YOUR FRIENDS LIKE OUR BRAND: SOCIAL IMPACT, CAPITAL, AND CONNECTIONS IN SOCIAL MEDIA ADVERTISING

by

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DISSERTATION ABSTRACT

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Social media networks such as Facebook enable advertisers to embed social connection information within advertisements. The purpose of this study was to better understand how social cues in social media advertising contribute to consumers' brand attitudes and purchase intentions. Two theoretical constructs guided the study: social impact theory and social capital theory. Social impact theory suggests that the number, relational strength, and immediacy of individuals exerting social influence determine its effectiveness. Social capital theory posits that our social networks are a product of the relational capital we have invested in them, with two forms of social capital: bonding and bridging. Bonding is associated with our intimate, "strong ties," and bridging is associated with our larger circle of acquaintances, or "weak ties." Using an experiment ($N = 211$), it was determined that while social context cues included in social media advertisements did influence brand attitudes, the strength and intensity of cues did not have an effect. Furthermore, bridging, strong-tie social capital positively moderated the relation between advertisement attitude and social media sharing of the advertisement as well as the relation between brand attitude and purchase intentions.

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CHAPTER I

INTRODUCTION

By 2017 it is expected that advertising revenue through digital channels will exceed advertising revenue generated by television ("Digital ad spending to surpass TV next year," 2016); digital advertising is expected to represent 38.4% of total ad revenue, while television revenue is expected to represent 35.8% of revenue. By 2020, it is expected that for the first time in the U.S., television revenue will constitute less than a third of all advertising revenue. Key to the rise of digital advertising is the emergence of social media advertising. It is estimated that social media generated over 32 billion dollars in 2016, up from 17.85 billion in 2014 ("Social network ad revenues accelerate worldwide," 2015). Furthermore, the social network Facebook is estimated to have taken 64.8% of that revenue in 2015. In 2016, Facebook generated $26.88 billion in advertising revenue, which represents a 57% increase in total annual revenue (Chandrasekhar, 2017). Facebook's display advertising revenue is expected to increase by 32.1% in 2017. Both Facebook and Google are expected to combine to generate over $106 billion in advertising revenue in 2017, which will equate to approximately 46.4% of all digital advertising revenue in 2017 (Handley, 2017).

Founded as a college-exclusive social network in 2004, Facebook initially offered advertising in the form of $10 to $40 "flyers" that campus groups or local businesses could use to advertise events and deals to their campus community (Toner, 2013). While certain corporations such as Apple, Victoria's Secret, and Microsoft had marketing and advertising deals with Facebook, it was not until the end of 2007 that Facebook introduced their own advertising platform that was widely and freely accessible to

businesses and organizations across the United States. In November of 2007, Facebook rolled out their advertising platform along with their new "Pages" feature. Pages allowed businesses and organizations to create an online profile much like the profiles used by individuals, with the promise of fueling online engagement and the viral spread of brand content. Facebook's hope was that participating brands would also utilize Facebook's advertising features (Toner, 2013). In 2009, Facebook made significant improvements to their advertisement targeting, allowing marketers to target Facebook users by location and social connections, in addition to allowing marketers to target audiences based on demographic and interest information shared through individual profiles (Kessler, 2011).

The promise of Facebook's network for advertisers and marketers is its ability to provide rich data about brand customers as well as general insights about consumers. In addition, it gives brands a direct channel of communication with customers who are able to share brand content with their own social network, creating the potential for the viral spread of content. While traditional media, such as television, magazines, and newspapers, are limited in their ability to accurately define and segment their audience, depending largely on probability methods and general purchase data, Facebook can provide detailed information about its followers within the network, including supporters' demographic data, interests, and social activity. In addition, Facebook users are able to create content in support of brand messaging to share with their larger network. Facebook users can click a "like" button that indicates their support of a Facebook message to their network. They can also click a button to "share" the brand message with their network, and they can interact with the content directly through comments. Facebook's advertising

innovations have capitalized on the potential afforded by the data provided by its users as well as their robust network of social connections.

However, helping brands create direct, consumer-to-consumer social sharing has not been the only focus of Facebook's advertising channel. In fact, Facebook has also been interested in allowing brands to harvest consumer social activity itself, specifically information about users who have "liked" or followed their brand, and use it to exert social influence as a part of its brand advertisements. For instance, along with its Pages feature, Facebook rolled out its "Beacons" feature in 2007. Beacons allowed brands to post updates to users' Facebook profile when users interacted with their brand website or applications. The purpose of this feature was to allow brands to leverage the power of social influence by generating word-of-mouth on behalf of consumers based on their online behavior rather than a specific message created by the consumers, themselves. However, this feature was discontinued in 2009 after a class action lawsuit was filed by privacy advocates (Kessler, 2011).

After the end of Beacons, Facebook altered its course and rolled out its "Sponsored Stories" feature in 2011. While Beacons allowed brands to post to users' Facebook profiles when the user interacted with the brand's external website or application, Sponsored Stories allowed brands to turn a social action that took place within Facebook's network into an advertisement shared with a user's network of Facebook connection, known as Facebook "friends." For instance, if a user "liked" a brand page or status update, or posted a message on the brand's Facebook newsfeed, the brand could then post that action as an advertisement to be seen by the user's Facebook friends. As with Beacons, Sponsored Stories faced a similar legal challenge in 2013, and

it was discontinued by Facebook in early 2014 (Hendricks, 2014). However, while Facebook no longer allowed brands to create stories based on user actions, it continued to allow brands to include social context along with their advertisements. Facebook defines social context as "stories about social actions your friends have taken, such as liking a page or checking in to a restaurant" ("An update to Facebook ads," 2014).

For example, a brand such as Nike has decided to advertise a new line of running shoes. Using Facebook's system, they target their ad to a particular age and gender demographic, and they narrow their search to those who have expressed an interest in outdoor activities and recreational running. They design an advertisement set to display their new shoes on select users' Facebook walls. In addition to the visual advertisement, a button encouraging users to "like" the advertisement or get more information via an external link is included. Finally, along the top of the advertisement is specific information about which other Facebook users in the targeted user's network have a relation to Nike via a "like." This is the social context element, and it is personalized for each user. As a part of the advertisement, users are shown information, specific to them, about who in their Facebook network likes the brand.

Facebook's commitment to social context in advertising demonstrates its regard for mediated social influence as a driver of advertising engagement. Facebook's own research suggests that increasing the number of social cues as well as the relational strength of those cues leads to more advertising clicks and increased engagement with brands through "likes" (Bakshy, Eckles, Yan, & Rosenn, 2012). However, there is a dearth of research examining the specific forces that create social influence through social context cues in social media advertising and how it relates to the perceived

relationships that constitute the interpersonal component of social media networks. In addition, while Facebook's field research suggests social cues impact Facebook specific behaviors, such as clicks, it does not address how social influence manifested in social media advertising impacts brand attitudes and brand behaviors, specifically purchase intentions. It also fails to address how the strength of social networks, and the perceived relationships that constitute the networks, impact social sharing and brand attitudes associated with social advertisements. As such, more research is needed to better understand how social impact is created through social context cues, and how the perceived make-up of an individual's social network determines the individual's attitude towards advertised brands and subsequent purchase intentions. As part of the promise of Facebook for brands lies in its ability to facilitate the viral spread of brand messages, it is also worth understanding how advertising attitudes and social forces determine the sharing of brand messages.

One type of advertisement that has received particular attention for its ability to generate positive consumer outcomes, as well as a high volume of social media sharing activity, is the online viral video (e.g. Huang, Su, Zhou, & Liu, 2013). Unlike traditional mass media video advertising, viral video content "is delivered in an interactive, Web-based environment characterized by viewer pull and control rather than sponsor push" (Huang et al., 2013, p. 36). According to the Web Video Marketing Council (2015), 73% of businesses utilizing online video report video has positively impacted marketing results, and 80% are using online video to increase brand awareness and engagement. In regard to Facebook video, between April and November of 2015, the average daily views of video doubled from 4 billion to 8 billion (Mawhinney, 2016).

The purpose of this dissertation is to better understand how social context cues in Facebook advertisements – specifically viral video advertisements – influence brand attitudes, social sharing, and purchase intentions. Two theoretical constructs that have been utilized to better understand social processes are social impact theory (Latané, 1981) and the concept of social capital (Bourdieu & Wacquant, 1992; Putnam, 2000). Utilizing an experimental approach, this study seeks to understand how social cues in Facebook advertisements exert normative social impact on brand attitudes and purchase intentions. In addition, the impact of online social capital on brand attitudes and social sharing intentions will be explored. This study will attempt to illuminate the relations between specific forces of social impact and how they influence brand attitudes and behaviors. In addition, this study will help clarify the role perceived social capital invested in Facebook's network plays in determining brand attitudes and behaviors, including social sharing. For marketers and social media designers, it is of interest to understand not only how social context cues influence consumer attitudes and behaviors, but also how the make-up of their networks moderates these relations. This will help advertisers develop more accurate, effective methods of social advertising using social context cues, for the benefit of both advertisers and the consumers whose time and energy is invested in social networks. Theoretically, this study will contribute to the body of literature devoted to social influence manifested in social media networks. Specifically, this study will help clarify how social capital is created and utilized in social media, and it will add to the growing body of literature directed at understanding how social influence guides behaviors in an online context.

CHAPTER II

REVIEW OF LITERATURE

The following review of literature will conceptualize social influence, normative influence, and norms of reciprocity based on social psychology, sociological, marketing, and economic literature, which will lead to a discussion of social impact theory, including social impact in online contexts. Next, social capital theory will be introduced and discussed, including an examination of social capital created and maintained in mediated contexts. Following the discussion of social capital, research related to advertising acceptance and brand attitudes will be explored, with implications for social cues and social norms discussed. Finally, based on the literature, specific hypotheses and research questions will be proposed.

Social Influence, Social Norms, and Reciprocity

To understand how social cues in advertisements could contribute to consumer attitudes and behaviors, it is important to define social influence first. Social influence is "the effect that words, actions, or mere presence of other people have on our thoughts, feelings, attitudes, or behavior" (Aronson, Wilson, Akert, & Sommers, 2015, p. 3)**.** Social influence manifests itself in the forms of compliance and conformity (Cialdini & Goldstein, 2004). Compliance is "a particular kind of response—acquiescence—to a particular kind of communication—a request" (Cialdini & Goldstein, 2004, p. 592). With compliance, the target of the compliance request is aware that they are being urged to respond in a particular manner. Conformity is "the act of changing one's behavior to match the responses of others" (Cialdini & Goldstein, 2004, p. 606). Both compliance and conformity are motivated by three goals: the goal of accuracy, the goal of affiliation,

and the goal of maintaining a positive self-concept. Individuals seek to be accurate in their actions, attaining goals in the most efficient and effective manor possible. Individuals also seek affiliation by forming and maintaining relationships with others. Finally, individuals seek to maintain a positive self-concept of themselves and their behaviors.

A key social force that drives compliance and conformity by helping individuals meet these goals is social normative influence (Cialdini & Trost, 1998). Social norms are the "rules and standards that are understood by members of a group, and that guide and/or constrain social behavior without the force of laws" (Cialdini & Trost, 1998, p. 152). Normative social influence established within a group can be a powerful predictor of behavior. New ideas and innovations are introduced to social groups only when a bounded group within a larger group is able to accept and confirm the innovation, which can then slowly spread to the larger group, suggesting the adoption of new ideas is still susceptible to the influence of normative influence (Kincaid, 2004).

The complexity of an individual's social identity may affect the normative influence of brand decisions, as less socially complex individuals are more susceptible to social influence in regards to brand decisions (Orth & Kahle, 2008). Normative influence exerted within an individual's economic or cultural group is also a predictor of consumer animosity directed at products produced by a country or region that is perceived to be in opposition to the consumer's in-group (Y. Huang, Phau, & Lin, 2010). With respect to advertising, research has specifically examined testimonials included as a part of advertisements (Martin, Wentzel, & Tomczak, 2008). High social normative influence consumers place a greater emphasis on the testimonials included in the advertisement

versus the source of the testimonial (either a typical person or a celebrity.) In addition to consumer decisions, research suggests that social normative influence in online networks can exert significant persuasive pressure (Waardenburg, Winkel, & Lamers, 2012; Weiksner, Fogg, & Liu, 2008).

One key social norm that has been identified as fundamental to the success and continued existence of social groups is the norm of reciprocity (Gouldner, 1960). According to Gouldner, the norm of reciprocity creates stable societies in that individuals who perform some action do so with the expectation that the there will be some sort of reciprocal action or payment performed in return. Even if there is no physical reciprocity, such as the case when there is a power imbalance, a sense of virtue, or direct coercion, the idea that the individual receives something in return still leads to some level of stability, depending on how the reciprocal action or value is perceived. The norm of reciprocity is universal, and it dictates that "1) people should help those who have helped them, and 2) people should not injure those who have helped them" (p. 171). The norm of reciprocity has been applied in research examining government welfare (Kumlin & Rothstein, 2005), income inequality and mortality (Kawachi, Kennedy, Lochner, & Prothrow-Stith, 1997), the relationships between politicians and citizens in crafting voter compliance (Lawson & Greene, 2014), as well as the role of caregivers in family units (George, 1986). Research suggests that norms of reciprocity not only dictate interactions between individuals, but they can dictate indirect effects, affecting individuals' willingness to help others based on their perception of how the others have themselves contributed help in social situations (Seinen & Schram, 2006). As such, the norm of

reciprocity is key to establishing other social norms within social groups, both large and small.

Norms of reciprocity are key not only to establishing relationships, but building strong communities in online networks (Mathwick, 2002). Those most engaged in online networks report experiencing the highest extrinsic rewards, including increased relational connection and perceived value, as well as the highest intrinsic rewards, including enhanced escapism and entertainment, for their participation. Furthermore, increased reciprocity in online communities leads to an increased desire to engage in online civic interactions and discussions, serving as a lubricant to offline democracy (Kobayashi, Ikeda, & Miyata, 2006). In respect to online consumer activity, norms of reciprocity make key contributions to the use of virtual consumer communities, enhancing community participants' loyalty to the community and desire to co-shop with other community members (Chan & Li, 2010). As Gouldner (1960) has argued, norms of reciprocity are key to the development and maintenance of communities and cultures, and this holds true for online communities, as well.

Social Impact Theory

Latané (1981) proposed social impact theory to describe a mechanism for how normative social influence predicts behaviors and beliefs. Latané defines social impact as "any of the great variety of changes in physiological states and subjective feelings, motives and emotions, cognitions and beliefs, values and behavior, that occur in an individual, human or animal, as a result of the real, implied, or imagined presence or actions of other individuals" (p. 343). While Latané's definition is admittedly broad, he suggests there are three fundamental social forces that exert social influence on an

individual in much the same way that physical forces such as gravity exert physical pressure on the individual. The three social forces are strength, immediacy, and number, and the social impact experienced by an individual is a product of these three forces.

The strength of social impact is best described as the importance of the social group to the individual being influenced. The social strength of an influencer will be determined by their "status, age, socio-economic status, and prior relationship with, or future power over, the target" (p. 344). The immediacy of social impact is determined by how close the social influence is to the individual in time and space; the closer the influencer is to the person being influenced in physical proximity, and the more urgent the influence, the more impact will be experienced by the person being influenced. The number simply refers to how many people are in the group, with greater numbers exerting greater impact, though this force begins to level as numbers grow higher. In essence, a large group of individuals important to the target in close proximity to the target exert a high level of social impact.

Social impact theory has been used to understand a variety of social behaviors, including social loafing, defined as the tendency for individuals to expend less effort when working in a group versus working on their own (Karau & Williams, 1993); stage fright (Jackson & Latané, 1981); mere social presence (Argo, Dahl, & Manchanda, 2012; Kinard, Capella, & Kinard, 2009); contagion (Ni, Weng, & Zhang, 2011); and persuasive communication (Wolf & Latané, 1983). In regards to persuasive communication, Nowak, Szamrej, & Latané (1990) argue that social forces as defined by social impact theory work as peripheral persuasive cues in congruence with Cacioppo & Petty's (1982) elaboration likelihood model of persuasion. Cacioppo and Petty argue that when

arguments are important to an individual, they will give the arguments close scrutiny, examining the arguments' quality and relevance. Cacioppo and Petty label this process of applying close attention and scrutiny as *central* processing. However, when the individual's involvement with the arguments is low, they will look at external factors, such as the attractiveness of the presentation or speaker expertise. Cacioppo and Petty label this peripheral processing. Nowak et al. argue social impact theory provides another set of peripheral cues congruent with Cacioppo and Petty's model:

> With regard to peripheral persuasion, at least, the application of social impact theory is relatively straightforward. To the extent that individuals are relatively uninvolved in an issue, they should be influenced by the strength, immediacy, and number of people advocating a contrary position. In this case, strength can be represented by sources' credibility and attractiveness, immediacy by their physical closeness, and number by how many there are. (p. 364)

While individual, micro-level patterns of influence in both benign social situations and in the context of persuasive communication can be understood via social impact theory's conceptualization of social forces, these micro-level patterns of influence can lead to larger, macro-level effects such as the polarization of public opinion and the definition of minority viewpoints (Nowak et al., 1990). In fact, social impact helps explain how the dynamic patterns of interconnectedness and social grouping present in modern society allow for "consolidation (the tendency for diversity within the group to be reduced as the proportion of people who hold the minority position decreases); clustering (the propensity for group members to end up more similar to their neighbors than to those at a greater distance); and continuing diversity, as minorities manage to

survive, rather than being eliminated" (Latané & L'Herrou, 1996, p. 1219). Thus, societal level effects are derived from micro-level social impact working in small nodes of individuals in the larger societal network.

Immediacy is an important determinant of social impact, especially for micro-level social impact (that is, impact exerted in individual groups). According to Latané's (1981) original conception of social impact, immediacy is conceptualized not only as the proximity of influence in time, but also the proximity of influence in space. Research suggests that immediacy, as defined by physical space, is an important predictor of social impact, with greater physical distance leading to decreasing impact. In fact, despite the ability of modern communication technologies to increase social connection over great distance – such as through telephones and internet-based communication – face-to-face contact is still an important predictor of social impact (Latané, Liu, Nowak, Bonevento, & Zheng, 1995), Latané et al.'s (1995) assessment was predicated on the idea that face-to-face contact is needed to initiate and maintain relationships. Twenty years later, with the ubiquity of online social networks and a robust and internationally connected Internet, the implications of physical distance may be of less importance than the impact of network distance. Network distance refers to how individuals are geometrically clustered in their social networks, with more connections between individuals allowing faster and easier flows of information which represents a closer network distance (Latané & L'Herrou, 1996).

