

# The Influence of Visual Social Media, Online Customer Reviews, and Personal Communication on Young Adults' Purchase Intention: A Mixed Methods View into Consumer Socialization

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## Abstract

Due to an increase in visually-oriented online social media websites and other user-generated content, such as online customer reviews, young adults are learning and using consumer-related knowledge differently than in the past. Traditionally, individuals emulated their consumption style after behaviors modeled by family, peers, and traditional forms of mass media. Since the popularity of visual social media and online customer reviews have gained a stronghold on young adults, it was hypothesized that individuals gain consumer knowledge of products through visual social media and other user-generated customer reviews. Explanatory sequential mixed methods were used to investigate which resources young adult consumers consult when searching for product information. Survey results indicate that young adults rely on visual social media and online customer reviews for information about products. Family members and peers were consulted for products as well, with findings from individual interviews indicating that mothers were the most influential resource.

**Keywords:** Consumer socialization; Online customer reviews; Visual social networking websites

## 1. Introduction

"Pins" and posts on visual online social networking websites (VSNS) have achieved heightened popularity in recent years (Duggan et al., 2015). Pinterest, Instagram, Wanelo, and Snapchat provide a means to upload or disseminate pictures in the form of user-generated visual content. Pew Research Center (2013) found that 47% of adult Internet users have reposted photos of products. User-generated posts of visual content on VSNS has also escalated due to an increase in the acceptance of smartphones and corresponding apps. As such technologies become an integral part of young adult consumers' lives, socialization inevitably changes (De Gregorio & Sung, 2012).

Since the use of VSNS is a relatively new phenomenon, very little is known about the effects of user-generated visual content on consumer socialization. Consumer socialization, which is how people learn consumption behaviors, impact how information about products is sought (Mochis & Churchill, 1978). Thus, the present study seeks to investigate the influence of VSNS, particularly through visuals of products, on the socialization of young adult consumers. The four VSNS, Pinterest, Instagram, Wanelo, and Snapchat, were considered appropriate for this study based on the popularity, social interaction, visual foundation, and retail implications for each VSNS. The increase in VSNS usage is hypothesized to have revolutionized how young adults share information and how they are socialized to become consumers in today's marketplace.

Extant literature indicates that consumers are influenced by mass media, familial communication and peer communication (Moschis & Churchill, 1978). In recent years, the effect of the Internet has become even more pronounced. Sridhar and Srinivasan (2012) found that user-generated customer reviews on the Internet are considered to be trustworthy sources of product information (Sridhar & Srinivasan, 2012). Communication with one's peers and family members also serve as an influence, as human interactions and acceptance are actively sought (DeWall & Bushman, 2011).

To investigate the influence of VSNS, online customer reviews, and personal communication, an explanatory sequential mixed methods design was employed to gain a complete understanding of this emerging phenomenon. The explanatory sequential design used the results from quantitative data to guide the collection of qualitative data. Thus, the qualitative phase delved deeper into the results found in the quantitative phase. The purpose of this study is to identify and explore the influences of VSNS, online customer reviews, as well as personal, face-to-face communications, on attitude and purchase intention of a product based upon Moschis and Churchill's (1978) Consumer Socialization Theory.

## 2.Literature Review

### 2.1.Consumer Socialization Theory

This study is guided by the Consumer Socialization Theory (CST) (Moschis & Churchill, 1978), which outlines “the process by which young people develop consumer-related skills, knowledge, and attitudes” (Moschis & Churchill, 1978, p.599). The three main components of the CST include antecedents, socialization agents, and behavioral outcomes. Antecedent variables encompass personal and environmental attributes, such as age, education level, gender, ethnicity, and family structure (Bush et al., 1999; Moschis & Churchill, 1978). Antecedent variables can affect how a consumer interacts with socialization agents and outcome behaviors, while socialization agents influence a person to develop similar norms, attitudes, and behaviors through socialization processes (Moschis & Churchill, 1978). Socialization agents “can be a person or organization that has frequent contact with the learner, primacy over the individual, and control over rewards or punishments given to the learner” (Moschis & Churchill, 1978, p.600). Thus, socialization agents are viewed as the primary influential force on the behaviors of a person (Bush et al., 1999). Antecedents and socialization agents also influence the outcomes within the CST (Bush et al., 1999, De Gregorio & Sung, 2012, Moschis & Churchill, 1978). A study conducted by Wang, Yu, and Wei (2012) used the CST to determine peer communication on SNS, indicating the theory’s applicability toward user-generated content in an online context. Thus, this study investigates personal communication and the addition of VSNS and online customer reviews to the CST.

