female	Asian American
	Joe	Male	Latin American
	Emma	Female	Latin American
	Olivia	Female	Latin American
	Derrick	Male	Latin American
	Mia	Female	White American
	Jessie	Male	White American
	Karen	Female	Hispanic
	Cole	Male	White American
	Jacinta	Female	Latin American
	Dexter	Male	Latin American
	John	Male	African American
<b>Mature Single</b>	Lily	Female	White American
	Martin	Male	White American
	Chad	Male	White American
	Brandy	Female	Asian American
	Lance	Male	African American
	Monica	Female	White American
<b>Adults with Family</b>	Emily	Female	Asian American
	Brenda	Female	Latin American
	Lawrence	Male	White American
	Patrick	Male	White American
	Blake	Male	Latin American
	Lisa	Female	African American
	Kim	Female	White American
	Nicole	Female	African American
<b>Empty nesters</b>	Amelia	Female	White American
	Naomi	Female	White American
	Mary	Female	White American
	Daniel	Male	White American
	Issa	Female	White American
	George	Male	White American
	Matt	Male	White American
	Jane	Female	White American
	Patricia	Female	White American
	Moesha	Female	White American
	Tia	Female	White American

**Table 02 – M-Shopping Activities by Life Stage**

Life Stage	Activities
<b>Young Adults</b>	Impulse Purchasing
	Price Matching - in-store and online
	Browsing
	Check Availability - in-store and online
	Purchase for Store Pickup
	Information Search
	Ad-Prompted – Social Media
<b>Mature Singles</b>	Browsing
	Straight Re-Buy
	Ad Prompted - Opt-in Email
	Purchase for Store Pickup
	Occasion Prompted
	M-Shopping Assistance
<b>Adults with Family</b>	Browsing
	Subscription Services
	Ad Prompted – Email & Social Media
	Price Matching - Browser Search
	Straight Re-Buy
	M-Shopping Assistance
	Mobile Coupon Clipping
<b>Empty nesters</b>	Browsing
	Price Comparison
	Access to Unavailable Items
	w/other Channels - computer, in-store
	Ad Prompted – Email & Social Media

**Table 03 – Exemplar Quotes by Life Stage**

<b>Lifestyle Group</b>	<b>Perceived Benefits</b>	<b>Perceived Disadvantage</b>	<b>Perceived Risks</b>
<b>Young Adults</b>	it's convenient I have it with me all the time	I do web browsers I prefer buying stuff on my laptop most of the time. You're able to view the whole website and everything that you need to know.	... because it hasn't happened, I don't have a negative experience
	[Online retailer] is something easier than me searching through stores	Because I can't try it on I mean I have before with shirts but I can't ever get shorts or jeans because I'd rather try it on and see how the material feels and how it fits	I don't associate a lot of risk as long as I do it at the house
	I did have a [friend] last semester that she said that she was addicted to shopping on her and that the phone ... because it was so easy to purchase	Shipping for items is always kind of annoying it's like yeah, it costs this much online and cost the same amount in store, but I don't have a car to get it in store, so...	
<b>Mature Singles</b>	I don't like people so I don't like to go in person. I don't like crowds. I don't like, I don't want anything to do that. I don't want people asking me can, they help me with stuff and leave me alone	Big ticket items that cost a lot of money, you're getting more of the experience of buying it... knowing that someone is backing it up, not, you know, not just a username on the Internet	... damaged product... it's an inconvenience to return things usually
	I don't have to deal with unfriendly staff at a store. Um, you know, I know what I'm looking for and if I don't, I can take my time	I like going shopping at the grocery store.	The legitimacy of the sites
	So that actual purchase process was easy because [online retailer]. I am familiar with it. I've used it several times.	So using my phone to do these things navigation, you know, I might hit the wrong thing or move away from the screen just kind of get lost and get kind of frustrated.	I will on certain websites that I don't feel. That aren't hundred percent safe. I'll use a different credit card.
<b>Adults with Family</b>	It also frees up more time to spend with the family instead of juggling kids for one store to the other we could just say this is your outside time going to from the car	Clothes, it's a sizing thing because size always vary even when you go to the store, especially when you're buying for kids it's just like they grow so fast and you	The actual purchasing part of it, I just feel safer. Added security features like I know my laptop comes with its own

		don't know what size they are so I always take them with me to go clothes shopping	security program and is constantly updating
	[My wife] cannot stand to be in a store and me neither. I don't like it. This is just like boom, easy right in my hand, right from the house. Plus I live on six acres [in a rural area] so it's a 45 minute drive to anywhere other than a small store.	Because a book I'm not so much concerned with, it's more of I just need to use this book for a particular class. Right. Whereas clothing is something that needs to be you. It's a little bit more personal...	I've never met this person that I'm buying from. I don't know their track record
	I know what's on my list and shopping online on my phone or online helps me to not overspend on groceries	Groceries, I would never shop online because I like going to the store to buy it	I think [older people] are more hesitant because they're not as savvy with a smartphone and apps and stuff like that
<b>Empty Nesters</b>	Well if it's something I can't get or not having to search for things, you know, if I know what I want it and they have it and I can also price compare without having to hit all the stores	I do because sometimes my phone doesn't have all the options I have on my laptop and so then I'm like going am I missing an option here	that items will not be as advertised or will be damaged in transit and I suppose there is a small risk of losing some of your information to scammers.
	Convenience. I think it's just very convenient. I love that. I wouldn't want to go back 20 or 30 years ago, you know, because of that.	Familiarity I have been using [my computer] for a couple of decades and it is easy to see... I don't have to use a magnifying glass like on my cellphone	chance of people stealing your identity
	It's convenient, easy to comparison shop, look for reviews and do it all at one place.	Yeah screen size, font size, you know, I've been using a computer for like 15 years, and I have been buying on my cell phone for 3 years so usually when I want to buy something get on my computer	I mean, early on and you know, everybody was like, oh my God people will steal your identity but they steal it whether you are online or not.

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