Specifically examining email communication, in which physical and temporal proximity were absent, Latané and L'Herrou (1996) found that distance, as described by network distance, was still an important predictor of social impact. In this particular case,

distance was formed via clusters of a predetermined – yet invisible to study participants – social network in which participants were only aware of the responses of those tied to them in the electronic network. In this manner, Latané and Herrou were able to manipulate both strength and immediacy via network structures.

Social Impact in Online Networks. Recent research has sought to identify the presence of social impact forces within online networks, where relational strength is mediated and immediacy may be poorly represented by temporal and/or physical proximity. Despite being incongruent with a traditional understanding of social impact forces, these investigations of social impact focused on computer-mediated networks have suggested social impact plays a role in online personal influence.

Miller and Brunner (2008) explored social impact in course-based educational networks marked by high social interaction and low personal disclosure. In networks with low personal disclosure, participants are not required to include personal identifying information, such as their actual names or identifying profile images, allowing for an increased level of anonymity. In particular, these networks allowed for anonymous and asynchronous interactions. As such, strength and immediacy had to be defined in a different manner than studies examining interpersonal social impact dependent on face-to-face interactions where anonymity is not possible. The strength of social impact was best predicted by users' assertiveness in their interactions and users' exaggeration of their credentials. Immediacy was represented by how frequently and deeply they engaged in the network. Miller and Brunner found that consistent with social impact theory, strength and immediacy both predicted social impact. However, inconsistent with social impact

theory, participant number was not a consideration due to the fixed nature of the networks.

As with Miller and Brunner (2008), Ng (2013) did not consider number in their study of social impact in an online setting. Ng specifically considered the role social impact plays in purchase intentions motivated by social media recommendations on Facebook. Immediacy was conceptualized as the intimacy and closeness (used interchangeably) of consumers' social connections, and strength was conceptualized as consumers' familiarity and feelings of understanding. The rationale for not including the number of social influencers as a key driver of social impact was that their study only considered one source of information at a time. Both immediacy and strength contributed to consumers' intentions to purchase products recommended by their social community on Facebook.

While Miller and Brunner (2008) and Ng (2013) were not concerned with the number of social connections as a driver of social impact in online networks, Mir and Zaheer (2012) looked specifically at the number of social influencers in their study of social media social impact. They found that a larger number of users presenting user generated content about a product on Facebook contributed to the perceived credibility of the user generated content. Simply put, the greater the number of users who contribute to user generated reviews of products on social media, the more those reviews were perceived as credible by other users. This increase in credibility led to more favorable brand attitudes and increased purchase intentions. In this case, number was the key driver of social impact, with strength and immediacy not considered.

It is clear from previous research utilizing social impact concepts in an online environment (e.g. Miller & Brunner, 2008; Mir & Zaheer, 2012; Ng, 2013) that social impact can be conceptualized in a variety ways, and social impact is not necessarily dependent on all three key forces as described by Latané (1981). Research suggests that social impact exists in online environments even when the specific forces are difficult to identify (Naylor, Lamberton, & West, 2012). This is true for brands' use of mere virtual presence (MVP), which is the inclusion of social media supporter information on branded websites and promotions. Naylor et al. found that including supporters who were either similar or heterogeneous to their target audience was as effective as not including supporters, but including dissimilar supporters had a negative effect. As such, it is not advisable to include social supporter information in situations when the brand is considered on its own; however, when individuals consider the brand along with other brands, it is best to include similar supporter information versus remaining ambiguous. While online MVP defies the conventional logic of social impact theory, in that the use of supporters who merely were similar to the persuasive target is not analogous to a traditional theoretical understanding of social strength, immediacy is difficult to conceptualize in an online environment where individuals are always available and always close, and number is irrelevant, social impact still appears to be at work. This finding is consistent with other research that suggests social media messages and relationships exert social impact and establish social norms, though the exact social impact model may not be identified specifically (Utz & Kramer, 2004).

While Naylor et al.'s (2012) investigation determined that social impact could exist despite an apparent lacking of Latané's (1981) social forces, the network structure of

social media allows for social influence to be studied based on the strength of a user's ties to their social connections. The idea that our network ties have different strengths was introduced by Granovetter (1973). Granovetter argued that our ties to others in a network can be strong, weak, or absent. Strong ties are a product of increased intimacy and trust, and typically, individuals share a tight network of strong ties, as people are more likely to be tied to others who share their strong connections. Weak ties join these tight clusters of strongly tied individuals to other clusters, and they are marked by connections where there is less intimacy. Granovetter suggests it is these weak tie connections that facilitate the movement of new information, as they allow the flow of ideas from one strong-tie micro-network to another. This conceptualization of network tie strength is relevant to studying social impact, as models of social influence are improved by examining the strength of connectivity of individuals' social networks (Mason, Conrey, & Smith, 2007). Such studies of online social media provide a network structure of differing numbers of interconnected individuals.

Waardenburg et al. (2012) examined different levels of both strength and number using social cues based on Facebook tie strength. A sample of Facebook users reviewed a series of photographs in a Facebook application. Social cues were used to encourage participants to continue with the experiment after a set period of participation. The study varied both strength of participant's network tie, manipulated by indicating how many of their Facebook friends took action versus how many of other participants in the study took action, and the number of influencers, manipulated by indicating either a low or high percent of each strength category who took action. While Waardenburg et al.'s findings suggested an overall main effect of social influence exerting pressure on behavior, they

did not find simple effects of number and strength on behavior. While greater numbers of influencers and network strength impacted behavior – in this case, respondents were influenced to continue participating in the study beyond the initial request – the differences were not statistically significant. However, this could be due to relatively small sample sizes in their factorial cells, which led to an underpowered experiment. Despite lacking individual effects, social impact seemed to be exerted using mediated social cues. An experiment with a larger sample might yield significant findings.

Facebook itself has conducted its own research concerned with social cues in its advertisements (Bakshy et al., 2012). Using a field experiment, Facebook varied the amount of an individual's Facebook friends who like a brand as a part of a sponsored story advertisement. They found that when more than one friend connection was displayed and when the strength of the friend's tie to the user was strong (conceptualized by how many times the individual communicated with their friend in recent months), users were more likely to click on the advertisement or engage with the brand through likes. Bakshy et al.'s study provides evidence of social influence enacted through their advertising system.

While the exact forces of social impact have been conceptualized using different methods, with not all factors consistently examined, research consistently suggests that social impact can be exerted in social networks (e.g. Miller & Brunner, 2008; Mir & Zaheer, 2012; Naylor et al., 2012; Waardenburg et al., 2012). Furthermore, a key component of understanding social impact in social media environments is the concept of network ties (Granovetter, 1973). It is through this conception of network ties that a

connection between social impact can be made to another theoretical concept related to social networks: social capital.

Social Capital

Bourdieu and Wacquant (1992) define social capital as "the sum of resources, actual or virtual, that accrue to an individual or a group by virtue of possessing a durable network of more or less institutionalized relationships of mutual acquaintance and recognition" (p. 14). Bourdieu suggests that social capital is not unlike physical capital in its usefulness and power for individuals. Like physical capital and human capital, social capital can provide energy to human interaction. However, social capital is distinct from human and physical capital in that it is less tangible than either. As Coleman (1988) argues, while physical capital is completely tangible in the form of tools, materials, and measurable resources, and human capital is less tangible in the form of measurable skills and abilities, social capital is the least tangible as it exists in the form of relationships between people within groups and networks.

Lin (1999) defines social capital as an "investment in social relations with expected returns" (Lin, 1999, p. 30). Beyond a purely exchange-based definition, social capital has also been described as a person's network of trustworthy relationships marked by norms of reciprocity (Putnam, 2000). Social capital can provide both a private and public good, as it can benefit individuals in direct relationships privately, as well as benefit the larger community which receives the positive effects of goodwill, even if they do not directly contribute. A key component of social capital is the trust individuals have in their network. Economists have identified trust – in individuals and groups – as a common predictor and identifier of social capital (Anderson, Mellor, & Milyo, 2004;

Karlan, 2005). In addition, processes that create social capital among isolated, indigenous individuals can lead to a greater level of normative social influence, empowering these individuals and leading to higher levels of economic position and status (Sanyal, 2009). Coleman (1988) defines three different types of social capital: social capital as trustworthiness in the social structure, social capital as an information channel, and social capital as a set of normative expectations.

Unlike physical capital, social capital cannot be transferred from one entity to another, and it is difficult to measure how it appreciates as compared to physical capital; however, like physical capital, increased social capital does appear to positively influence economic and personal outcomes in the same way increased physical capital benefits individuals and organizations (Sobel, 2002). Recent conceptualizations of social capital have focused on the necessary conditions for its formation as well as its specific benefits. Social capital depends on opportunity, in terms of the existence of social ties an individual can use to build social capital; motivation, as in an individual's desire to create social capital; and ability, specifically the ability of the network to provide social capital (Adler & Kwon, 2016). Furthermore, social capital is most useful in providing to individuals information, power and influence, and solidarity.

Some communication scholarship has favored a social cohesion approach to examining social capital, which "distinguishes social capital as an overarching structure from more individual choices with respect to social networks and social supports," versus a social network approach, which examines social capital at the group and individual level (C. Lee & Sohn, 2016, p. 730). As such, communication research has cited Putnam (2000) more heavily, who was concerned with the decline of societal social capital at the

hands of television, than Bourdieu (1992). However, by adopting a social network approach – specifically measuring social capital as an individual trait – social capital becomes an important mediator or moderator of media effects by "directly capturing resources embedded within their audiences' social networks instead of just inquiring into the frequency of conversations with others" (C. Lee & Sohn, 2016, pp. 742-743).

Social Capital and Media Use. To better understand how media could be used to create and maintain social capital, it is important to understand the social utility of media. Researchers in the psychology field posit that the social utility of an action "[specifies] level of satisfaction as a function of outcome to self and other" (Loewenstein, Thompson, & Bazerman, 1989, p. 427). In other words, an action's social utility is desirable to an individual when the individual perceives it is beneficial to both the individual taking the action and those affected by the action. As such, media engagement has utility in its ability to potentially facilitate social interaction, bonding, and positive social identity.

Online advertisements have social utility because they facilitate discussions among peers, fostering group participation, understanding of meaning, and the creation of ritualistic scripts based on the content of advertisements (Ritson & Elliot, 1999). Furthermore, the content of advertisements can be utilized socially in a manner that ignores or omits product associations. For instance, an individual might reference an advertisement slogan or catch-phrase in a social setting without mentioning or referencing the advertisement's brand. Budweiser's 1999 "Wassup" catch-phrase or Wendy's 1984 "Where's the Beef?" slogan are good examples of advertising content that was applied in social settings not necessarily connected to specific brand behaviors. In addition, the taglines, slogans, and catchphrases presented in advertising are used in

social settings without acknowledgement or association with the advertised brand, and meanings for advertisements are derived in social contexts free of the advertisement's brand affiliation (Mitchell, Macklin, & Paxman, 2007). This research suggests a social utility for advertisements may exist that is distinct from advertised brands' product utility.

Uses and Gratifications and Social Capital. One theoretical framework that has been consistently utilized to understand the utility of media is the uses and gratifications framework. This framework is useful for understanding media's social utility, and recent work has drawn a connection between media social utility and social capital (Papacharissi & Mendelson, 2011). This approach originally was conceived as researchers began to understand the media as a means for entertainment rather than purely studying media as a source of persuasion (Katz & Foulkes, 1962). Based on the uses and gratifications approach, individuals use media to gratify certain needs, which lead to differing patterns of media exposure (Katz, Blumler, & Gurevitch, 1974). Katz et al. provided the following definition of uses and gratifications:

> They are concerned with 1) the social and psychological origins of 2) needs, which generate 3) expectations of 4) the mass media or other sources, which lead to 5) differential patterns of media exposure (or engagement in other activities), resulting in 6) need gratifications and 7) other consequences, perhaps mostly unintended ones. (p. 20)

Katz, Haas, and Gurevitch (1973) identified a list of more than 30 needs which individuals satisfy by using media. They broke this list of needs down into five broad categories of need gratification: 1) cognitive needs, which are related to the acquisition of

information and knowledge, 2) affective needs, which are related to a emotional experiences and appreciation of aesthetics, 3) integrative needs, which relate to increasing individual status among peer groups, 4) integrative needs which relate to enhancing and strengthening social contact, and 5) needs for tension-release and escape (pp. 166-167). The two integrative needs are concerned with integration in social groups, which supports the assertion that need gratification takes place in some type of environment, and most needs as well as the methods used to meet them – whether those needs are met through media or some other activity – typically have a social context within that environment (Swank, 1979).

Recent uses and gratifications research has examined the needs gratified through social media, with many studies identifying social interaction as a key gratification sought and obtained through social media (Luqman, Cao, Ali, Masood, & Yu, 2017; N. Park, Kee, & Valenzuela, 2009; Z. Wang, Tchernev, & Solloway, 2012; Whiting & Williams, 2013). In addition, specific forms of social interaction have been identified, including sharing social information about current activities and "what's going on" (Quan-Haase & Young, 2010) as well as making new friends and locating old friends (Raacke & Bonds-Raacke, 2008). Examining social media through the lens of consumer activity, Heinonen (2011) identified six types of social needs satisfied through consumer uses of social media: 1) social surveillance, or "learning about friends and acquaintances;" 2) collaborative experiencing, or "sharing and experiencing with others;" 3) belonging and bonding, or "connecting with people;" 4) being up-to-date, or "knowing what is happening in one's own community;" 5) staying in touch, or "keeping up

relationships within one's own network;" and 6) social networking, or "creating and managing a social network of friends and acquaintances" (p. 361).

In regard to consumer activity, research suggests that a brand website's ability to facilitate increased social interaction motivates consumers to stay engaged and ultimately make purchasing decisions (Ko, Cho, & Roberts, 2005). Consumers use brand content on social media for social interaction such as finding friends and building relationships, social identity such as identifying with a particular brand to form strong connections, and to help and get help from other social media users (Muntinga, Moorman, & Smit, 2011). In addition, these interactions in an active brand community on social media add value to the brand. Finally, the specific act of sharing on social media, i.e. posting specific content to a social media site, is strongly associated with the socializing gratification (Lee & Ma, 2012). This research suggests that brand activity carried out on social media is not confined to purely consumer action, but that it has social implications, as well.

Ruggiero (2000) suggested that in the new century, uses and gratifications research should seek to reimagine the definitions of "audience activity" and "audiences," given that the line between media creators and media consumers has blurred. Online channels give consumers the ability to offer feedback and create their own content that can then be broadcast to a mass audience through internet-based media channels. In addition, uses and gratifications research should seek to understand not only the social deficits media addresses – a focus of much uses and gratifications research in the twentieth century – but rather uses and gratifications research should emphasize the social purposes of media utilized by consumers. Media is no longer a consumptive, need-

based act, but it is purposeful, and one of its crucial purposes is building and maintaining social networks.

In this context, Papacharissi and Mendelson (2011) looked to the increasingly social nature of media consumption facilitated by interactive media. They proposed a model of uses and gratifications that incorporates the principles of social capital. Social media use actively facilitates social capital, though its use is more ritualistic than instrumental. In other words, people use social media habitually as a part of their everyday lives, but in doing so social media actively supports social capital. As such, Papacharissi and Mendelson proposed a model that suggests one cannot understand media use in the new century without considering its social outcomes. Their model is framed by five arguments:

1. Social behaviors, including media ones, are both purposeful and ritualistic.
2. Social and psychological factors mediate communication behaviors.
3. Individuals adopt convergent media to address psychological needs as well as build and maintain social networks.
4. Media compete and converge with other forms of communication to fulfill both social and psychological needs.
5. Media use has social outcomes, including differing levels of social capital.

For Papacharissi and Mendelson, the use of media, especially web-based social media, has social outcomes, and those outcomes contribute to individual social capital. Beyond merely fulfilling social needs, media use should be examined as an ongoing social process. In a sense, the use of social media becomes an integral part of how people build and maintain their social networks, with implications outside of pure individual,

momentary media utility to meet basic needs. Social capital becomes a key component in understanding the decisions people make related to mediated communication.

Social Capital in Online Networks. To better understand how social capital is created and utilized within social groups, it is important to understand network structures (Sobel, 2002). Social capital has been useful in understanding how information flows in networks, specifically corporate networks (Inkpen & Tsang, 2005; Steinfield, DiMicco, Ellison, & Lampe, 2009) and professional virtual communities (Chiu, Hsu, & Wang, 2006). In much the same way that social impact researchers built upon Granovetter's (1973) model of network tie strength to understand processes of social impact (e.g. Waardenburg et al., 2012), Putnam (2000) uses network ties to conceptualize two forms of social capital: bridging and bonding. Putnam conceptualizes Granovetter's strong and weak ties as bonding and bridging social capital. Putnam argues that we have bonding social capital with our intimate friends, whom we depend upon to "get by," and we have bridging social capital with our larger network of weak ties, who through information diffusion we can rely upon to "get ahead."

Recent attention has turned to how both bonding and bridging social capital are constructed and maintained via mediated communication networks, in particular online social networks. Both online and offline interactions produce both forms of social capital, which leads to a concept of social capital in four quadrants: online bonding, offline bonding, online bridging, and offline bridging (Williams, 2006). In addition, three themes have emerged in research examining social media based social capital: 1) the amount of personal disclosure and activity a user contributes to their social network dictates the level of benefits they receive; 2) social media creates both bonding and bridging social

capital, but particularly bridging social capital; and 3) social media networks support both online and offline relationships (Steinfield, Ellison, Lampe, & Vitak, 2012), which is consistent with the suggestion that both forms be considered in studying social media. Indeed it would appear that online social capital can contribute to offline professional reputation (Wasko & Faraj, 2005) as well as life satisfaction and civic participation (Valenzuela, Park, & Kee, 2009). In addition, social media's usefulness in building social capital transcends cultural differences (Ji et al., 2010).