### 2.2. Socialization Agent: Visual Social Networking Sites (VSNS)

Females use social networking websites more often than males (Drozdenko et al., 2012; Feng & Xie, 2014; Pew Research Center, 2017) and have been found to create and post more content (Ottoni et al., 2013), including personal information (Rahman, 2014). Females have also been found to maintain relationships through the dissemination of photos on VSNS and share such photos more frequently than males (Hunt & Langstedt, 2014).

People between the ages of 18-29 use social networking websites more than any other age group (Penni, 2017; Pew Research Center, 2017; Rahman, 2014) and spend an average of one-to-four hours per day on these sites (Gilstrap & Holderby, 2016). Interactive and collaborative features draw in this demographic and spur the habitual use of social networking websites (Khang et al., 2014, Penni, 2017). Social media also assists consumers in gaining information about products, as well as establishes an ease of interaction with brands (Davis et al., 2014).

Pinterest, Instagram, Wanelo and Snapchat utilize the power of visuals to disseminate many types of information, including information about products. All VSNS explored in this study host millions of active users throughout the world. Of the four VSNS investigated in this study, Instagram caters to the largest number of people with over 600 million users (Statista, 2017), while Wanelo has the smallest number of people with 11 million users (Strugatz, 2014). Consumers use VSNS for information, communication, and entertainment (Mull & Lee, 2014) and retailers use these visual sites to trigger emotions, establish brand identity, demonstrate product value (Savenijie, 2013), and create a higher purchase intention. For example, a recent study found that image-oriented advertisements on Instagram, instead of pure product-focused pictures, generated a higher purchase intention (Kim et al., 2017). Based on the information gleaned from current literature, the following hypothesis was created:

Hypothesis 1. VSNS will have an impact on young adults’ attitudes and purchase intentions toward gaining product information.

H1a. VSNS usage has a greater impact on females than males for product information searches.

H1b. VSNS usage has a greater impact on younger participants than older participants for product information searches.

VSNS are social arenas in which to share information with peers. Peers, however, may also interact in other contexts, including direct and face-to-face interactions.

### 2.3. Socialization Agent: Peers

Peers are more influential when young consumers can purchase products without guidance from parents (Shim et al., 2011), as peers influence product attitudes and purchase intention (Wang et al., 2012). A greater influence is also apparent when the product is considered to be essential for acceptance into a specific peer group (Wang et al., 2012), which typically includes apparel and accessories (Huang et al., 2012; Moschis & Moore, 1979). Young adults also spend more money when shopping with the desired peer group (Huang et al., 2012) and peers influence the way young consumers evaluate a product and its characteristics (Mangleberg et al., 2004). For purchases made on social shopping websites, peer expertise is positively associated with perceived utilitarian and social value (Hu et al., 2016). While peers communicate in both real-world and social media settings, it has been found that peers on social media facilitate consumption behaviors (Khajeheian, 2016). Thus, the following hypothesis was developed:

Hypothesis 2. Peer communication will have an impact on young adults’ attitude and purchase intention toward

gaining product information.

H2a. Peer communication has a greater impact on females than males for product information searches.

H2b. Peer communication has a greater impact on younger participants than older participants for product information searches.

While the literature suggests real-world and social media communication with peers impact purchases (Khajeheian, 2016), seeking online customer reviews could provide more product information from people experienced with a product.

#### *2.4. Socialization Agent: Online Customer Reviews*

Young adults rapidly adopt ever-changing Internet technologies faster than any other age group (Shim et al., 2011). Retailers also gain a greater profit when people can search the Internet for additional product information (Drozdenko et al., 2012). Such product information can come from online customer reviews, which are user-generated comments about a product. An online customer review can help people make a decision based on various review characteristics, such as review depth, extremity, and product category (Mudambi & Schuff, 2010). Overall, consumers use online product reviews to gain information about products before purchase (Huang et al., 2015).

Consumers are heavily influenced by online customer reviews of products, as purchases increase 270% when reviews are available (Askalidis & Malthouse, 2016). Due to a perceived lack of control by the retailer, reviews are also deemed trustworthy (Sridhar & Srinivasan, 2012). Through positive product evaluations, high-quality reviews lead to higher purchase intentions (Lee & Shin, 2014). Based on the literature, the following hypothesis was developed:

Hypothesis 3. Online customer reviews will have an impact on young adults' attitude and purchase intention toward gaining product information.

H3a. Online customer reviews have a greater impact on females than males for product information searches.

H3b. Online customer reviews have a greater impact on younger participants than older participants for product information searches.

Product information found online equips people with the knowledge to select products (Tokunaga & Gustafson, 2014). However, family members model consumption behaviors, which includes gaining information and learning about consumption opportunities (Shim et al., 2011).

#### *2.5. Socialization Agent: Family*

People tend to be fully-functional consumers by the age of 13 (Benn, 2004), but the development of consumer skills is a lifelong process modeled by parents (Ahmad et al., 2011). When included in consumption decisions for the family, young consumers become more accepting of consumption decisions and learn more from the opportunity (Shim et al., 2011). The influence of family members on consumer-related preferences is greater for young emerging adults (Thorson & Horstman, 2016). Advice is actively sought from a parent when price, social acceptance, and product performance is important (Moschis & Moore, 1979). Therefore, the following hypothesis was developed for this study:

Hypothesis 4. Familial communication will have an impact on young adults' attitude and purchase behavior toward gaining product information.

H4a. Familial communication has a greater impact on females than males for product information searches.

H4b. Familial communication has a greater impact on younger participants than older participants for product information searches.

According to the CST, socialization agents, such as VSNS, peers, online customer reviews, and family, will influence outcomes, such as attitude and purchase intention (Moschis & Churchill, 1978).

#### *2.6. Outcome: Attitude and Purchase Intention*

Consumers who do not have experience with a product will have a less stable attitude toward the product (Mourali & Yang, 2013), and will require more reasoning to reach a purchase decision (Erasmus et al., 2014). When consumers are highly involved in finding product information, a higher intention to purchase that product will result (Kim et al., 2009; Singh & Nayak, 2014). During a product information search, word-of-mouth provides trust and confidence to a consumer (Choi et al., 2009), which can be generated by social networking websites and direct communication (Bae & Lee, 2011, See-to & Ho, 2014). Also, family members' and friends' product recommendations influence consumers' purchase intention (Hsiao et al., 2010). Overall, attitudes are formed through social interactions and influence the intention to purchase a product (Bian & Forsythe, 2012).

To analyze the relationships among all antecedents, socialization agents, and outcomes, an explanatory sequential mixed methods design was employed to gain an in-depth understanding of the population's

experience with each socialization agent.

### 3. Methodology

A mixed methods approach was used to gain 1) insights on the impact that VSNS, online customer reviews, and personal interactions have upon consumer socialization, and 2) a deeper understanding of how and why consumers use VSNS, online customer reviews and personal interaction. It is essential to gain in-depth knowledge of the influence of VSNS, online customer reviews, and personal interactions among family members and peers, as young adult consumers are using such resources to gain product information. As mixed methods research lends itself to triangulation, the respective benefits of quantitative and qualitative approaches will lead to a complete understanding of the phenomenon (Creswell & Plano Clark, 2010; Hesse-Biber, 2010).

Since this study used an explanatory sequential mixed methods design, the results from the quantitative phase were used to guide the collection of qualitative data. In this study, significant results determined the age range of the qualitative sample, as well as the interview questions on significant socialization agents. Thus, integration of the quantitative and qualitative phases occurred between the first, quantitative phase and the second, qualitative phase. The collection and analysis of qualitative data provided a complete picture of how and why different media and personal interactions are used beyond the quantitative data on which media and personal interactions are used.