Seeking information via social networking sites is a positive predictor of individual's social capital (Gil de Zúñiga, Jung, & Valenzuela, 2012), as is increased personal disclosure on social media (Trepte & Reinecke, 2012). Specifically, information seeking and sharing on social networks, along with building social connections, have been shown to be predictors of bridging social capital, while convenience is a significant predictor of bonding social capital (Mo & Leung, 2015). In other words, while the convenience of social media is most useful in maintaining intimate ties through bonding social capital, the sharing and information seeking aspects of social media are most useful in building bridging social capital. Indeed, bridging social capital best predicts individuals' intention to speak up on social media sites (Sheehan, 2015), and bridging social capital is key to understanding how opinion leaders make recommendations in social networks (Burt, 1999). In addition, bridging social capital predicts continued use of social media and satisfaction with social media; however, bonding social capital does not (Chang & Zhu, 2012). However, the nature of the social network itself is a contributor to the type of social capital cultivated by the network. Snapchat, which emphasizes personal interactions between individual users is best associated with bonding social capital, while

Twitter, which emphasizes widely-broadcasted messages, is best associated with bridging social capital (Phua, Jin, & Kim, 2017).

Concerning social media, social capital, and consumer activity, Kwahk and Ge (2012) determined that social capital conceptualized as the strength of interaction ties and norms of reciprocity within the network contributes to increased intentions to make online purchases. Social media social capital is also associated with higher performance ratings for the consumption of media such as television (Oh & Yergeau, 2017). Kwahk and Ge's study borrowed their interpretation of social capital from Chiu et al. (2006), who found interaction tie strength and norms of reciprocity were tied to increased information sharing. Social network ties are also associated with an increased desire to engage in the sharing of electronic word of mouth (eWOM) via social media sites (Chu & Kim, 2011) as well as brand related messages (Fu, Wu, & Cho, 2017), and social capital and self-disclosure motivate the use of branded e-stickers in social media messaging apps (Y. C. Lee, 2017). Similarly, a consumer's trust in their social network mediates the relationship between social impact and consumer purchase intentions for products recommended by friends on Facebook (Ng, 2013). As trustworthiness strongly relates to social capital in social networks (Putnam, 2000), it is possible that within online social networks, social capital may be a predictor of consumer behaviors in addition to sharing behaviors.

Facebook and Social Capital. Much attention has been given to Facebook by researchers examining online social capital, with results consistent with previous findings related to social media and the creation of social capital. In general, research supports the idea that, like social media in general, Facebook use contributes to building bonding

social capital, but is most useful for bridging social capital (Ellison, Steinfield, & Lampe, 2007; Johnston, Tanner, Lalla, & Kawalski, 2011). In addition, its benefits for bridging social capital may be greater for those with lower self-esteem (Steinfield, Ellison, & Lampe, 2008), suggesting Facebook may be particularly useful for those who lack social confidence. While Facebook is most useful for facilitating bridging social capital, research suggests that it can be useful for facilitating strong tie emotional support (Burke & Kraut, 2013). However, while intense Facebook use itself is not associated with bonding social capital, specific behaviors are predictive of bonding, especially responding to a post from a Facebook friend who is seeking support and having family members as Facebook friends (Vitak, Ellison, & Steinfield, 2011). Furthermore, research suggests than there may be gender differences in how individuals utilize Facebook to build relationships, with women focusing on building closer relationships and men focusing on building a broader network (Krasnova, Veltri, Eling, & Buxmann, 2017).

In addition to examining Facebook's overall contribution to social capital, research has looked at the contribution of specific Facebook behaviors to the creation of different types of social capital. Burke, Marlow, and Lento (2010) compared direct communication, conceptualized as sending and receiving direct news feed posts or messages, and passive consumption, conceptualized as users' passive viewing of their news feeds without direct interactions with friends. They determined that in general, Facebook use predicted both social capital and decreased loneliness, though loneliness was higher for those who only passively consumed news feeds rather than engaging in direct communication. Similarly, Burke, Kraut, and Marlow (2011) examined three social media behaviors: direct communication with friends in the form of messages and

comments, passive consumption of friend news feed posts, and broadcasting on individuals' own news feeds. They found that direct communication was best predictive of social capital, in particular bridging social capital. Also, individuals with low communication skills had higher bridging social capital as a result of both direct communication and passive consumption, suggesting that perhaps passive consumption provided communication context for those who would otherwise be hesitant to engage in conversations.

While different types of Facebook communication behaviors are associated with building different types of social capital, some specific types of sharing behaviors may impact bridging and bonding social capital in different manners. The ability to share personal opinions on Facebook motivates individual's desire to engage in Facebook's communication practices; however, it has a negative relation with bridging social capital (Su & Chan, 2017). This suggests that while individuals desire to share personal opinions on Facebook, that ability may damage their weak-tie relationships via the sharing of controversial or contrary opinions. However, opinion sharing does not appear to have an effect on bonding social capital, suggesting opinion sharing may be an expected part of relational connection and enhancement.

Patterns of Facebook use can have other social capital benefits for those seeking information about their social connections. People are more likely to use Facebook to seek information about social connections rather than to maintain or initiate social connections (Ellison, Steinfield, & Lampe, 2010). In other words, Facebook is useful for surveillance in interpersonal relationships, particularly those outside of an exclusively online context. Furthermore, this relational information seeking process contributes to

both bridging and bonding social capital. In addition, people use relationship maintenance behaviors – which are specific acts individuals take to build, maintain, and repair relationships – on Facebook to build bridging social capital, suggesting Facebook is particularly useful for maintaining often distant, weak-tie relationships (Ellison, Vitak, Gray, & Lampe, 2014). Social media not only contributes to online bridging social capital, but also offline bridging social capital.

Social capital built through Facebook not only contributes to offline social capital, but it may contribute to other offline outcomes in specific contexts. Both bridging and bonding social capital built with coworkers via Facebook may contribute to work performance (L. V. Huang & Liu, 2017). Facebook bonding social capital with coworkers, for example, contributes to increased job satisfaction, and Facebook bridging social capital contributes to increased job performance. In addition, bonding social capital mediates the relation between information utility and job satisfaction, suggesting the strong tie relationships built via Facebook contribute to a sense of workplace community. Though this study was specifically concerned with workplace outcomes, it does provide compelling evidence of offline benefits for social capital built via Facebook.

Attitudes, Advertising, and Brands

To understand the roles social impact and social capital might play in Facebook advertising, it is important to understand how advertising shapes brand attitudes and subsequent consumer behaviors. One theory that has been utilized to understand how attitudes shape behaviors is Fishbein and Ajzen's expectancy-value theory, a component of their larger theory of reasoned action (Fishbein, 1963; Fishbein & Ajzen, 1975). Fishbein and Ajzen argue that a person's behaviors are predicted by their intentions,

which are predicted by their attitudes towards the intended behavior. Attitudes are the sum of the product of a person's salient beliefs and evaluations of those beliefs. Working from the uses and gratifications perspective, media researchers have utilized this approach to understand how gratification-seeking attitudes lead to media exposure behaviors (Palmgreen & Rayburn, 1982; Rayburn & Palmgreen, 1984). From a marketing perspective, the theory of reasoned action has fueled research which explores how the evaluation of brand attributes presented in marketing messages shape brand attitudes, thus leading to purchase intentions and behaviors (i.e. Cohen, Fishbein, & Ahtola, 1972; Lutz, 1977; Lutz & Bettman, 1977; Wilkie & Pessemier, 1973). Beyond examining brand attributes, Mitchell and Olson (1981) suggested other factors may act as mediators alongside the evaluation of brand attributes in determining brand attitudes. Beliefs about the brand or product are not the only mediator of the relation between advertising exposure and brand attitude. The attitude toward the advertisement itself is also an important mediator of brand attitude, and – as suggested by the theory – brand attitude ultimately may predict purchase intentions. As such, much attention has been given to how individuals receive and evaluate advertisements, themselves.

Early research into the reception of advertising looked specifically at cognitive evaluations (Wright, 1973) as well as opinions and judgments (Wells, Leavitt, & McConville, 1971). However, Batra and Ray (1986) suggested that affective responses should be studied along with cognitive responses as they have a significant impact on brand attitudes. Three dimensions of feelings – upbeat, negative, and warm – can relate to attitudes towards advertisements as well as attitudes towards the brand (Edell & Burke, 1987). In addition, brand familiarity moderates the relation between advertising emotion

and brand attitudes (Machleit & Wilson, 1988). In an effort to create a comprehensive understanding of advertising acceptance, Feltham (1994) used Aristotle's theory of rhetoric and the related concepts of ethos, logos, and pathos to develop the Persuasive Discourse Inventory (PDI). Based on Aristotle's theory, Feltham developed a three-dimension scale with items related to an advertisement's source credibility (ethos), evidence and information (logos), and emotional appeal (pathos). Research suggests that attitudes towards a brand are indirectly impacted by feelings generated while viewing an advertisement (Pham, Geuens, & De Pelsmacker, 2013); feelings positively relate to an overall assessment of the ad, which in turn positively relates to an assessment of the brand. Recent advertising acceptance research has examined advergames (Wise, Bolls, Kim, Venkataraman, & Meyer, 2008), and in-game advertising (Lewis & Porter, 2010).

Huang, Su, Zhou, and Liu (2013) looked specifically at online, video advertisements to understand how advertisement attitude might not only predict brand attitudes and purchase behaviors, but also social sharing. Huang et al. based their model of advertising acceptance on MacKenzie's, Lutz's, and Belch's (1986) mediating model of advertising acceptance. MacKenzie et al. proposed four different models of advertising acceptance in which advertising attitude mediated the relation between advertising exposure and brand attitude. MacKenzie et al. determined that a dual mediation process best explained the relationship. The dual mediation hypothesis suggests there is an indirect flow of causation from the attitude towards the advertisement through brand cognitions to brand attitude, which works in addition to the direct effect of advertisement attitude on brand attitude. However, Huang et al. found Mackenzie et al.'s affect transfer hypothesis was most predictive. In the affect transfer model, advertisement attitude

directly impacts brand attitude without affecting brand cognitions. As with Fishbein's and Ajzen's (Fishbein, 1963; Fishbein & Ajzen, 1975) approach, brand attitude predicted brand behavior. In addition, Huang et al. determined that attitude towards the advertisement directly impacted social sharing intention, suggesting advertisements not only impact brand attitudes, but they also have social utility.

Social Norms. Advertising research has focused on the attitudinal, expectancy-value aspect of the theory of reasoned action to better understand how advertising attitudes impact brand attitudes and behaviors. However, Ajzen and Fishbein (1975; 1980) argue that attitudes are only one predictor of behavioral intentions. In addition to attitudes about a behavior, social norms related to the behavior also influence behavioral intentions. As advertising research primarily has concerned itself with the mediating role advertising attitude plays in shaping brand attitudes, it has ignored the social component. However, given the ability of social media advertisements to imbed social cues within the ad, it is worth considering how social norms work alongside other aspects of brand attitude. While research suggests that attitudes are a much better predictor of behavioral intentions than subjective norms, subjective norms exert more influence on intentions when the behaviors are social in nature (Trafimow & Finlay, 1996). Social media advertising takes place in a social environment with potential social outcomes through social sharing, and as such, they provide an excellent opportunity to examine social norms in the process of brand attitude formation. In this case, the social context cues embedded in the ad are expected to influence the brand attitude, which in turn motivates purchase intentions.

Hypotheses and Research Questions

Based on Latané's (1981) conception of social strength, research has suggested that the strength of social ties in online networks contributes to overall social impact of mediated messages (Bakshy et al., 2012; Miller & Brunner, 2008), which leads to increased purchase intentions (Ng, 2013). In addition, the number of social connections increases the social influence of brand messages in social media contexts, influencing brand attitudes and subsequent purchase intentions (Bakshy et al., 2012; Mir & Zaheer, 2012). Finally, immediacy as conceptualized as intensity of engaging in the network also contributes to the social impact of mediated messages (Miller & Brunner, 2008). While Waardenburg et al.'s (2012) experimental design allowed both number and strength to be manipulated at the same time, they did not examine any interactions between the two concepts, perhaps due to a lack of experimental power. However, it is possible that such effects exist. In addition, Waardenburg et al. did demonstrate that the mere presence of social cues in Facebook messages positively related to specific behaviors. As such, the following hypotheses and research question are proposed:

H_1: The presence of social cues in Facebook advertisements leads to positive brand attitudes.

H_2: Stronger network ties in social context cues in Facebook advertisements lead to more positive brand attitudes.

H_3: Greater numbers in social context cues in Facebook advertisements lead to more positive brand attitudes.

H_4: Higher intensity Facebook users have more positive brand attitudes of Facebook advertisements containing social cues.

RQ_1: Is there an interaction between network tie strength, number, and intensity exerting influence on brand attitudes in Facebook advertisements containing social cues?

Based on the theory of reasoned action (Ajzen & Fishbein, 1980; Fishbein, 1963; Fishbein & Ajzen, 1975), advertising researchers have suggested that attitudes towards brand features as communicated in brand messaging positively predicts behavioral intentions (e.g. Cohen et al., 1972; Wilkie & Pessemier, 1973). However, attitude towards the advertisement itself is also a predictor of brand attitude (MacKenzie et al., 1986; Mitchell & Olson, 1981). In addition, advertising attitude also predicts social sharing of the advertisement (J. Huang et al., 2013). The following hypotheses are proposed:

H_5: Positive advertising attitude predicts positive brand attitude.

H_6: Positive advertising attitude predicts social media sharing of the advertisement.

H_7: Positive brand attitude predicts purchase intention.

Research suggests social media use contributes to social capital, in particular bridging social capital (Steinfield et al., 2012). Facebook is no exception, as research suggests there is a relation between Facebook use and increased social capital (Ellison et al., 2007; Johnston et al., 2011; Steinfield et al., 2008). In particular, bridging social capital predicts Facebook sharing (Burke et al., 2011, 2010). As advertisements are useful in their social utility, and regular engagement with social media increases social outcomes, including social capital (Papacharissi & Mendelson, 2011), it is expected that advertisements with a positive assessment will be more likely to be shared on social

networks due to their perceived social utility. In addition, social media social capital also has positive implications for consumer activity, specifically purchase intentions, for ads shared in social networks (Ng, 2013). As argued by Lee and Sohn (2016), social capital might be best utilized in communication effect research as a behavioral and attitudinal moderator. Therefore, it is possible that in addition to its role as a moderator predicting social behaviors, it may have implications for attitude formation, as well. Thus, the following hypotheses and research questions are proposed:

H_8: Bridging social capital positively moderates the relation between brand attitude and purchase intention for Facebook advertisements with social cues.

H_9: Bridging social capital positively moderates the relation between advertising attitude and social sharing intention for Facebook advertisements with social cues.

RQ_2: Does bridging social capital moderate the relation between advertising social impact and brand attitude for Facebook advertisements with social cues?

RQ_3: Does bridging social capital moderate the relation between advertising attitude and brand attitude for Facebook advertisements with social cues?

Figure 2.1 presents a model of social media advertising based on the aforementioned hypotheses. All figures are included in Appendix A. The model is consistent with Mitchell's and Olson's (1981) advertising attitude meditational model derived from an expectancy-value approach to understanding attitudes and behavioral

intentions (Fishbein, 1963; Fishbein & Ajzen, 1975); however, the model introduces social impact as the normative component of Fishbein and Ajzen's model.

Conclusion

Social norms and social influence are an important predictor of behaviors. The strength of our connection with those exerting social influence, the number of influencers present, and their closeness to us in time and space determine the overall amount of social influence exerted in any given context. Research suggests this holds true in both online and consumer contexts. In addition, the social capital an individual has invested in their network determines an individual's desire to engage in network behaviors. Based on previous research, it was predicted that within a social media setting, advertisements that contain social cues about how an individual's social ties engage with the brand advertised will have more favorable attitudes towards the brand, and will thus be more likely to make favorable purchasing decisions. Furthermore, an individual's bridging social capital will moderate their social sharing and purchase decisions. To test the hypotheses and research questions presented in this study, an experiment was preformed. The next chapter presents the methodology for this experiment.

CHAPTER III

METHODOLOGY

To test the hypotheses and address the research questions proposed in this study, a quantitative experiment was performed. Experiments are a form of quantitative methodology designed to test clearly defined and limited concepts (Babbie, 2013). While the need to clearly define concepts on a limited basis is a weakness of experimental methods when compared to qualitative or correlation methods, such as focus groups or surveys, experiments satisfy the requirements of causation; specifically, there must be a) temporal priority, where the cause precedes the effect in time; b) spatiotemporal contiguity, where the cause and effect are close to each other in time in space, and c) constant conjunction, where the effect is consistent across different tests (M. Sobel, 2009). As such, experiments are unique in their ability to establish causation.

There are three key elements of experiments: 1) the manipulation of independent variables, i.e. the situations, events, text, or other stimuli predicted to be the cause of some effect; 2) the use of controls, such as random assignment, to determine that the effect is the result of the manipulations and not some other factor; and 3) a measured effect or response, known as the dependent variable (Kirk, 2009). It is the first two elements that set experiments apart from other methods. Essentially, in an experiment, you are manipulating some variable – in the case of the current study, the strength and number of social media relationships in a social context cue – to determine if that variable causes an effect – in this case, brand attitude will be impacted by exposure to the social context cue. Compared to other methods, experiments are best suited to determine causality.

The study utilized a 2x2 factorial design to manipulate the primary independent variables: advertisement social cue tie strength of relationship (low versus high) and number of people exerting influence (low versus high). As recommended by Thorson, Wicks, and Leshner (2012) with respect to experimental designs in mass communication research, more than one media stimuli was utilized to ensure that effects were not related to a specific stimulus rather than controlled manipulations. Three different visual advertisements were used along with the four different social cue manipulations and a hard control. A between-subjects design allowed for maximum control of the influencer number variable, as the same values for low and high numbers could be used across each cell. The experiment presented respondents different viral video advertisements that included social cues modeled after the types of advertisements presented on Facebook. Participants were then asked to indicate their advertisement attitude, brand attitudes, social sharing intentions, and purchase intentions for the advertisements. The remainder of this chapter will discuss how and where study participants were recruited to take part in the study, the specific procedure for the study, the results of a pretest used to determine the stimulus videos used in the study, and a description of the scales and measures utilized in the study.

Participants

Study participants were recruited from undergraduate communication and marketing courses. As Huang et al. (2013) has argued, students are ideal candidates for viral video and social media studies due to their active engagement with these mediums. Students were offered credit in their courses in exchange for their participation. All students were informed that the study would take approximately fifteen minutes to

complete, and that their course credit would be awarded at the end of the term. At the time of the study, approximately 400 students in marketing courses had enrolled to participate in the marketing pool, and thus were eligible to participate. There were approximately 220 students enrolled in the communication classes who were invited to participate. As such, approximately 620 students were aware of the study and eligible to participate. 227 students elected to participate in the study, suggesting a response rate of approximately 37%.

Students in marketing courses are required to participate in research studies administered through a marketing pool. In exchange for their participation, students were awarded credit points towards their marketing pool class requirement. Students were recruited through an online portal that allows students to select studies in which they can participate to satisfy their requirement. In the online portal, students viewed a brief description of the study, and they could then select a timeslot in the late morning or afternoon for their participation. They were then instructed to attend the study at their appointed time in a research lab in the School of Business. Communication students were recruited from a research methods course as well as a media history course. As the communication classes do not include a required research pool, students were offered extra credit in exchange for their participation, and they were entered into a drawing to win a $100 Amazon.com gift card. Students in communication classes were recruited in-person by the researcher as a class announcement, and they were sent an email through the course website from their instructor. The email linked to a webform where students could request participation and indicate their availability. Students then received an email from the researcher confirming their participation times in the late morning or afternoon,

and they were instructed to attend a lab space in the school of journalism to complete the study at their designated times.

Procedure

The study was completed in computer labs in both the business school and the school of journalism. Before beginning the study, participants were asked to view an informed consent statement, and participant information was collected separate from the study instrument to protect the confidentiality of student responses. Students in marketing courses provided an ID code which the researcher entered into the online marketing pool system to award their course credit. For communication students, student names and identification numbers were provided to their instructors so they could be awarded credit in their courses.

The stimuli and study measures were provided using Qualtrics online survey software. To reduce threats from demand characteristics and increase the believability of the study manipulations, participants were given specific instructions on the nature and method of the study. The first screen of the study informed participants that they were participating in a nationwide study being conducted at universities and testing centers in all fifty states, and researchers were specifically curious about their attitudes towards video advertisements on Facebook. As the study involved Facebook, the screen included a link to log in to Facebook's network. No information was passed from Facebook to the survey; participants were only asked to log in to the network to increase the believability and validity of the experiment. The Qualtrics survey tracked which participants clicked the log-in button, and presented a log-in success screen after participants followed the link.

After logging in, participants completed a measure of their bridging social capital. This measure was completed prior to viewing the experimental stimuli to reduce the chance that the experiment might bias responses to the measure. Upon completion of the social capital measure, participants were shown one of the Facebook viral video advertisements with social context cue stimuli. Participants were randomly shown one of the three stimulus videos (selected in a pretest; see below), and the social cue manipulation was randomly assigned for each video for each participant.

The included social context cue was based on the larger Facebook network stated as a percentage of all Facebook users (weak tie) or a participant's own Facebook network stated as a percentage of a participant's Facebook friends (strong tie). For each tie, a different percentage of users who liked the brand was shown, either low or high. In accordance with Waardenburg et al. (2012), The social cue manipulations were as follows:

1. High Strength, High Number: "86% of your Facebook friends who participated in this study like [Brand Name]."
2. High Strength, Low Number: "14% of your Facebook friends who participated in this study like [Brand Name]."
3. Low Strength, High Number: "86% of Facebook users who participated in this study like [Brand Name]."
4. Low Strength, Low Number: "14% of Facebook users who participated in this study like [Brand Name]."

In addition to the four social context cues included with the viral video advertisement, one manipulation included no social context cue; this manipulation was

used as a hard control. The advertisement was identical to the other manipulations; however, the area containing the social context cue was left blank. Figures 3.1.-3.5 depict examples of the stimuli used in the final study.

After viewing the advertisement, participants were asked to respond to questions in regards to their attitude towards the advertisement, the social utility of the advertisement, their attitude towards the brand, their social sharing intentions, and their product purchase intentions. Then, participants were asked to complete characteristic and demographic measures, including their daily intensity of Facebook use, age, gender, and ethnic origin. Upon completion of the survey, participants were asked to log out of Facebook to complete the study. At the study's conclusion, students who completed the study in the communication lab were shown a screen with debrief information describing the study manipulations and the Facebook log-in deception. In accordance with established procedures for the marketing lab, the same text viewed by communication students was sent to participants who completed the study in the marketing lab at the end of the term.

Pretest

The stimuli utilized in the study consisted of a viral video advertisement embedded in a Facebook-styled advertisement that included a social context cue. The decision was made to use existing brand-oriented viral videos as stimuli in this experiment. A viral video is one that "is delivered in an interactive, web-based environment characterized by viewer pull and control rather than sponsor push" and has "interesting video content and embedded brand information" (Huang et al., 2013, p.36). A pretest was conducted to determine which videos to utilize in the final experiment.

The viral video advertising content utilized in the advertisement stimuli was selected in a manner consistent with Huang et al. (2013), which includes a procedure for finding potential viral video advertisements followed by a pretest to identify the videos utilized in experimental stimuli. As the largest source of video content on the web ("comScore releases February 2016 U.S. desktop online video rankings," 2016), Google's YouTube website was searched for viral video advertisement content using the search terms "funny," "exciting," "entertaining," "good," "advertisement," and "ad." In addition, the researcher solicited ideas for good viral video advertisements from social media connections via status updates posted to Facebook. Advertising Age's weekly viral video chart (http://adage.com/section/the-viral-video-chart/674), which includes a listing of the top viral video advertisements each week, was also accessed to identify viral video advertisements.

Consistent with Huang et al.'s (2013) procedure, after a list of 15 viral videos were identified, the researcher, working with associates, subjectively recommended eight videos that best met the criteria recommended by Huang et al.: 1) the videos were highly rated with high view counts, 2) the videos contained product and brand information, and 3) the videos had to contain one complete story, have a running time of 5 minutes or less, and have professional audio-visual quality. In addition, videos that were thirty seconds or less were excluded to differentiate viral videos from television commercials, as commercials created specifically for television are limited to a shorter run-time. The eight videos were included in a pretest utilized to identify the videos used as a part of the experimental stimuli. The smaller number of videos was desirable to eliminate survey fatigue in the pretest. Video runtimes ranged from 1:15 to 5:16. Table 3.1. includes

information about each video, including an online link, summary, runtime, and video views. All tables for this dissertation are included in Appendix B.

These eight videos were submitted to a sample of 56 student participants for viewing. Students were offered extra credit in a communication class in exchange for their participation. After watching each video, students were asked to assess the videos using Huang et al.'s (2013) Facebook social conversation scale. In addition, respondent's likelihood that they would "like," "share," or send the video in a private message was also measured. Responses were measured on a seven-point, Likert scale ranging from "strongly disagree" to "strongly agree." Table 3.2. presents mean scores for each scale for the eight videos included in the pretest. Three videos' mean scores on each social sharing score were relatively close together across each of the sharing measures: the Temptations "Keep Them Busy" video, the Reebok "25,915 Days" video, and the Sense "Meet Sense with Voice" video. In addition, the runtimes for each of these videos ranged between 1:15 and 1:34. Consistent with recent trends in viral video sharing which has seen a steady decrease in the average time for viral videos (Jones, 2014; Waterhouse, 2015), the shorter runtimes for the three videos was desirable. The closeness in runtimes also controlled for any variance that may have resulted from using videos with extreme differences in length. As such, these three videos were selected as the stimulus videos for the study.

In addition, the pretest addressed the social context cue manipulation using a separate viral video not included in the study as well as the Facebook log-in deception. Pretest participants were asked to log-in to Facebook to connect the study to their own Facebook account. They were then shown a viral video with one of the four social context cues. They were then asked to evaluate studies that connect to Facebook in terms

of their right to privacy, and they were asked to recall the number percentage manipulation and whether it represented a large or small amount of their network. Only one participant indicated they did not believe they logged in to Facebook. Furthermore, only three participants did not accurately remember the number manipulation outside of ten percentage points, and no issues were identified in relation to their interpretation of the number.

Measures

As outlined in the procedure, participants first completed a measure of bridging social capital before viewing the advertisement stimulus. Upon viewing the advertisement stimulus, participants completed measures of familiarity with the video, social media advertisement privacy, advertisement attitude, brand attitude, purchase intention, and advertisement sharing intention. These measures were identical for each advertisement. Facebook intensity and demographic variables were measured after participants viewed their stimulus and completed advertisement and brand scales. A complete listing of measures and scale items is included in Appendix C.

The independent variable "bridging social capital" was measured using Williams's (2006) scale of online social capital, adapted to Facebook use. The scale consisted of ten items measured using seven-point, Likert scales. Sample items include, "Interacting with people on Facebook makes me interested in what people unlike me are thinking," and, "I am willing to spend time to support general community activities on Facebook."

As the videos drawn for the study were readily available through online media channels, specifically YouTube, it was deemed necessary to measure participants' familiarity with their video as a control in the study. No specific measure was identified

in the literature. As such a one-item measure was utilized. Respondents were asked how many times they had seen the video on a four-point scale ranging from “never” to “many times.” In addition, one survey question asked respondents how much respondents felt the ad violated their privacy, given that respondents were led to believe the advertisement included a social cue derived from their Facebook network. Previous research suggests privacy concerns and concerns about the invasiveness of Facebook advertisements can diminish attitudes and behavioral intentions (Jung, Shim, Jin, & Khang, 2016). An adequate scale was not identified in the literature. As such, respondents were asked to indicate the invasiveness of the advertisement on a seven-point semantic differential scale ranging from “very invasive” to “not at all invasive.”

The dependent variable “attitude towards the advertisement” was measured using Madden's, Allen's, and Twible's (1988) advertising evaluation scale. The measure consisted of six items measured on seven-point, semantic differential scales. Respondents were asked to indicate their feelings towards the advertisement on items such as “unpleasant/pleasant” and “artless/artful.” The dependent variable “brand attitude” was measured using Mitchell and Olson's (1981) scale. The measure consisted of four items measured on seven-point, semantic differential scales. As with the advertisement attitude measure, respondents were asked to indicate their feelings towards the advertised brand on items such as “bad/good” and “poor quality/high quality.” The dependent variable “purchase intention” was measured using Huang et al.'s (2013) approach, consisting of two items measured on seven-point, semantic differential scales designed to measure purchase likelihood as well as the perceived wisdom of making such a purchase.

The dependent variable “advertisement social sharing intention” was measured using a scale from Huang et al. (2013), adapted to Facebook sharing, which includes Brown, Bhadury, and Pope's (2010) probability of pass-along scale, probability of talking about the advertisement, and probability of telling others. As this scale specifically related to social media sharing regardless of network, the scale was expanded using original items designed to address sharing behaviors specific to Facebook. Specifically, respondents were asked their intentions respecting liking, sharing, or sending the video in a private message. Respondents were asked the likelihood of engaging in each action, measured on seven-point, Likert scales ranging from “strongly disagree” to “strongly agree.” Sample statements from this scale include, “I am likely to pass-along this video to others on Facebook,” and, “I am likely to share this video on Facebook.”

The independent variable “Facebook intensity” was measured using an approach to measuring media usage utilized by Perse and Ferguson (1993). Participants were asked to indicate how many hours they spent on Facebook yesterday and how many hours they spent using Facebook on a typical day, with the resulting measure being the average of the two. In addition, respondents were asked to indicate how many friends they have on Facebook.

Demographic data related to gender identity, ethnic background, and age were collected. At the conclusion of these measures, participants were asked to respond to an open-ended prompt asking them their impression of the study. This was used to identify any problem responses due to experimental awareness. No issues with the survey were identified based on these open-ended responses.

Conclusion

This chapter outlined the experimental method utilized to address the hypotheses and research questions introduced in chapter two. The chapter presented the sampling procedure as well as the experimental procedure of the study, and it described the results of a pretest designed to evaluate the study stimulus and determine the viral videos utilized in the stimulus. Finally, study measures were introduced and described. The next chapter will present the results of the experiment. Descriptive statistics of the study sample will be presented along with statistics dealing with scale reliability. Then, correlation and regression analyses will be utilized to address the study's hypotheses and research questions.

CHAPTER IV

RESULTS

This chapter presents the findings of statistical tests used to analyze the results of the quantitative experiment and address the hypotheses and research questions. First, descriptive statistics related to the sample are presented along with the results of univariate outlier analyses and randomization checks. Second, scale reliability statistics, descriptive statistics, and a factor analysis are presented. Third, the chapter presents results of statistical tests designed to test the hypotheses and address the research questions.

Data Analysis

A t-test and hierarchical regression were performed to address the first set of hypotheses (H1-4) and the first Research Question (RQ1). H1 argued the presence of social cues in Facebook advertisements leads to positive brand attitudes. H2 predicted stronger network ties in social context cues in Facebook advertisements lead to more positive brand attitudes. H3 predicted greater numbers in social context cues in Facebook advertisements lead to more positive brand attitudes. H4 predicted higher intensity Facebook users have more positive brand attitudes of Facebook advertisements containing social cues. Finally, RQ1 asked if there was interaction between tie strength, tie number, and Facebook intensity exerting influence on brand attitudes in Facebook advertisements containing social cues.

Hierarchical regressions were utilized to test H5, which predicted positive advertising attitude predicts positive brand attitude, H6, which suggested positive

advertising attitude predicts social media sharing of the advertisement, and H7, which argued positive brand attitude predicts purchase intention.

Regressions were performed to test H8, which argued bridging social capital positively moderates the relation between brand attitude and purchase intention for Facebook advertisements with social cues, H9, which suggested bridging social capital positively moderates the relation between advertising attitude and social sharing intention for Facebook advertisements with social cues, RQ2, which asked if bridging social capital moderates the relation between advertising social impact and brand attitude for Facebook advertisements with social cues, and RQ3, which asked if bridging social capital moderates the relation between advertising attitude and brand attitude for Facebook advertisements with social cues.

Sample

A total of 227 students completed the study. At the conclusion of the study, responses that had been flagged during the experiment as problematic were eliminated. Four respondents were eliminated because they did not have a Facebook account, two respondents were eliminated because the advertisement did not display correctly, three respondents were eliminated because they did not proceed past the first question, two respondents were eliminated because they did not proceed past the first scale to see the advertisement, and two respondents were eliminated because they did not click to log in to Facebook during the study. The resulting sample ($N = 214$) was predominantly white ($N = 135$) and 55.6% female ($N = 119$). Complete demographics are presented in Table 4.1.

Univariate outlier analyses were conducted for the main dependent variables. Cases were considered for omission from study analysis if they were a univariate outlier on one or more dependent variables. The standard to determine if a variable was an outlier was whether or not it was +/- 3.0 standard scores beyond the mean of the variable. Decisions to omit any of the outlier cases were based on the frequency with which a case appears as an outlier as well as the magnitude of deviation of the outlier, with the retention of all cases as the default position. As only three cases were outliers in more than one variable, and no cases were outliers in three or more variables, the default position was maintained. Table 4.2. presents the outlier cases by variable.

As previously mentioned, individuals with concerns about the invasiveness of Facebook advertisements are less likely to have positive brand attitudes or purchase intentions (Jung et al., 2016). One question in the survey was designed to address concerns with privacy; specifically, respondents were asked how invasive they felt the advertisement was on a seven-point scale ranging from "very invasive" to "not at all invasive." On average, study respondents did not find the Facebook ad to be invasive (M = 5.92, SD = 1.49); however, those who evaluated the advertisement as excessively invasive were eliminated from analysis to control for possible bias towards the experimental manipulation. As with the univariate outlier analyses, respondents who felt the advertisement was invasive beyond -3 were eliminated from analysis. Three such cases were identified and eliminated.

Checks of randomization were performed to reveal if there were any significant differences between participants by each randomly assigned condition on the demographic variables. Chi-squares were used to test the differences between each

condition, control, tie strength, and tie number, and both gender and race (white vs. non-white participants.) There were no statistically significant differences in the presence of men and women in either the tie strength ($\chi^2 = 2.46$, $p > .05$) or tie number ($\chi^2 = 2.92$, $p > .05$) conditions. Likewise, there were no statistically significant differences in the presence of non-white and white participants in either the tie strength ($\chi^2 = 3.21$, $p > .05$) or tie number ($\chi^2 = 1.76$, $p > .05$) conditions. ANOVAs were used to the test the differences between each condition and age. There were no statistically significant differences in age for either the tie strength, $F(2, 208) = 2.48$, $p > .05$, or tie number, $F(2, 208) = 1.64$, $p > .05$, conditions.

Measures

To evaluate the reliability of survey measures, Cronbach's alphas were utilized. Cronbach's alpha is used to measure the reliability of scale measures, and research suggests alphas should be between .7 and .95 (Tavakol & Dennick, 2011), however, a cut-off of closer to .8 is more desirable (Nunnally, 1978). Based on this criteria, measures for "bridging social capital" (Williams, 2006), $\alpha = .85$, "attitude towards the advertisement" (Madden et al., 1988), $\alpha = .92$, and "purchase intention" (J. Huang et al., 2013), $\alpha = .79$, were all reliable based on Travakol & Dennick (2011). Descriptive statistics and Cronbach's alphas for measured variables and measure items are presented in Table 4.3.

When examining "brand attitude" (A. A. Mitchell & Olson, 1981), it was determined at the experiment's conclusion that one item had been reversed inconsistently in contrast to the other three items included in the scale. The item asked participants to rate the brand on a scale ranging from "pleasant" to "unpleasant," while the other three

items in the scale listed the negative word first (i.e. “bad” to “good,” or “very dislikable” to “very likable.”) Not only was this inconsistent with the brand attitude scale, but it was also inconsistent with all of the items in the study. While the resulting scale with all four items, including a recoded version of the improperly presented item, had marginal reliability ($\alpha = .76$), by removing the item, the reliability of the scale was improved ($\alpha = .88$). This improved alpha matched exactly the alpha from Mitchell and Olson’s study that originated the scale. As such, the item was eliminated to improve the reliability of the scale and address the problem with survey design and execution.

The dependent variable “advertisement social sharing intention” utilized both an established scale (Brown et al., 2010; J. Huang et al., 2013) as well as three original items developed to address sharing behaviors specific to Facebook’s interface. To determine the six items’ association with the latent construct, “advertisement social sharing,” a factor analysis was employed. Principal components analysis (PCA) was chosen as the technique of factor analysis, given its ability to retain as much information as possible from the chosen variables, thus reducing measured variables into a smaller set (Park, Dailey, & Lemus, 2002). As such, PCA is useful for item reduction, which was desirable to help eliminate any superfluous items from the expanded measure. In addition, the oblimin rotation method was utilized since oblique rotation methods allow factors to correlate, avoiding the often-misleading results produced by orthogonal methods (such as varimax) when significant correlations are present (Fabrigar, Maccallum, Wegener, & Strahan, 1999). As recommended by Hair et al. (2006) for a sample of 200, factor loadings of .4 or greater were included in factor groupings. The six items were grouped

into one factor. See Table 4.4. for factor loadings. The resulting scale was reliable, α = .92.