### 4. Study Phases, Results, and Findings

#### 4.1. Phase 1: *Quantitative Survey Methods and Results*

After the IRB approved this study, a random sample of 236 undergraduate students participated in the quantitative phase. All students attended a large Midwestern university, were between the ages of 19-24, and were actively enrolled in at least one course with an undergraduate status. The university's records and registration officials provided 1,800 randomly-selected student email addresses to the researchers. Other student information was not disclosed. The personal email addresses were used to recruit participants, and the email provided a link to the standardized online survey through Qualtrics. Online consent forms were supplied to all participants, and all responses were anonymous. Since all undergraduate students had an equal chance of being selected for the study, coverage error was minimal.

An initial response rate of 13.1% was obtained, resulting in a sample of 236 participants. The median age of the sample was 20, with a range from 19 to 51 years of age. Seven outliers were eliminated from the dataset, as the focus of this study were young adults between the ages of 19-24 that have used VSNS. All responses that were not complete were also excluded, resulting in a total of 159 analyzed responses. To test the hypotheses investigating age, the differences between older and younger adults were determined by dividing participants based on the median age of the sample.

Young adults were the target population for this study, as they are 1) making an increased number of new consumption decisions and 2) are the heaviest users of VSNS (Pew Research Center, 2017). In this study, a majority of participants were female (47.5%), while males (29.7%) and participants who would rather not specify (0.8%) represented the rest of the sample. Participants also tended to have a class status of either sophomore (22.9%) or senior (20.3%) status, which represented the highest response rates. When thinking about purchase behavior, 55.1% of participants felt that they had money to spend on desirable products, while 53% of the participants were currently employed.

##### 4.1.1. *Survey Measures*

To begin the survey, participants were presented with a screening question about their active, personal accounts on VSNS, in which all participants used at least one VSNS. Frequencies of interactions between peoples' socialization agents were adapted from Mangleburg et al.'s (1997) study on the socialization of purchasing branded products. Participants in the current study were questioned as to how often they communicate or use certain socialization agents by indicating that they use it "Every day," "5-6 times per week," "3-4 times per week," "1-2 times per week," and "I did not use." An example of a question is "During the past week, how often did you talk to your friends about a product?" A coefficient alpha of  $0.68 \leq \alpha \leq 0.8$  was achieved across past uses of these measurements (Mangleburg et al., 1997, Moschis & Mitchell, 1986).

Survey measures for attitude and purchase intention, socialization agents, and antecedents were adapted from Lueg, Ponder, Beatty, and Capella's (2006) study. These measures were selected based on past validity and reliability, as well as the appropriateness of fit between variables in the current study and prior research studies. Each measure used a Likert-type, five-point scale between "Strongly Agree" to "Strongly Disagree." An example of these measures include "I spend a lot of time talking with my family about purchasing a product" and "I intend to ask my friends for advice about products in the future." Across past research studies, a coefficient alpha of  $0.88 \leq \alpha \leq 0.96$  was recorded for these measures investigating consumer socialization (Bush et al., 1999, Belch et al., 2005, Lueg et al., 2006, Mangleburg et al., 1997, Mochis & Moore, 1979).

The VSNS scale consisted of eight items ( $\alpha = .926$ ), the peer communication scale consisted of six items



( $\alpha=.863$ ), the online customer review scale consisted of six items ( $\alpha=.903$ ), and the familial communication scale consisted of seven items ( $\alpha=.792$ ). These measures exceeded the minimum acceptable level of internal consistency and all scales representing socialization agents (familial communication, peer communication, VSNS usage, and online customer reviews) were found to be very good predictors of attitude and purchase intention.

#### 4.1.2. Results

As extant literature indicates, there is a need to determine which socialization agents are influential on the socialization of young adult consumers (Thorson & Horstman, 2016). Age and gender were found to have significance when predicting the influence of VSNS and familial communication's influence on attitude and purchase intention. All hypotheses were tested through a series of multiple regression models to investigate the relationships between all socialization agents. A 95% confidence level was used. The modified CST model indicating significant hypotheses is available in Figure 1.