Facebook intensity was represented by respondents' average daily Facebook use (Perse & Ferguson, 1993) as well as by Facebook friend count. There was a statistically significant correlation between average Facebook use and Facebook friend count, $r = .23$, $p < .01$. While the relationship was significant, the correlation was relatively weak, suggesting the uniqueness of each measure. As such, consistent with previous research (Miller & Brunner, 2008), Facebook intensity was represented using the average Facebook use measure.

Social Impact

The first hypothesis posited that the mere presence of a social context cue on a Facebook advertisement would lead to a more positive brand attitude toward the brand sponsoring the video. To test this hypothesis, an independent samples t-test was employed to compare the means of brand attitudes between those in one of the four experimental factors who saw a social context cue included with their Facebook advertisement and those in one of the control groups who did not see a social context cue included with their Facebook advertisement. There was homogeneity of variances, as assessed by Levene's (1960) test for equality of variances ($p > .05$). Based on the t-test ($N = 211$), those who did not see a social context cue with their advertisement ($n = 42$, $M = 4.84$, $SD = 1.26$) had less positive brand attitudes than those who saw a social context cue with their advertisement ($n = 169$, $M = 5.43$, $SD = 1.03$), a statistically significant difference with a medium effect size, $t(209) = -3.16$, $p < .01$, $d = .54$. Figure 4.1. represents the relation between the presence and absence of a context cue.

This relationship was further examined using a one-way ANOVA to compare the means of brand attitudes of each experimental condition, including the control condition. With the ANOVA, there was homogeneity of variances as assessed by Levene's test for equality of variances ($p > .05$). Based on the ANOVA, there were significant differences in brand attitudes between the experimental conditions, $F(4, 206) = 3.38$, $p < .05$. LSD post hoc analysis revealed participants in the control condition ($n = 42$, $M = 4.84$, $SD = 1.26$) had statistically significant, less positive brand attitudes than those in the low strength, low number condition ($n = 44$, $M = 5.56$, $SD = 1.00$, $p < .01$); the low strength, high number condition ($n = 44$, $M = 5.42$, $SD = .94$, $p < .05$); and the high strength, high number condition ($n = 42$, $M = 5.54$, $SD = 1.16$, $p < .01$). While the control condition was less positive than the high strength, low number condition ($n = 39$, $M = 5.16$, $SD = .98$) the difference was not statistically significant ($p > .05$). There were no statistically significant differences between any of the experimental conditions outside of the control condition. Figure 4.2. presents the differences between each condition and the control. Given the results of the t-test and the significant differences between all of the experimental conditions and the control except for one, this hypothesis had strong support.

H2 and H3 suggested that greater strength of social ties in social context cues in Facebook advertisements and greater numbers of social ties in social context cues in Facebook advertisements would produce more positive brand attitudes. H4 suggested high intensity Facebook users would have more positive brand attitudes for Facebook advertisements containing social cues. RQ1 asked if there was an interaction between tie

strength, tie number, and Facebook intensity. To address these hypotheses and research question, a hierarchical regression predicting brand attitude was employed.

Step one of the hierarchical regression introduced control variables. Specifically, the model controlled for the type of video advertisement viewed, whether Temptations, Reebok, or Sense, dummy coded into two variables: Video is Reebok and Video is Sense. The model also controlled for Video Familiarity, which was a measure of how many times participants had seen the video. This step was statistically significant, and explained 7% of the variance, $F(3, 165) = 4.07$, $p < .01$. Of the control variables, viewing the Sense video was a statistically significant predictor of positive brand attitudes ($B = .60$, $SE\ B = .19$, $p < .01$), though the model only explained a small percentage of the variance. Step two of the hierarchical regression introduced the main effects of the experiment. Tie Strength and Tie Number were dummy coded between high strength and low strength and high number and low number, with the high values coded as "1" and the low values coded as "0." Facebook Intensity (mean-centered) was represented by the average daily use measure described in chapter 3. This step was not statistically significant, only explaining an additional 1% of the variance, $\Delta F(3, 162) = .46$, $p > .05$. As such, the addition of the main effects was not statistically significant, suggesting these variables lacked predictive power. Step three of the hierarchical regression introduced the four interactions between tie strength and tie number, tie strength and Facebook intensity, tie number and Facebook intensity, and the three-way interaction between tie strength, tie number, and Facebook intensity. This step was also not statistically significant, explaining an additional 5% of the variance, $\Delta F\ (4, 158) = 2.16$, $p > .05$. As with the second step, this lack of statistical significance of the overall model suggests the

experimental variables were not predictive of positive brand attitudes. Table 4.5. presents the results of this hierarchical regression.

In the final step of the regression, there were statistically significant relations between the main effect of tie strength (B = -.45, $SE\ B$ = .22, $p < .05$), the interaction between strength and intensity (B = -.56, $SE\ B$ = .28, $p < .05$), the interaction between number and intensity (B = -.50, $SE\ B$ = .24, $p < .05$), and the three-way interaction between strength, number, and intensity (B = .79, $SE\ B$ = .34, $p < .05$) and brand attitude. Figure 4.3. presents the three-way interaction between strength, number, and intensity. However, given that neither step two, which introduced the main effects, and step three were statistically significant in the model, and the overall model explained only about 13% of the variance, the results of the regression do not support hypotheses two, three or four, and the results suggest that there is not a significant interaction between the three factors.

Advertising, Brand, and Purchase Attitudes

H5 posited that a positive attitude towards the advertisement would predict a positive brand attitude. To test this hypothesis, a hierarchical regression was employed. Step one of the regression introduced the control variables, specifically the video stimuli viewed, dummy coded as "Video is Reebok" and "Video is Sense," and video familiarity. This step explained 6% of the variance and was statistically significant, $F(3, 207) = 4.51$, $p < .01$. As with social impact, when controlling for the other control variables, viewing the Sense video was a statistically significant predictor of brand attitudes (B = .60, $SE\ B$ = .18, $p < .01$). Step two of the regression introduced the other independent variables: Facebook intensity of use, social impact – dummy coded as whether or not the social

context cue was present, and bridging social capital. This step explained an additional 9% of the variance and was also statistically significant, $\Delta F(3, 204) = 6.79$, $p < .001$. The addition of the other independent variables explained more of the variance in brand attitudes, increasing the predictive power of the model. The final step introduced the independent variable of interest: advertisement attitude. This step explained 30% of the variance, and was statistically significant, $\Delta F(1, 203) = 107.98$, $p < .001$. The vast improvement in variance explained suggests the addition of the advertisement attitude variable best predicted brand attitude. In regards to multicollinearity, the literature suggests no tolerance for any variable should be lower than .2 (Menard, 1995), and no variance inflation factor (VIF) for any variable should exceed 4 (Pan & Jackson, 2008). No tolerance was below .65 and no VIF exceeded 1.53 for any variable in any step of the regression, suggesting a lack of multicollinearity. Table 4.6. presents the correlations between the independent and dependent variables for this analysis and analyses to follow. Table 4.7. presents the results of the hierarchical regression.

Advertisement attitude was a statistically significant predictor of brand attitude in the final step of the regression ($B = .56$, $SE\ B = .05$, $p < .001$), in addition to social impact ($B = .42$, $SE\ B = .15$, $p < .01$) and bridging social capital ($B = .16$, $SE\ B = .06$, $p < .05$). However, advertisement attitude had the highest standardized beta ($\beta = .58$) of any predictor in the model. Given that the addition of the advertisement attitude variable in the final step of the hierarchical regression explained the most variance of any step in the regression, and given the strong weight of the variable predicting brand attitude, this hypothesis was supported.

H6 suggested that a positive attitude towards the advertisement would predict social media sharing of the advertisement. To test this hypothesis, a hierarchical regression was performed. As with the testing of hypothesis five, step one of the regression introduced the control variables: the video stimuli viewed and video familiarity. The introduction of the control variables explained 2% of the variance and was not statistically significant, $F(3, 207) = 1.27$, $p > .05$, suggesting the control variables were not predictive of social sharing. Step two of the regression introduced the other independent variables: Facebook intensity, social impact, and bridging social capital. This step explained an additional 14% of the variance and was statistically significant, $\Delta F(3, 204) = 11.53$, $p < .001$. The addition of the other independent variables improved the model and explained a modest level of variance. The third and final step introduced the independent variable of interest: advertisement attitude. This step explained 26% of the variance, and was statistically significant, $\Delta F(1, 203) = 92.65$, $p < .001$. The addition of the advertisement attitude variable greatly improved the variance explained, suggesting this variable was the best predictor of social sharing. No tolerance was below .65 and no variance inflation factor exceeded 1.53 for any variable in any step of the regression, suggesting a lack of multicollinearity (Menard, 1995; Pan & Jackson, 2008). Table 4.8. presents the results of the hierarchical regression.

Advertisement attitude was a statistically significant predictor of advertisement social sharing in the final step of the regression ($B = .74$, $SE\ B = .08$, $p < .001$), as was bridging social capital ($B = .48$, $SE\ B = .09$, $p < .001$). Advertisement attitude was the best predictor as it had the highest standardized beta ($\beta = .55$) of any of the predictor variables in the model. Also, the addition of the advertisement attitude variable in the

final step of the hierarchical regression explained the most variance of any step in the regression. As such, this hypothesis was supported.

H7 posited that brand attitude would predict purchase intention of the advertised product. This hypothesis was tested with a hierarchical regression. As with the testing of hypotheses five and six, step one of the regression introduced the control variables: the video stimuli viewed and video familiarity. Step one explained 5% of the variance and was statistically significant, $F(3, 207) = 3.36$, $p < .05$. As with previous analyses, viewers of the Sense video were more likely to have positive brand attitudes than the other controls ($B = .52$, $SE\ B = .22$, $p < .05$). Step two of the regression introduced the other independent variables: Facebook intensity, social impact, bridging social capital, and advertisement attitude. This step explained an additional 16% of the variance and was statistically significant, $\Delta F(4, 204) = 9.99$, $p < .001$. Adding the other independent variables improved the model, explaining more of the variance. The third and final step introduced the independent variable of interest: brand attitude. The third step explained 18% of the variance, and was statistically significant, $\Delta F(1, 202) = 59.56$, $p < .001$. The addition of the independent variable of interest, brand attitude, best predicted purchase intentions. No tolerance was below .56 and no variance inflation factor exceeded 1.80 for any variable in any step of the regression, suggesting a lack of multicollinearity (Menard, 1995; Pan & Jackson, 2008). Table 4.9. presents the results of the hierarchical regression.

Brand attitude was a statistically significant predictor of advertisement social sharing in the final step of the regression ($B = .69$, $SE\ B = .09$, $p < .001$), as was bridging social capital ($B = .23$, $SE\ B = .08$, $p < .01$). Brand attitude was the best predictor in the model as it had the highest standardized beta ($\beta = .57$) of any of the predictors. While

only a marginal improvement over step two, the addition of the brand attitude variable in the final step of the hierarchical regression explained the most variance of any step in the regression. As such, this hypothesis was supported.

Social Capital

H8 posited that bridging social capital would positively moderate the relation between brand attitude and purchase intention for Facebook advertisements with social cues. Using Model 1 of the PROCESS macro by Hayes (2013), it was determined that the relation between brand attitude and purchase intention was moderated by bridging social capital, as the interaction was statistically significant ($\beta = .17$, $SE = .07$, $p < .05$). Table 4.10. presents the results of the regression. The interaction is illustrated in Figure 4.4. The interaction was probed by testing the conditional effects of brand attitude at three levels of bridging social capital, one standard deviation below the mean, at the mean, and one standard deviation above the mean. As shown in Table 4.11., brand attitude was significantly related to purchase intention when bridging social capital was one standard deviation below the mean ($p < .001$), when at the mean ($p < .001$), and one standard deviation above the mean ($p < .001$). Using the Johnson-Neyman technique, it was demonstrated that the relationship between brand attitude and purchase intention was statistically significant when bridging social capital was above -2.11 standard deviations below the mean. In other words, bridging social capital moderated the relationship between brand attitude and purchase intention for individuals whose bridging social capital was more than two standard deviations below the mean of bridging social capital and higher. For those with bridging social capital well below the mean, it still exerted

influence on the relation between brand attitude and purchase intention. This hypothesis was supported.

H9 suggested bridging social capital would positively moderate the relation between advertisement attitude and social sharing intention for Facebook advertisements with social cues. Using Model 1 of the PROCESS macro by Hayes (2013), it was determined that the relation between advertisement attitude and advertisement social sharing intention was moderated by bridging social capital, as the interaction was statistically significant ($\beta = .21$, $SE = .09$, $p < .05$). Table 4.12. presents the results of the regression. The interaction is illustrated in Figure 4.5. The interaction was probed by testing the conditional effects of advertisement attitude at three levels of bridging social capital, one standard deviation below the mean, at the mean, and one standard deviation above the mean. As shown in Table 4.13., advertisement attitude was significantly related to advertisement social sharing when bridging social capital was one standard deviation below the mean ($p < .001$), when at the mean ($p < .001$), and one standard deviation above the mean ($p < .001$). Using the Johnson-Neyman technique, it was demonstrated that the relationship between advertisement attitude and advertisement social sharing was statistically significant when bridging social capital was above -1.92 standard deviations below the mean. Similar to the relation between brand attitude and purchase intention, bridging social capital moderated the relationship between advertisement attitude and advertisement social sharing for individuals whose bridging social capital was almost two standard deviations below the mean of bridging social capital and higher. For those with bridging social capital well below the mean, it exerted influence on the relation between

advertisement attitude and advertisement social sharing intention. This hypothesis was supported.

RQ2 sought to determine if bridging social capital moderated the relation between advertisement social impact and brand attitude for Facebook advertisements with social cues. Using Model 1 of the PROCESS macro by Hayes (2013), it was determined that the relation between advertisement social impact and brand attitude was not moderated by bridging social capital, as the interaction was not statistically significant ($\beta = -.11$, $SE = .14$, $p > .05$). Table 4.14. presents the results of the regression. RQ3 asked if bridging social capital moderated the relation between advertisement attitude and brand attitude for Facebook advertisements with social cues. Using Model 1 of the PROCESS macro by Hayes (2013), it was determined that the relation between advertisement attitude and brand attitude was not moderated by bridging social capital, as the interaction was not statistically significant ($\beta = .06$, $SE = .06$, $p > .05$). Table 4.15. presents the results of the regression.

Conclusion

This chapter detailed the results of the experiment described in chapter 3, including demographic data and data related to the reliability of study measures. In addition, the results of statistical tests designed to address the study's hypotheses and research questions were presented. Hypothesis testing suggests that there is support for the presence of social impact in Facebook advertisement social context cues influencing brand attitudes; however, the individual forces of social impact theory – tie strength, tie number, and intensity – did not influence brand attitudes as conceptualized. As expected, attitudes toward the advertisement predicted social sharing of the advertisement as well

as brand attitudes, and brand attitudes predicted purchase intentions. In addition, social capital moderated the relation between brand attitude and purchase intentions as well as the relation between advertisement attitudes and social sharing. Social capital did not influence the relation between advertisement attitude and brand attitude nor the relation between social impact and brand attitude. Table 4.16. presents the conclusions of the hypotheses and research questions based on the results of this study. Figure 4.6. updates the hypothetical model presented in chapter 2 to display the supported hypothetical relations between advertisement attitude, social impact, social capital, social sharing, brand attitude, and purchase intentions. The final chapter will address the findings presented here, discuss the theoretical implications of these findings, address the limitations of the current study, and suggest avenues for future research.

CHAPTER V

DISCUSSION

The purpose of this dissertation was to better understand how social cues in Facebook advertisements exert social impact on brand attitudes and purchase intentions, as well as to explore the impact of online social capital on brand attitudes, behaviors, and social sharing intentions. Using an experiment performed with students in marketing and communication classes at a major university in the Pacific Northwest, this study determined that the presence of social context cues in Facebook advertisements predicts positive brand attitudes, which lead to positive purchase intentions. However, varying the strength and number, and differences in intensity of use, did not predict positive brand attitudes. Furthermore, bridging social capital moderates the relation between brand attitudes and purchase intentions as well as the relation between advertisement attitude and social media sharing intentions, but it does not moderate the relation between advertisement attitude and brand attitudes nor the relation between advertising social impact and brand attitudes. This chapter will discuss the results of the study, specifically addressing the theoretical implications of the study's findings for social impact theory and social capital theory.

Theoretical Implications

Social Impact. The findings of this study were consistent with previous research examining social impact in a Facebook environment; specifically, it was determined that social cues did, in fact, exert social influence (Waardenburg et al., 2012), but the relation between the particular components of social impact and social influence were not clear. While participants who were exposed to social context cues in the advertisement reported

higher brand attitudes than those who received no social context cues, there was no evidence that different levels of tie strength, number, or intensity exerted influence on brand attitudes in the social media advertising context. The results of the experiment did not provide strong evidence for main or interaction effects for social context cues that included strong versus weak network ties, large versus small numbers, and differing levels of intensity measured as individuals' daily use of the Facebook network. This is in contrast to previous research which determined that the strength and immediacy of social connections in online contexts (Miller & Brunner, 2008; Ng, 2013) as well as the number of social connections (Mir & Zaheer, 2012) exerted social influence in mediated social situations, including consumer situations.

This study utilized an approach to its experimental stimuli that was congruent with Waardenburg et al. (2012). As with the Waardenburg et al. study, this study also did not find statistically significant main effects of strength and number influencing Facebook user behavior. Waardenburg et al. attributed this issue to their small sample size and lack of statistical power. In fact, Waardenburg demonstrated mean differences in favor of their hypotheses; specifically, those in the high tie strength and high tie number conditions had larger means of their dependent measure than those in the low tie strength and low tie number conditions. However, their results were not statistically significant. It was suggested that a larger sample size with greater numbers in each cell would lead to statistically significant findings in favor of the hypotheses. As such, because this study employed a sample of over 200 participants with upwards of 40 subjects in each cell, it was expected that the findings would support the study hypotheses. This was not the case. Therefore, alternative explanations for the results must be examined. For instance,

Waardenburg et al. concluded that if their sample size was not responsible for their findings, then perhaps their findings could be explained by the possibility that many who saw the smaller number cue may have made a positive social comparison about their own uniqueness, and those who saw the cue indicating the larger network may have assumed the larger network included their Facebook friends, leading to misleading results.