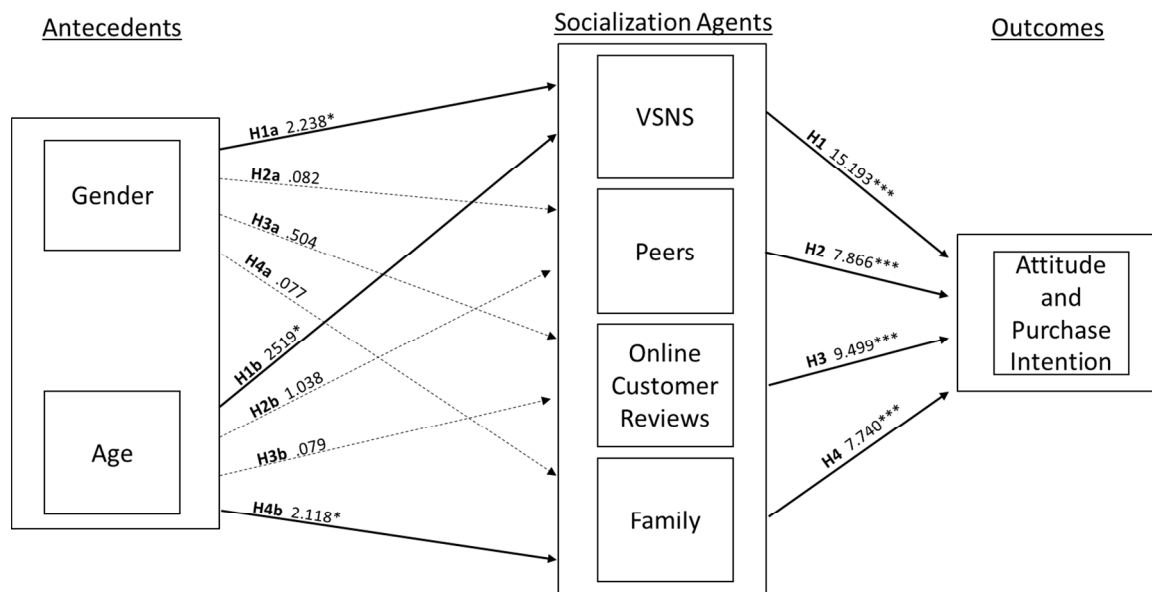


Figure 1. Modified CST Model

Note. \* $p<.05$ , \*\*\* $p<.0001$

A variance of 64.9% was predicted for attitude and purchase intent on the influence of VSNS ( $R^2=.649$ ,  $F(7, 152) = 40.107$ ,  $p<.05$ ). In this study, VSNS was found to influence attitude and purchase intention ( $\beta=.754$ ,  $p<.001$ ). Age was also of significance ( $\beta=.142$ ,  $p<.05$ ), indicating that younger participants tend to have a more positive attitude and purchase intention while using VSNS. Females ( $\beta=.111$ ,  $p<.05$ ) were also found to have a more positive attitude and purchase intention toward VSNS. Thus, Hypotheses H1, H1a, and H1b were supported.

A variance of 35.6% was found to predict peer communication's influence on attitude and purchase intention ( $R^2=.356$ ,  $F(7, 152) = 11.922$ ,  $p<.001$ ). Peer communication was found to have a significant relationship with attitude and purchase intention ( $\beta=.550$ ,  $p<.05$ ). Resulting from these hypotheses, a more positive attitude and purchase intention is developed when young adults communicate about product information with peers. Therefore, Hypothesis H2 was supported.

A 41.2% variance was predicted for the impact of online customer reviews on attitude and purchase intention ( $R^2=.412$ ,  $F(7, 152) = 15.185$ ,  $p<.001$ ). Results indicate that online customer reviews are significant in developing both attitude and purchase intention ( $\beta=.630$ ,  $p<.001$ ). Therefore, a more positive attitude and purchase intention are developed when adult consumers spend more time reading online customer reviews for product information. Hypothesis H3 was supported.

A variance of 32.8% was accounted for familial communication's influence on attitude and purchase intention ( $R^2=.328$ ,  $F(7, 152) = 10.583$ ,  $p<.001$ ). A person's attitude and purchase intention were found to be influenced by familial communication ( $\beta=.540$ ,  $p<.001$ ). Thus, the more a person talks with family members about a product, the more positive attitude and higher purchase intention that person will have toward that product. Age was also found to be a significant influence on levels of familial communication ( $\beta=.177$ ,  $p<.05$ ). The younger half of the sample specified that familial communication is sought for product information more than for the older half of the sample. Thus, Hypotheses H4 and H4b were supported.