This speaks to a larger issue about how individuals respond to social cues within social network contexts, specifically Facebook. Research exploring the use of the Facebook "like" button has suggested that it is more useful for acknowledging the posting of other users than responding to group normative pressure (Levordashka, Utz, & Ambros, 2016). Perhaps the social context cue information presented with advertisements speaks less to establishing group norms than providing a sense of trends and individual responses. In other words, individuals may see social context cues not as establishing expectations of an individual's brand attitudes or social sharing, but rather the social context cues might indicate whether or not the content is worth the user's attention. In that sense, varying the strength and number of network ties might elicit different responses depending on how individuals seek to identify with brands within their networks. For instance, recent research suggests that the desire for uniqueness of a consumer moderates the relation between social media communication and brand attitudes, with those who scored higher in their need for uniqueness experiencing lower brand attitudes based on social media communication (X. Wang, Yu, & Wei, 2012). High number, high strength ties may elicit a different response in a mediated environment than in an interpersonal environment, depending on the motivations and social identity needs of the user.

The current study attempted to include all three aspects of social impact: strength defined as connections between personal networks versus the larger network, number defined by varying percentages of users at different levels, and intensity defined as frequency of use of the network. However, previous research examining social impact in online and social media environments has been inconsistent in regards to how social impact is conceptualized. Prior research has yet to conceptualize the social forces that constitute social impact theory in a consistent and universally coherent manner when examining online communication, incorporating all three social impact forces within one study. Miller's and Brunner's (2008) study explored social impact in an online education forum, finding evidence of the presence of social impact despite the fact that tie-strength was dependent upon the communication style of participants, as participants were anonymous. This is in contrast to the social media setting of the current study, as Facebook's network requires personal disclosure. Exploring social impact in a social media setting, Ng (2013) was able to consider tie-strength based on actual network ties, finding evidence of social impact. However, both studies did not consider number as a factor in their models, which was manipulated in the current study. However, Mir and Zaheer (2012), in their study of social media recommendations, considered number without considering tie strength. Unlike the current study, while each of these studies found evidence of social impact in online mediated environments, they employed different approaches to conceptualizing social impact's key elements, omitting certain elements.

Given the finding of this study that social impact was present, though the individual forces of social impact did not appear to exert impact, themselves, it would

appear that the conceptualization of social impact in an online setting has yet to be effectively defined. Of course, it is possible that social impact may operate in a different manner in online contexts versus offline, interpersonal contexts, and the forces of strength, number, and intensity may have different effects and different meanings within the social media environment. This is particularly evident in Naylor et al's (2012) study, which found evidence of social capital despite the fact that their conceptualizations of strength, number, and immediacy were either inconsistent or irrelevant within the social media environment.

This inconsistency calls to question the validity of previous results form Facebook's own research suggesting a connection between social impact forces embedded in advertisements and brand behaviors and attitudes. For instance, Bakshy et al. (2012) found evidence of tie-strength in social context cues exerting influence on Facebook "likes." However, Bakshy et al's study conceptualized tie strength in terms of the number of Facebook communications exchanged between individuals. This is in contrast to research that suggests communication volume between individuals is not necessarily predictive of their interpersonal tie strength. In Burke et al's (2011) study, it was determined that direct Facebook communication between users was a very weak predictor of bonding social capital – a good indicator of a strong tie relationship – explaining their findings as such:

> Media multiplexity may help explain this finding: we tend to communicate with our closest friends over many channels, including face-to-face (Haythornthwaite & Wellman, 1998). Therefore, the exchanges that maintain close relationships are

> less likely to appear in server logs. Facebook is one component in a diverse ecology of communication channels for strong relationships. (p. 578)

In other words, by conceptualizing tie strength in this manner, Facebook may not have presented actual strong-tie relations to study participants. Nevertheless, social impact was still present. Research into social media consistently has determined that social media networks are particularly useful for creating weak-tie – i.e. high bridging social capital – networks, and those networks are connected with and impact offline networks (Steinfield et al., 2012). It is possible that our understanding of tie-strength and its implications for both online and offline relational networks needs continued and closer inspection, in particular in regards to the forces of social influence.

Social Capital. Consistent with past research in a variety of different contexts, this study determined that attitudes toward the advertisement predicted brand attitudes, and in turn, brand attitudes predicted purchase intentions (e.g. MacKenzie et al., 1986; Mitchell & Olson, 1981). In addition, this study supported past research suggesting attitudes toward the advertisement would also predict social media social sharing of the advertisement (J. Huang et al., 2013). Beyond these predicted findings, this study determined that social capital – in particular bridging social capital – moderated the relations between advertisement and brand attitudes and behavioral intentions, but not the formation of brand attitudes themselves. In particular, this study showed the relation between brand attitudes and purchase intentions, as well as the relation between advertising attitudes and social media sharing intentions, were modified by an individual's bridging social capital within the Facebook network. However, the relations

between advertisement attitude and brand attitude, and social impact and brand attitude, were not moderated by bridging social capital.

As expected, bridging social capital was a significant moderator of the relation between advertisement attitude and social media sharing of the advertisement. This is consistent with prior research that has shown bridging social capital predicts intentions to share controversial opinions online (Sheehan, 2015), and bridging social capital is an important factor in opinion leader recommendations (Burt, 1999), as opinion leaders depend on weak-tie connections with their broader network to share and disseminate ideas and innovations. Furthermore, examining Facebook in particular, bridging social capital was strongly associated with direct communication (Burke et al., 2011) and relational maintenance (Ellison et al., 2014). This study provides further evidence for the relation between social media sharing and the creation and maintenance of bridging social capital. The larger a Facebook user's network of weak-tie, distant connections, the more motivated they would appear to be to share content that interests them via the social network. As evidenced by this study, those who have a positive attitude towards an advertisement will be most motivated to share the advertisement in their networks if they have a generally favorable perception of the strength and trustworthiness of that network.

In accordance with Ng's (2013) findings, social capital was a predictor of purchase intention, moderating the relation between brand attitude and purchase intention. However, unlike Ng's study, which examined purchase intention in an online setting through a Facebook-based ecommerce site, purchase intentions in this study were not specifically tied to an online act to make the purchase. The advertisements themselves did not contain a link or connection to an external purchasing site, nor a direct call-to-

action directing participants to make a purchase within the social media or connected framework. The influence of online, social-media-based social capital on purchase behaviors that may not take place in an online, social media setting observed in this study provides evidence for the strong connection between online social capital and offline social capital suggested by Williams (2006). While it has been argued that media use has social outcomes, especially the creation of social capital (Papacharissi & Mendelson, 2011), this finding suggests that online social capital has offline behavioral outcomes, especially if the attitude that predicts the behavior was formed online.

To better understand the relation between online attitude formation and purchase intentions that do not necessarily require an online context suggested by this study, it is important to note that not all social sharing is driven by online content – applications such as Instagram and Snapchat encourage users to share images and videos from their everyday, "offline" lives. As such, individuals may be more inclined to engage in an offline activity if they perceive it will have an online social benefit. In the case of this study, purchase intentions may have been driven by the potential opportunity to engage in social sharing and conversations driven by the purchase, as evidenced by the strong moderation effect of social capital on brand attitudes predicting purchase intentions. Subjects considered the social capital benefits of their purchasing intentions. In other words, the decision to make purchases – and not just online purchases – could be motivated by the potential for online social attention through social media sharing, thus building and maintaining network social capital. Any behavior – not just media consumption – can have mediated social benefits. Research suggests that the relation between social influence and purchase intentions is moderated by the manner in which

the good is consumed, with publicly consumed goods predicting more positive purchase intentions (Kulviwat, Bruner, & Al-Shuridah, 2009). Social media enables almost any consumptive practice to become a public act. Not surprisingly, this study suggested that participants with a robust, weak-tie Facebook network were more likely to purchase the items about which they formed a positive attitude, as their purchase could potentially provide opportunities for mediated social interaction.

Given that this study found social capital served as a moderator between attitudes and behaviors, but did not predict the attitudes themselves, it provides insight into social capital's place in the larger conversation respecting social influence. Two concepts key to understanding social influence are the ideas of private acceptance and public compliance (Sherif, 1936). Private acceptance can be defined as "conforming to other people's behavior out of a genuine belief that what they are doing or saying is right," while public compliance is defined as "conforming to other people's behavior publically without necessarily believing in what the other people are doing or saying" (Aronson et al., 2015, p. 232). Research has suggested that the more an individual feels accepted by a group, the more likely they will both privately accept and publicly comply with normative pressure; however, when an individual's feelings of acceptance are marginal, they will publicly comply to group norms without a high degree of private acceptance (Dittes & Kelley, 1956). Simply put, behavioral compliance is easier to come by than private acceptance in social contexts when social influence is present. In addition, compliance is motivated by both position within a group as well as the group's position within larger networks of groups (Branscombe, Spears, Ellemers, & Doosje, 2012), suggesting perceived network ties may motivate individual compliance as well as acceptance.

As a predictor of behavioral intentions, both social media sharing and purchase intentions, social capital may play a role in public compliance. However, social capital did not appear to play a role in attitude formation, suggesting it may not play a role in private acceptance. As evidenced by this study, social capital comes into play when attitudes are translated into behaviors, but they do not appear to play a role when attitudes are forming. Social capital was not considered when participants were crafting their brand attitude after viewing the stimulus, but when it came time to consider purchase intentions, social capital played a role. Likewise, social capital was considered when participants considered sharing the advertisement within their social networks. This is consistent with the theory of reasoned action (Fishbein, 1963; Fishbein & Ajzen, 1975), where social norms work alongside attitudes to influence behavioral intentions. In this case, social capital influences the behavior – the public output of brand attitudes – much like social norms influence behavior in the reasoned action model.

With regard to social norms and beyond the norms of reciprocity generally associated with the conceptualization of social capital (Putnam, 2000), it is possible that increased social capital within a network can aid in the formation and support of social norms (Adler & Kwon, 2016). A key benefit of social capital is solidarity, which can facilitate the formation of social norms within networks, and the benefits of established norms are significant for both weak-tie and strong-tie connections. In particular, social capital facilitates group trust and cohesion and limits conflict between group members, and it reduces the need for overt control and monitoring by group leadership. While social norms, specifically norms of reciprocity, are considered to be a part of the formation of social capital, it may be possible that social capital can facilitate the

formation of norms, themselves. Given this study's finding that social capital plays a role in motivating behaviors, it follows that it may indirectly influence the establishment of group norms in both tight-knit and larger social networks.

Conclusion

Based on the results of this study, it would appear that social impact in social media advertising social context cues does influence brand attitudes in social media advertising; however, the accepted conceptualizations of social impact in terms of tie strength, tie number, and immediacy do not appear to exert influence in a manner consistent with a traditional understanding of social impact theory. This study also demonstrated that social capital moderated the relation between attitudes and behavioral intentions – both online, sharing intentions as well as purchasing intentions. Based on these findings, it is clear that the nature of online social networks and the ties formed in these networks have implications for social media advertising and their related brand behaviors. The final chapter will discuss the implications of this study for the advertising and media industries, and it will propose avenues for future research while discussing the study's limitations.

CHAPTER VI

CONCLUSION

As Facebook continues to grow and evolve as both a social network and a global media channel, the manner in which it presents advertising to its users will have important implications for the media industry and culture. Understanding the unique nature of its social media context is important not just for advertisers who hope to better target and influence target audiences, but also for people who use Facebook and wish to build and interact with an online social network of friends and acquaintances. This study found that social impact exerted through social context cues in Facebook advertisements did influence brand attitudes, though how social impact has been conceptualized in past research was unable to explain this influence. In addition, the study demonstrated that social capital built in Facebook's network moderated the relation between attitudes and intentions in the social media consumer context, suggesting the trust and expectations of reciprocity a Facebook user has built in their network plays an important role in how they respond to advertisements in a social media setting. Based on these findings, this chapter will discuss industry implications, study limitations, and avenues for future research.

Implications for Practice

For advertisers and social media designers, it is important to understand that social media advertisements are viewed within an online, mediated social context. While the advantages of including social context cues are apparent, exactly how that influence manifests itself is not clear. In addition, how individuals are positioned in their network in regards to their individual social capital investment is also an important consideration when determining how social media advertising influences both social sharing action and

purchase intentions. While this study as well as past research (i.e. Williams, 2006) suggests there is a connection between online and offline social capital, it is important to note that social capital created in an online network is unique to that network, and social influence exerted in online networks does not necessarily conform to an understanding of social impact in offline social situations.

Regarding social impact theory specifically, this study's findings suggest a traditional understanding of the forces described by the theory may not be adequate to describe how social context cues exert influence in social media advertising, and perhaps within social media contexts in general. While Facebook's research (Bakshy et al., 2012) suggested that social context cues exerted influence in a manner consistent with the theory, this study's findings were not as conclusive. For social media developers and advertisers, it is important for them to determine their audience's interpretation of context information. It may be possible that context cues do not constitute a form of direct interpersonal persuasion, since the context information provided is done so by the advertiser and not directly by the Facebook connection. In other words, it is possible that consumers may not see the context cues as a form of interpersonal influence, but rather as peripheral cues designed to enhance the persuasion from the advertiser. In a physical interpersonal setting, the social connections exert direct influence; however, in a social media advertising setting, the direct influence comes from the advertiser, and it is not clear if the consumer sees the context cues as exerting direct social influence, or if those cues play a different role.

For advertisers and social media designers, the exact role social context plays in persuasive communication needs to be explored. As suggested in the previous chapter,

social context cues may simply provide evidence of trends or establish some sort of social norm rather than exerting direct social influence. As such, varying numbers and tie-strength my have unexpected results. Perhaps social context cues play a role in the creation of the fear of missing out (FoMO). Recent research suggests that rather than reflecting a desire to experience certain events, FoMO may play a mediating role between social deficiencies, such as loneliness or a need to connect, and social media engagement (Beyens, Frison, & Eggermont, 2016; Przybylski, Murayama, Dehaan, & Gladwell, 2013). As such, FoMO is less about missing the moment itself, and more about missing the opportunity to connect with others. Perhaps social context is a reminder that brands provide opportunities for social connection, and advertising is an important component of that process.

One of the primary concerns with social media advertising, as well as online advertising in general, is a concern with threats to privacy and the seemingly invasive nature of using an individual's social media data to promote products. This study suggests the exact process of how social media cues manifest influence is perhaps not understood in a theoretically coherent manner. As such, social media network managers should be mindful of how they present social media connection data within advertising settings, as a variety of factors can potentially influence how those cues are interpreted and how they impact brand attitudes for advertisers.

Examining social influence in social media contexts is complex, because individual differences may not be easily identifiable based on available metrics of social media engagement. This study supported previous research that suggests bridging social capital is an important predictor of behavioral intentions in social networks; however, using

social data alone, it is difficult to identify the strength of network ties due to differing patterns of social engagement across multiple communication contexts. Social media advertisers should be aware that social media networks are a part of a complex media and interpersonal ecosystem, and that the data harvested through such networks may not provide a complete and accurate picture of an individual's broader social network. While there are great opportunities for social media marketers to utilize social media social influence to better target audiences and increase the effectiveness of their advertisements via social context, care should be taken given the limits of these networks in projecting an accurate, complete view of an individual's preferences and social networks.

Implications for Facebook. Facebook's commitment to the inclusion of social context cues in their advertising despite legal challenges suggests the company believes in the power of these cues to stimulate positive brand outcomes. While Facebook's own research (Bakshy et al., 2012) has focused on social context cues and their influence on "likes" and advertisement clicks, Facebook's advertising director has suggested that Facebook's focus is not on engagement and clicks alone, but rather on advertising exposure and purchase behaviors (Empson, 2013). However, reports from social media and digital marketing platforms have cited increases in click-through rates as the key benefit of Facebook's advertising (e.g. Ha, 2013). This study suggests that in fact, there is a benefit to including social context in Facebook advertising for brand attitudes and subsequent purchase behaviors; however, the influence of context cues on brand attitudes may not operate in the same manner as Facebook's researchers have observed when examining engagement behaviors. If Facebook is concerned with broader brand benefits, including brand attitudes and purchase intentions, then their current approach may not be

addressing these outcomes as their approach intends. Rather than creating social influence, they may be creating social norms or social trends. The findings of this study suggest something besides word-of-mouth influence may be at work, and Facebook's own approach – whose focus seems to vacillate between driving engagement and stimulating purchase behaviors – may need further refinement.

Ultimately, Facebook's vision is "that advertising must be re-organized around people" (Ha, 2013, para. 4). As such, social context is intended to be something helpful to its consumers, providing cues as to whom in their social network is engaging with a brand. However, given this approach may not be operating as Facebook expects, it begs the question as to just how that benefit is being interpreted. As this research suggests, social context can lead to positive brand outcomes. However, it does not appear to be operating as expected in comparison to other social settings. Its influence is unique. If Facebook hopes to continue to benefit its advertisers and consumers, a better understanding of exactly how social context cues work within Facebook's network is essential.

Limitations and Future Research

For data collection purposes, this study used an advertisement stimulus viewed outside of the Facebook setting that contained social context cues that differed from the actual social context provided by Facebook. While efforts were made to conform the stimulus to the style of a typical Facebook advertisement, it was not possible – absent a direct connection to Facebook through the Facebook API – to recreate an actual Facebook experience that would be seamless to the user. As such, it is possible that the weak findings related to the social impact of the social context cues imbedded in the

advertisements were a result of the rather weak external validity of the research design. Future research should seek to more accurately recreate the actual Facebook experience.

In addition, while pre-testing suggested the manipulation was viewed and understood by participants, specific manipulations checks were not employed in an effort to avoid possible priming effects. It is possible that attention to the social cues may have been a factor in the relative weak findings related to the influence of specific social impact cues. Future research should utilize methods such as eye-tracking to determine if attention to the social context cues plays a role in the influence exerted by the social cues. Future research should also seek to replicate the study in other contexts with different populations. Several participants made open-ended comments about how they used Facebook less than other prominent social media applications, such as Twitter, Snapchat, or Instagram. In addition, the current study's college student population was drawn from one university using business and mass communication students, whose social media use may differ from other student populations. Perhaps repeating the study using a non-college demographic, or a different college demographic, could result in more definitive results.