All socialization agents were found to influence the attitude and purchase intention of young adults. To further explore and understand why and how this population uses these resources, a qualitative phase was

essential.

#### 4.2. Phase 2: Qualitative Methods and Findings

The qualitative phase of this study provided in-depth information about the process people encounter when seeking product information. The foundations of a grounded theory approach were modified to further explore the sequential progression of how and why consumers are socialized to obtain certain attitudes and purchase intentions. Results from the quantitative phase guided the development of the interview questions and the sample selection for the qualitative phase of the study. The information gleaned from the qualitative phase was also used to further expand upon the CST.

Based on the quantitative results, people under the age of 20 used the socialization agents more readily, but further insight is needed as to how and why this age range utilize these socialization agents. Individual, in-person interviews were conducted with 11 people who had also participated in the first, quantitative phase of the study. Three participants were male and eight were female, all of whom were either 19 or 20 years of age and represented various majors across the university. These participants were contacted via the email that they voluntarily provided at the end of the quantitative survey. Before the interview commenced, participants were briefed on the interview process and received a \$10 gift certificate to Amazon.com in compensation for their time.

Interviews consisted of 14 open-ended questions with additional probes when necessary. Examples of interview questions included "Please describe a situation when your family members encouraged you to purchase a product" and "Do you think it is important to gain information from visual social media before making certain purchases? Why and in what ways?" Participants' interviews lasted an average of 43 minutes and were digitally recorded after the participant signed the informed consent form. Interviews continued until a point of saturation occurred and were later transcribed. Transcripts were validated through member checking with all participants. For this study, the use of qualitative memoing, coding, and the constant comparative method ensured an inclusive perspective.

Transcribed interview data was organized and analyzed using MaxQDA software. An exploratory analysis was conducted, and items were initially coded. Three rounds of coding, open, focused, and themed coding based on Charmaz's (2014) method, were used to sort and code information to further understand participants' viewpoints. Open coding yielded 41 codes, while focused coding consolidated 41 codes into 11 codes based on similarities. Focused coding further reviewed each of the 11 codes and consolidated main findings into a total of four themes. Within each round of coding, coded items were reviewed and themes were selected which addressed the main research question.

##### 4.2.1. Findings

The themes identified in this study reflect the process by which young adults form an attitude and purchase intention toward products. Four themes best revealed the influences that participants in the study identified.

*Mom knows best for most things.* Participants identified the mother as the most influential member of the family. The mother was the most emotionally involved and financially responsible and was described as knowing whether an item is wanted or needed. Participants also stated that they were comfortable with discussing the purchasing of products with their mothers, which guided their decisions.

*"Even after all of that research and everything, if my mom says "I really don't think you need that" or "You probably shouldn't purchase that," then usually I don't. She is usually the deciding factor in it, just because I value her opinion the most."* -Female Participant, Age 20

Mothers were found to be the most influential immediate family member for each participant in this study. In addition, most participants considered family to be the most important influence on the products that he or she purchased.

*Peers' opinions are not always taken.* Family members were believed to be more conscientious of the participant's finances than peers. Dishonest comments from peers were also a concern for many participants, particularly if the item was apparel.

*"I trust less my friends, because they can sometimes be jealous of something...I believe my mom's opinion more than them."* -Female Participant, Age 19

When product information and advice was sought from peers, face-to-face interactions were more influential. Shopping was considered by participants to be a social activity, as peers served as a forum to discuss products and helped to confirm participants' existing attitudes toward products. While discussing the importance of peers' advice on products, one participant expressed the confidence received by getting peer feedback on product purchases. However, when discussing products with peers, one participant directly stated that he decides to go against the social group's norm.

*VSNS are glorified ads, but provide product ideas.* Participants were unanimous when stating that they did not use social media to find specific product information. However, many participants declared that they did find ideas for what they would like to purchase on VSNS. The most widely used VSNS for product search included

Pinterest and Instagram. Highly popular products shown on VSNS created more interest and intention to purchase. To search for certain products, one participant discussed how it is more convenient to use VSNS to find items.

*“Yeah, I definitely think it's a good resource. It is sometimes faster than just general searching...Like, if you go to Pinterest and you search in that kind of language, then you're going to get more of what you're looking for.”* -Female Participant, Age 19

Participants identified that VSNS was still an important resource, but was utilized in a different way than other socialization agents. VSNS was primarily used for enjoyment, but products of interest tended to catch the participants' attention.

*Customer reviews are important, but proceed with caution.* All participants in the qualitative phase discussed their reliance on online customer reviews for product information. Participants gained product information by reading these reviews and ranking systems, such as the number of stars a product received. Most participants stated that they found these reviews either on the retailer's website or on Amazon.com. Some participants spoke about how a consensus among online reviews was sought before accessing other readily-available resources. Product reviews were considered valuable information, as others had made an investment of time and money on the product, which led to a higher level of knowledge of the product.

*“I think it's because other people have already experienced it and I guess I am kind of taking a leap of faith in trusting their judgment, but I figure if enough people had a bad time with a particular product then I shouldn't waste my time.”* -Male Participant, Age 20

Although customer reviews were considered essential when purchasing expensive items, many participants mentioned that some information available online could not be trusted. Untrustworthy information includes 1) inaccurate product information, usually disseminated by the retailer, and/or 2) people paid by the retailer to post positive product reviews. Overall, the amount of information available online encourages participants to consult online customer reviews instead of using other forms of digital information.

From the results of the quantitative phase, undergraduate students use all four socialization agents, which include family, peers, VSNS, and online customer reviews. Participants in the qualitative phase elaborated on the use of each socialization agent. Most participants also stated that they chose to be highly informed when making purchase decisions.

## 5. Discussion

The use of the CST allowed for the integration of new technologies within a traditional framework of face-to-face or mass media interactions. By investigating the inclusion of new technological advances to the CST, such as VSNS and online customer reviews, an updated theoretical framework was created and initially tested. To further test this theory, this study utilized a sample of young adults, many of whom indicated their routine use of visual technology advances. This study yielded significant results indicating that all four socialization agents--VSNS, peers, online customer reviews, and family members--provide product information allowing for positive attitudes and purchase intentions to be formed. However, findings from participant interviews developed further knowledge, as family members, in particular mothers, serve as the main socialization agent for young adults.

Over the course of three decades, many researchers have identified family members as a socialization agent (Mitchell et al., 2015, Moschis & Churchill, 1978). This study also identified family as a significant influence on consumer socialization, as family members take a leadership role among young, emerging consumers (Mitchell et al., 2015). Family members, particularly mothers (Minahan & Huddleston, 2013), also serve as a model demonstrating how tasks and consumption goals are accomplished (Barreto et al., 2014). Similar to this study, Minahan and Huddleston (2013) found that mothers provided trustworthy advice on purchases and were also more aware of the wants and needs of their child. Overall, mothers have been found to be highly influential on consumption experiences over the course of a child's life (Minahan & Huddleston, 2013).

VSNS are primarily used to entertain and to socialize. Overall, 69% of all adults in the United States access online social networks (Pew Research Center, 2017), which are used to connect and communicate with others (Rao & Shalini, 2013). Pate and Adams (2014) found that information posted about products on social media led to a higher purchase intention of those products within a young adult age group, which was also found in this study. The ease of communication between young adults, which is enabled by VSNS, has altered the manner in which people share information. People now have more flexibility and control over information that is sought and received (Gangadharbatla et al., 2014). As this study suggests, people now have means to communicate and gain knowledge through VSNS, which has affected the CST.

Online customer reviews are important when gaining information about products, but the review must be relevant and of quality for a person to perceive efficiency from the information. If a person identifies that information is reliable, the person will use the Internet more to find information (Tokunaga & Gustafson, 2014). Consistent with this study, Pate and Adams (2013) found that information is sought online before products are purchased, whether the product is purchased online or in a brick and mortar store. More time is also saved when

information is highly accessible (Anderson et al., 2014). Recommendations shown as percentages have been found to influence purchase intention (Book et al., 2018). People who are exposed to a limited number of negative reviews tend to have a higher price satisfaction and purchase intention, but purchase intention lowers when exposed to a greater number of negative reviews when there is a purchase goal in mind (Weisstein et al., 2017).

Participants in this study had a positive attitude toward gaining information from online customer reviews, and also held a positive attitude toward shopping online for products. In contrast, qualitative findings suggest that people may be wary of customer reviews, especially if there is an indication that a free product was gained by posting the review. There is evidence, however, that incentivized reviews lead to a higher number of sales (Petrescu et al., 2018).