Other social media advertising contexts should be explored to determine whether the findings from this study reflect the realities of different platforms. While Twitter and Snapchat are not known to employ social context cues in the same manner as Facebook, it is possible that social impact is manifested in some other manner. Future research should seek to better understand these advertising platforms and how social impact is utilized within them.

While this study explored the relation between advertising attitude and social media sharing intentions, it did not explore the possible relation between brand attitudes and purchase intentions on social sharing. It is possible that brand attitude plays a mediational role between advertising attitude and social sharing. In addition, purchase intentions may be predictive of sharing intentions, as well, as purchase intentions may suggest a willingness to engage in other brand-positive behaviors. As such, future research should seek to better understand the role these concepts play in the social media environment.

Future research should also seek to more carefully and completely define the forces of social impact within online and social media contexts. As studies have consistently found evidence of social impact within online environments, though the conceptualizations of the individual forces have varied widely, it is apparent that how social impact is manifested within online and social media contexts is not clear. Research is needed to more effectively define and examine the individual forces of social impact in online settings. Attention should be given to particular online contexts, such as social media, online forums, and interactions with ecommerce sites.

Future research should continue to explore the role online social capital plays in the formation of offline social capital, as well as the role offline actions play in the formation of online social capital. This study seems to suggest Facebook social capital predicted purchase intentions for products that did not necessarily need to be purchased in an online environment. As such, the findings suggest online social capital, in particular social media social capital, may play a predictive role in day-to-day decision making outside of the online environment. For example, the purchase of a new garment or the

selection of a leisure activity might be as much motivated by the potential social capital gained when that purchase or activity is shared on Facebook as other motivating factors typically associated with purchase intentions. Future research should seek to understand just how important the social utility of non-mediated activities is in motivating actions, both consumer and non-consumer. It is not unreasonable to suggest that social media use and online social capital would predict menu item selection, given the frequency with which restaurant patrons produce mobile phones to snap pictures of their entrée at dining establishments. Are there differences in the social value of different purchases and different product categories? How much does social capital predict major purchases, such as a vehicle or house, versus minor purchases, such as meals? Future research should seek to answer these questions.

Future research should also seek to better understand the relation between social capital and social norms. While social capital reflects social norms – in particular norms of reciprocity – it is expected that the two concepts are independent constructs. However, their relation, especially in terms of decision-making processes, should be explored. While this study suggested social capital plays a moderating role between attitudes and behavioral intentions, it did not explore the role of social capital in the relation between social norms and behavioral intentions. It is not clear if social capital is interchangeable with social norms in the reasoned action model, if social capital acts on social norms in a similar manner to the relation between attitudes and behaviors, or if social capital is another force in the reasoned action model, altogether. In addition, future research should seek to understand if the role of social capital is context specific, paying particular attention to online versus offline decision-making. As previously mentioned, the relation

between online and offline social capital merits further research. Efforts should be made to better understand the distinction between both types of social capital in the reasoned action model, as well as other models of decision-making and social influence.

Conclusion

As social media advertising continues to grow both in terms of overall advertising revenue and as a cultural phenomenon, understanding how social media networks deploy online advertising will become increasingly important. While the implications of using social media data to more effectively target advertisements warrants close inspection, it is also important to examine how social media data can influence the content of the advertisements, themselves. The purpose of this dissertation was to better understand how social context cues in Facebook influence brand attitudes and social sharing. This study determined that while individual differences in the nature of social context cues – specifically differences in the strength of social tie connections and the overall number of connections – did not impact the social influence of the advertisement on brand attitudes and subsequent purchase intentions, the mere presence of social context information did influence brand attitudes. Furthermore, bridging social capital moderated the relations between advertisement attitudes and social media sharing, and brand attitudes and purchase intentions. Simply put, this study demonstrated that social context cues in social media advertisements do exert social influence on brand attitudes, and an individual's trust in their network determines their intentions to take brand actions.

APPENDIX A

FIGURES

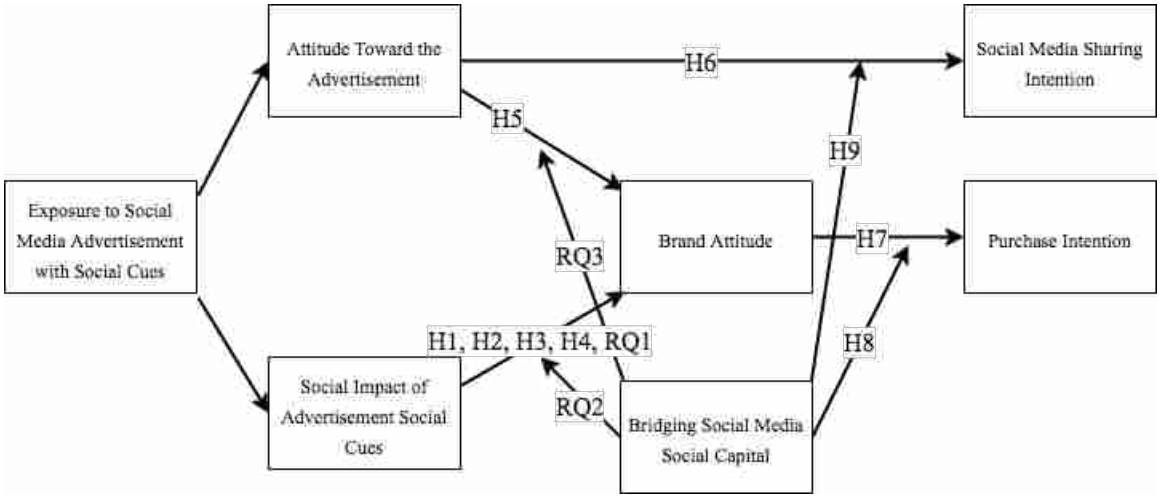

Figure 2.1. Conceptual model presenting hypothesized relations between exposure to social media advertising with social cues, brand attitude, social media sharing intention, and purchase intention.

Figure 3.1. Sample of experimental stimulus with high tie strength, high number social context cue. This layout was repeated for the other brands included in the study: Sense and Reebok.

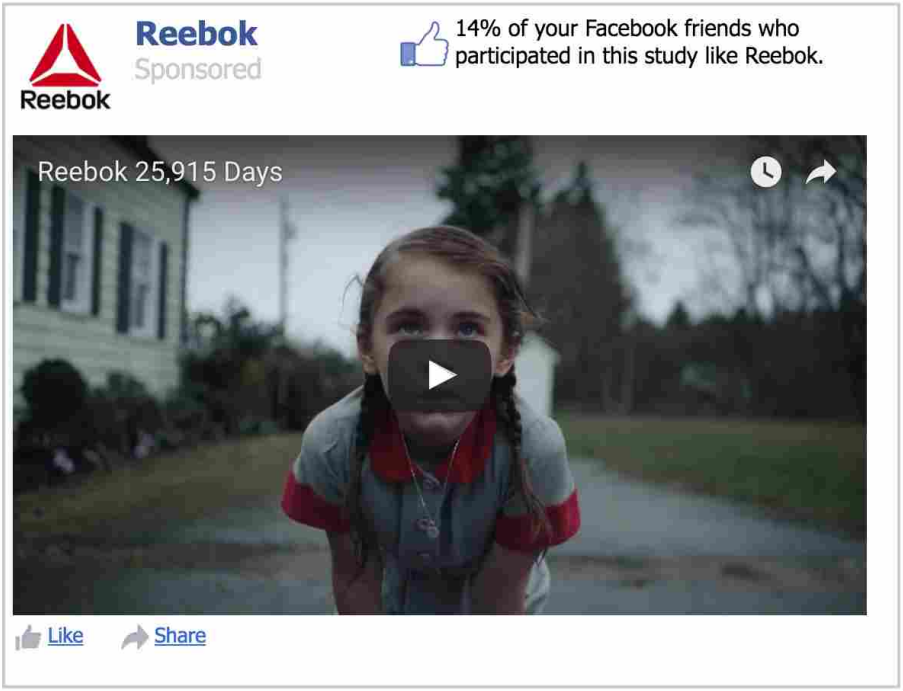

Figure 3.2. Sample of experimental stimulus with high tie strength, low number social context cue. This layout was repeated for the other brands included in the study: Sense and Temptations.

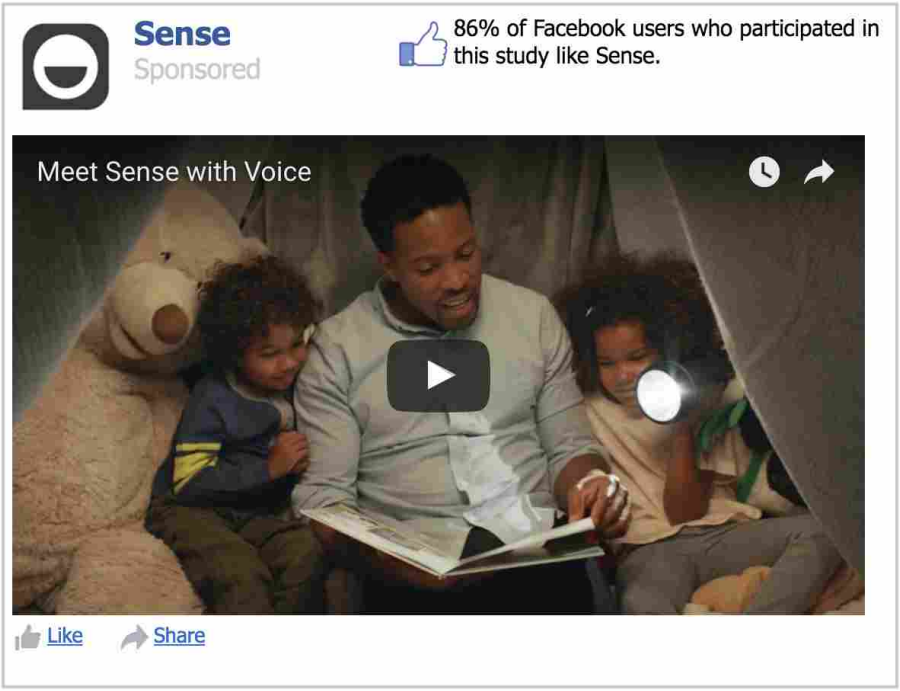

Figure 3.3. Sample of experimental stimulus with low tie strength, high number social context cue. This layout was repeated for the other brands included in the study: Temptations and Reebok.

Figure 3.4. Sample of experimental stimulus with low tie strength, low number social context cue. This layout was repeated for the other brands included in the study: Sense and Reebok.

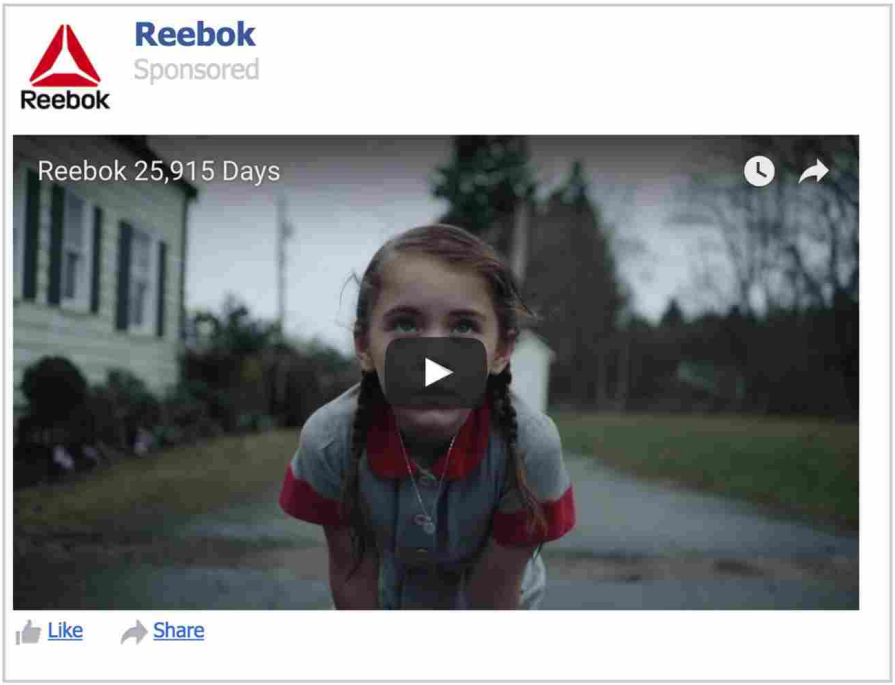

Figure 3.5. Sample of experimental stimulus control, which contains no social context cue. This layout was repeated for the other brands included in the study: Sense and Temptations.

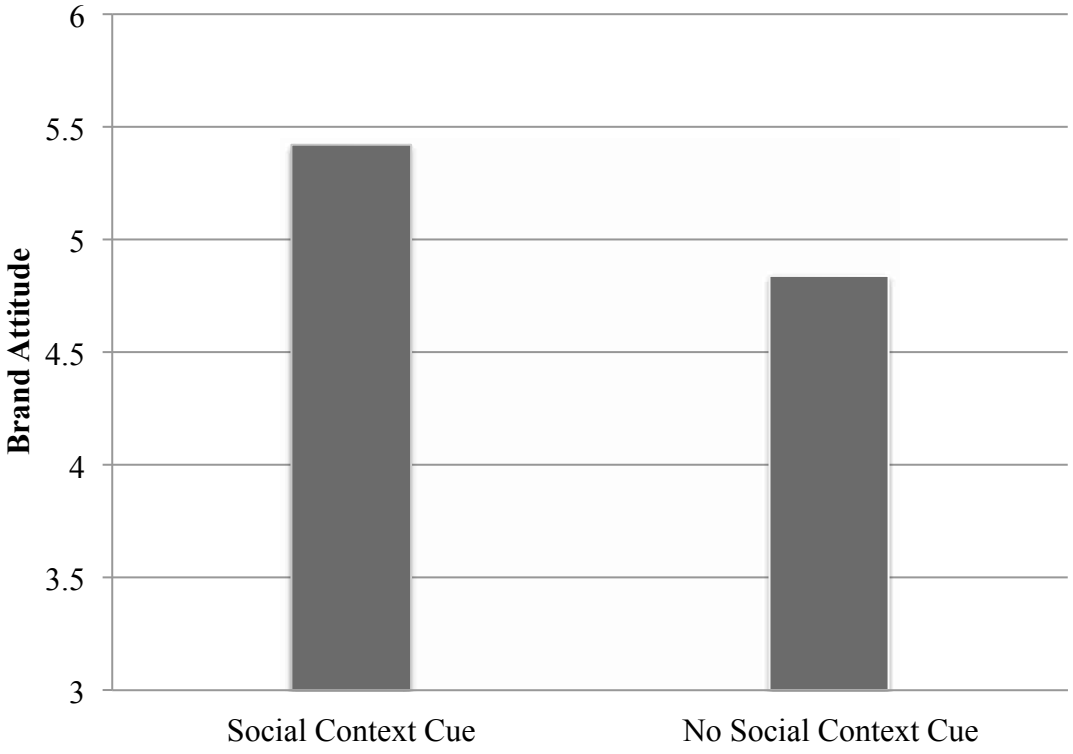

Figure 4.1. Graph depicting the mean difference of brand attitude between those viewing a Facebook advertisement with a social context cue and those viewing a Facebook advertisement with no social context cue.

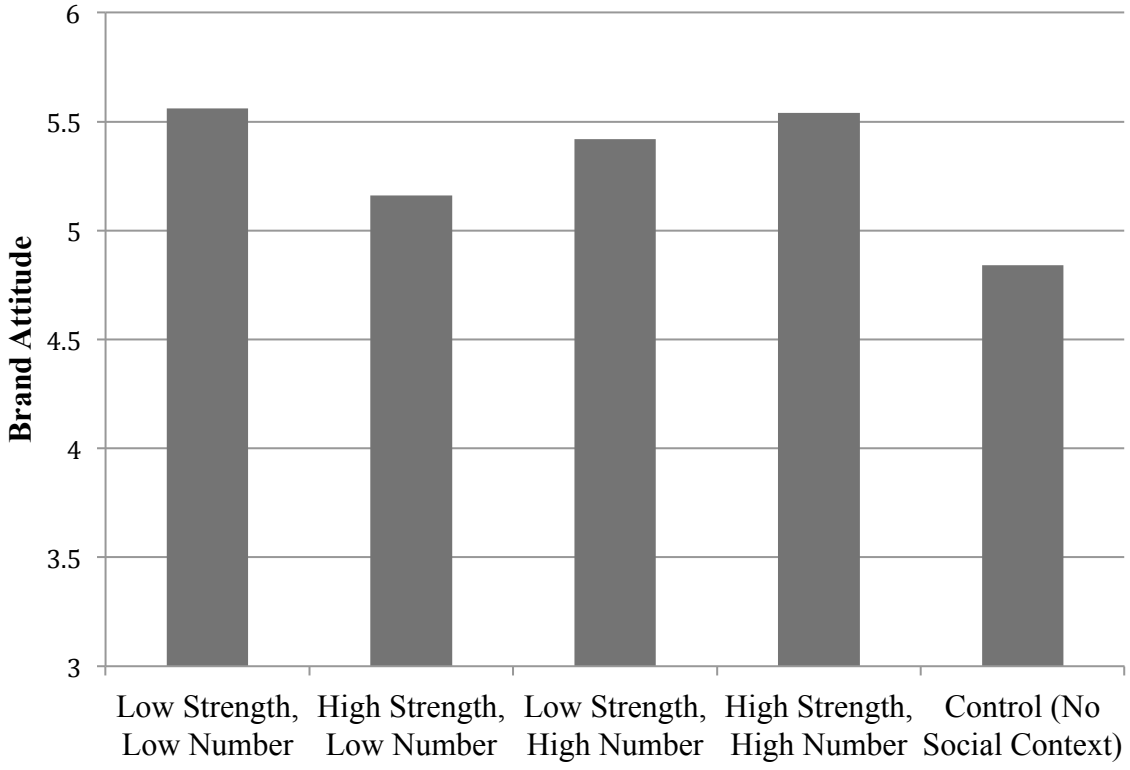

Figure 4.2. Graph depicting the mean difference of brand attitude between each experimental condition including the control condition.