In this study, peers were also found to influence attitude and purchase intention. Unsurprisingly, technology usage is observed and adopted through watching peers utilize such technologies (Eastman et al., 2014) and could indicate that people use both peer and VSNS socialization agents simultaneously. A person's choice of social networks is also influenced by peers as one's peer group tends to pressure and recommend certain social networks (Wu et al., 2014). Lewallan (2016) proposed that visual images on VSNS can spur feelings of competition among peers. Also, once all members of a peer group are observed using and owning the same product, the product no longer designates status among that peer group (Eastman et al., 2014), indicating that future technological socialization agents may continue to evolve.

## 6.Theoretical Contribution

Both phases of the study demonstrated that the CST must be expanded to include VSNS and online customer reviews, as well as personal communication for young adults. Based on data from the qualitative phase, participants provided in-depth information as to how each socialization agent is used when discussing products. Qualitative findings suggest that VSNS and peers help to provide the idea of a new product, while family and online customer reviews help to provide information and advice. Participants actively sought multiple socialization agents for ideas, information, and advice on products. High-risk products, which are usually higher in price, initiate an extensive use of most or all socialization agents investigated in this study. Interestingly, however, participants did not discuss the need to consult VSNS after discussing products with peers. Figure 2 provides a diagram of how participants in the qualitative phase described the use of all four socialization agents when considering the attitude and purchase intention of products.

Participants looked to all socialization agents for information, dependent upon previous experience with the product. Thus, the CST should be updated to include new technologies, such as VSNS and online customer reviews, while maintaining the inclusion of peers and family members.

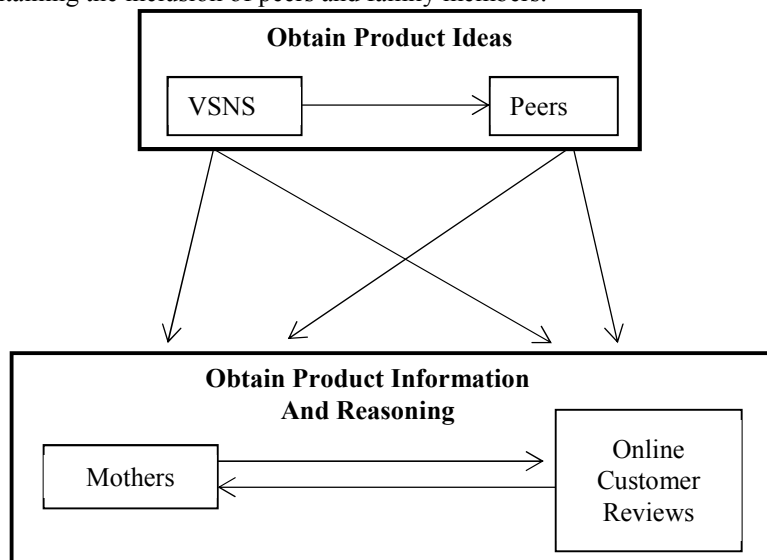


Figure 2. Communication among socialization agents

## 7.Limitations, Implications, and Future Directions

The main limitation of this study involves the low response rate during the quantitative phase. Although the initial response rate was adequate, when partial responses were removed from the dataset, the studied sample decreased. The sample was also not as diverse as desired, as females responded at a higher rate than males. Thus, a call for future research is needed to further test the CST in response to new technological advancements yielding a more diverse population. Future iterations of this research should aim for an equal gender ratio and a



more ethnically diverse sample. It would also be beneficial to utilize the expanded CST to study young adults from across the United States and the world. Comparisons across geographic locations would provide a unique perspective on the socialization of young adult consumers.

Results and findings from this study indicate that young adult consumers seek many sources of information before forming an attitude and purchase intention for a product. These sources include mothers, neutral online customer reviews, and Pinterest and Instagram. Therefore, retailers and marketers must consider unique marketing mix strategies to create interaction among multiple socialization agents to form positive attitude and purchase intentions. In addition, entrepreneurs and social networking executives could leverage this research to gain insight into how information is gleaned from socialization agents.

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