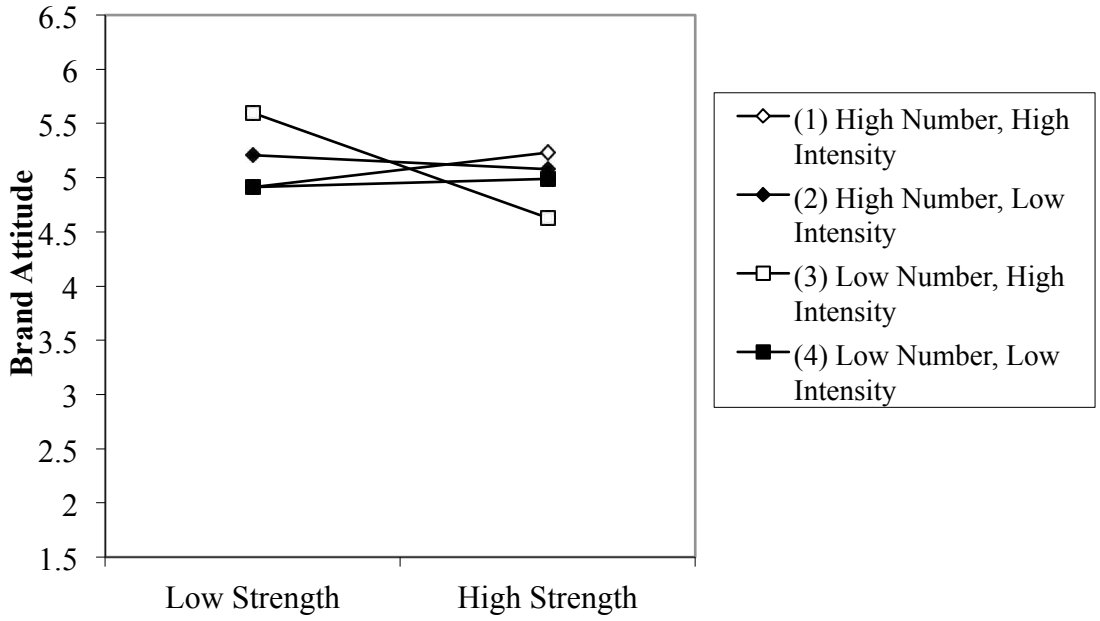

Figure 4.3. Graph depicting the interaction between tie strength, tie number, and Facebook intensity predicting Brand Attitude. The introduction of the interactions in the regression model was not statistically significant.

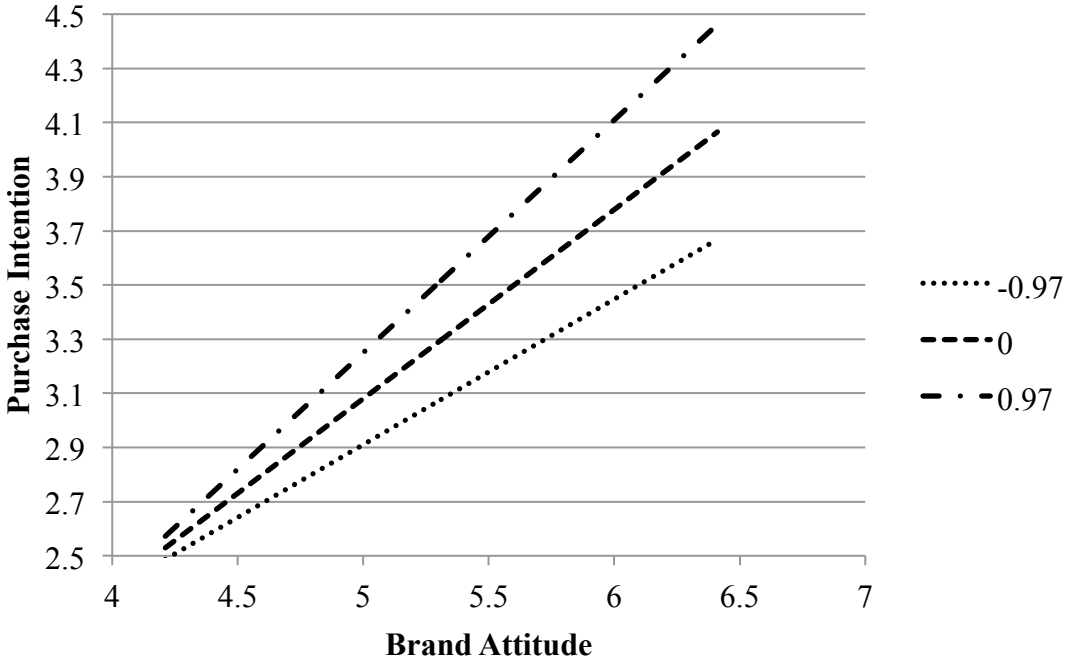

Figure 4.4. Graph depicting conditional effects of brand attitude on purchase intention at different levels of bridging social capital. Effects are depicted at one SD below the mean, at the mean, and one SD above the mean.

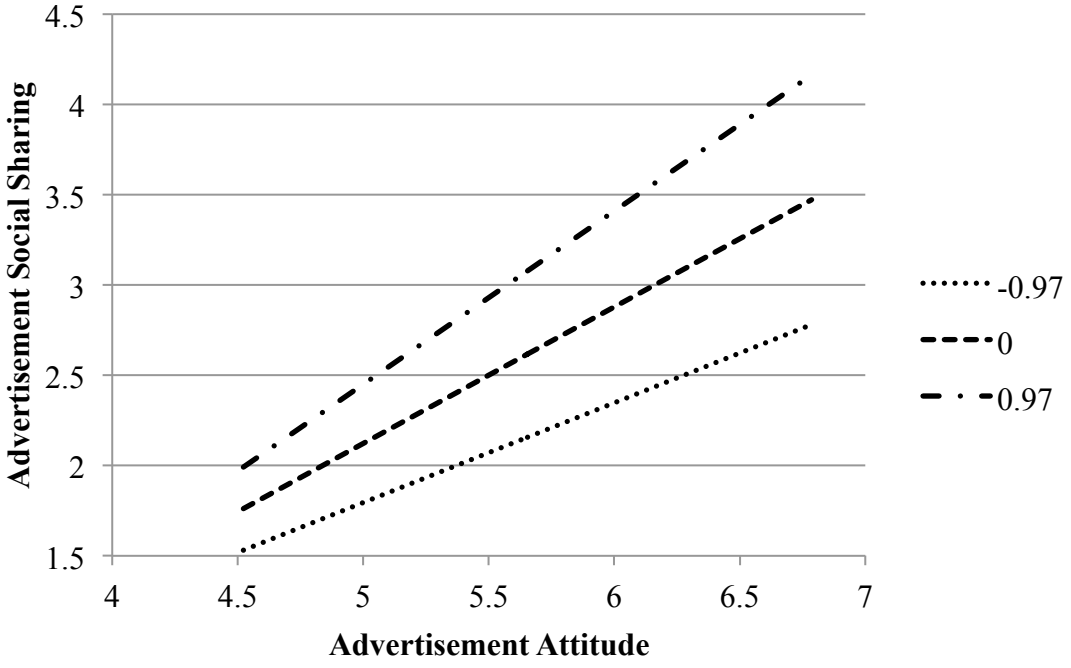

Figure 4.5. Graph depicting conditional effects of advertisement attitude on advertisement social sharing at different levels of bridging social capital. Effects are depicted at one SD below the mean, at the mean, and one SD above the mean.

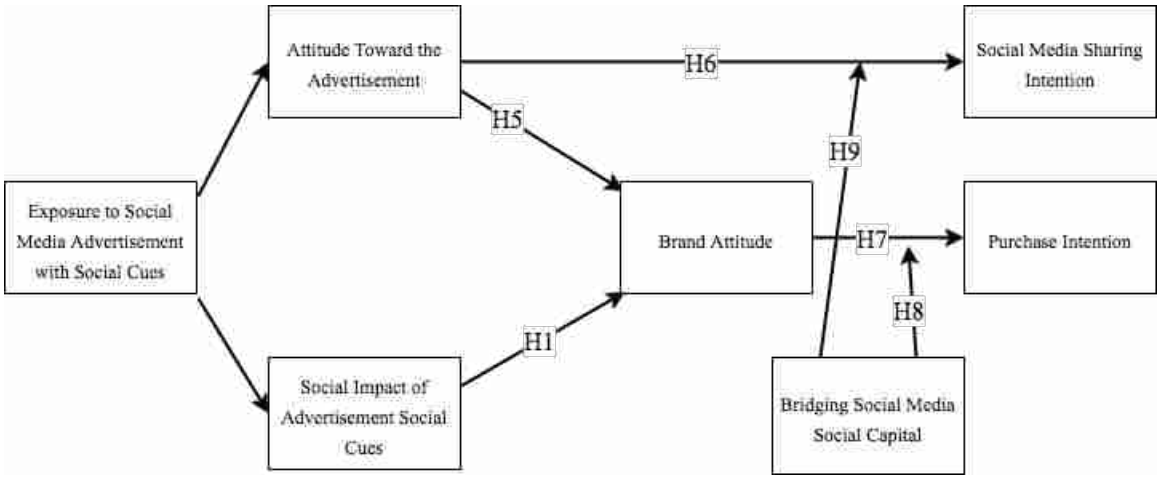

Figure 4.6. Model presenting supported hypothesized relations between exposure to social media advertising with social cues, brand attitude, social media sharing intention, and purchase intention.

APPENDIX B

TABLES

Table 3.1. Stimulus Videos from the Pretest

Brand	*Video URL*	*Duration*	*Summary*	*Approx. Views*
Temptations* "Keep Them Busy"	https://www.youtube.com/watch?v=WeZ9g4TXylk	1:15	Advertisement featuring domesticated cats destroying a Christmas scene, who are then distracted by cat treats. Includes the slogan, "Keep them busy this holiday season."	160 thousand
Reebok* "25,915 Days"	https://www.youtube.com/watch?v=bcJGh32e2Mw	1:16	Advertisement depicting women engaged in physical activities at different ages and in different life stages. The advertisement is promoting athletic shoes.	1.4 million
Sense* "Meet Sense with Voice"	https://www.youtube.com/watch?v=Ru1jZT5042M	1:34	Advertisement for a sleep monitor, depicting individuals struggling with the effects of sleep deprivation who then find more energy and success after using the sleep monitor.	3,200
DriFit "Lilly's Story"	https://www.youtube.com/watch?v=IBCrJEV-Fyg	1:36	Advertisement depicting a woman and her father at different life stages, with her father providing support as she needs protection provided by different hygienic products.	3.3 million

Table 3.1. (continued).

Brand	*Video URL*	*Duration*	*Summary*	*Approx. Views*
VitaFusion "Indoor People Try Spending a Day Outside"	https://www.youtube.com/watch?v=2EdjPrsOGAQ	3:23	Video depicts people who prefer to spend time indoors agreeing to participate in outdoor activities. VitaFusion's slogan is "healthy doesn't have to be hard."	1.7 million
Purina "Puppyhood"	https://www.youtube.com/watch?v=L3MtFGWRXAA	3:34	Advertisement for puppy chow depicting a young man adjusting to life with a new puppy.	14.2 million
FiberFix "Tape as Strong as Steel"	https://www.youtube.com/watch?v=haPvuhznuyI	4:58	Advertising video for FiberFix, a powerful tape product. Depicts the product being used in different contexts. It is the "manly solution to manly problems," and its slogan is "tape as strong as steel."	2 million
Momondo "The DNA Journey"	https://www.youtube.com/watch?v=tyaEQEmt5ls	5:16	Advertisement for a DNA testing service. Depicts people discussing their heritage and pride in their nation of origin as well as prejudices towards other nations. Participants then take a DNA test, and their actual origins are revealed, challenging preconceived notions.	9 million

Note. * = Videos selected to be included in the final experiment. Approx. = Approximate. Approximate views are representative of view counts as of the pretest conducted in November of 2016.

Table 3.2. Results of Social Sharing Scales for Pretest Stimulus Videos

	Social Sharing Scale		*Like on Facebook*		*Share on Facebook*		*Send in PM on Facebook*	
	M	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*
Temptations*	2.46	1.81	3.07	2.05	2.30	1.88	2.58	1.93
Reebok*	2.67	1.71	3.71	2.09	2.51	1.73	2.62	2.03
Sense*	2.52	1.67	3.18	2.18	2.20	1.77	2.52	1.84
DriFit	1.63	0.78	2.12	1.58	1.42	0.73	1.70	1.08
VitaFusion	1.96	1.21	2.55	1.76	1.77	1.12	1.82	1.19
Purina	3.40	2.02	4.44	2.22	3.33	2.28	3.47	2.24
FiberFix	1.84	1.19	2.18	1.90	1.60	1.01	1.98	1.57
Momondo	4.11	2.09	5.17	2.31	4.19	2.22	4.00	2.30

Note. * = Videos selected to be included in the final experiment.

Table 4.1. Demographic Breakdown of Study Participants (*N* = 214)

Average Age = 21.5 (*SD* = 2.46)

Gender	*N*	*Percent*
Male	95	44.4
Female	119	55.6
Race		
Hispanic or Latino	17	7.9
Black of African American	2	0.9
Asian	48	22.4
Native Hawaiian or Other Pacific Islander	6	2.8
Middle Eastern	5	2.3
American Indian or Alaska Native	1	0.5
White	135	63.1

Table 4.2. Univariate Outliers by Variable ($N = 214$)

Variable	*Case #*	*Z-Score*
Social Capital	174	-3.14
Advertisement Attitude	31	-3.81
Advertisement Attitude	115	-3.67
Brand Attitude	115	-3.62
Brand Sharing	42	3.93
Brand Sharing	179	3.93
Facebook Intensity	174	3.89
Facebook Intensity	42	5.75

Table 4.3. Descriptive Statistics for Measured Variables and Items ($N = 211$)

Variable	*Item*	*M*	*SD*	α
Social Capital - Bridging		4.12	.97	.85
	Interacting with people on Facebook makes me interested in things that happen outside of my town.	5.12	1.38	
	Interacting with people on Facebook makes me want to try new things.	4.28	1.53	
	Talking with people on Facebook makes me curious about other places in the world.	4.54	1.57	
	Interacting with people on Facebook makes me interested in what people unlike me are thinking.	4.21	1.61	
	Interacting with people on Facebook makes me feel like part of a larger community.	4.25	1.40	
	Interacting with people on Facebook makes me feel connected to the bigger picture.	4.17	1.52	
	Interacting with people on Facebook a reminds me that everyone in the world is connected.	4.93	1.44	
	I am willing to spend time to support general community activities on Facebook.	3.66	1.38	
	Interacting with people on Facebook gives me new people to talk to.	3.16	1.37	
	On Facebook, I come in contact with new people all the time.	2.92	1.46	
Video Familiarity	Prior to viewing the video during this study, about how many times have you seen this video before?	1.19	.55	
Social Media Privacy	Thinking about my privacy, I feel this advertisement was very invasive / not at all invasive.	5.92	1.49	
Advertisement Attitude	*I feel this advertisement was …*	5.65	1.13	.92
	Unpleasant / Pleasant	5.96	1.19	
	Unlikeable / Likeable	5.96	1.21	
	Boring / Interesting	5.45	1.52	

Table 4.3. (continued).

Variable	*Item*	*M*	*SD*	α
Advertisement Attitude	(continued)			
	Tasteless / Tasteful	5.49	1.40	
	Artless / Artful	5.37	1.38	
	Bad / Good	5.70	1.29	
Brand Attitude	*I feel that [Brand] is …*	5.31	1.10	.88
	Bad / Good	5.45	1.24	
	Very Dislikeable / Very Likeable	5.31	1.18	
	Pleasant / Unpleasant[+]	4.91	1.68	
	Poor Quality / High Quality	5.17	1.27	
Purchase Intention		3.33	1.33	.79
	Regarding [Brand] I am not likely to buy / very likely to buy.	2.79	1.66	
	To purchase [Brand] would be foolish / wise.	3.87	1.23	
Advertisement Social Sharing	*I am likely to …*	2.64	1.53	.92
	pass-along this video to others on Facebook.	2.66	1.79	
	tell others about this video on Facebook.	2.74	1.77	
	talk about this video on Facebook.	2.17	1.54	
	like this video on Facebook.	3.49	2.24	
	share this video on Facebook.	2.23	1.65	
	send this video in a private message on Facebook.	2.56	1.77	
Facebook Intensity		1.31	1.08	
	About how many hours did you spend on Facebook yesterday?	1.21	1.09	
	About how many hours do you spend on Facebook on a typical day?	1.40	1.15	
Facebook Friends	How many friends do you have on Facebook?	844.73	552.80	

Note. [+] = Item eliminated from final scale. α = Cronbach's alpha.

Table 4.4. Factor Analysis for Advertisement Social Sharing Intention ($N = 211$)

Variables	*Factor Loadings*
I am likely to pass-along this video to others on Facebook.	.90
I am likely to tell others about this video on Facebook.	.91
I am likely to talk about this video on Facebook.	.88
I am likely to like this video on Facebook.	.83
I am likely to share this video on Facebook.	.84
I am likely to send this video in a private message on Facebook.	.76
Eigenvalue	4.40
Percentage of Variance Explained	73.28

Note: Factor loadings were considered significant at the .40 level.

Table 4.5. Summary of Hierarchical Regression of Main and Interaction Effects of Social Impact Variables Predicting Brand Attitude ($N = 169$)

	Step 1			*Step 2*			*Step 3*		
Variables	*B*	*SE B*	β	*B*	*SE B*	β	*B*	*SE B*	β
Controls									
Video is Reebok	.07	.19	.03	.07	.19	.03	.09	.19	.04
Video is Sense	.60	.19	.27**	.60	.19	.28**	.62	.19	.28**
Video Familiarity	.11	.13	.06	.10	.14	.06	.11	.14	.06
Main Effects									
Tie Strength				-.15	.16	-.07	-.45	.22	-.22*
Tie Number				.10	.16	.05	-.19	.21	-.09
Facebook Intensity				.02	.08	.02	.36	.19	.33
Interactions									
Strength x Number							.54	.31	.23
Strength x Intensity							-.56	.28	-.36*
Number x Intensity							-.50	.24	-.37*
Strength x Number x Intensity							.79	.34	.42*

Note. $^{*}p < .05$, $^{**}p < .01$
Step 1: $R^2 = .07$, $F\ (3, 165) = 4.07$, $p < .01$.
Step 2: $\Delta R^2 = .01$, $\Delta F\ (3, 162) = .46$, $p > .05$.
Step 3: $\Delta R^2 = .05$, $\Delta F\ (4, 158) = 2.16$, $p > .05$.

Table 4.6. Pearson Correlations of Independent and Dependent Variables ($N = 211$)

Variables	1.	2.	3.	4.	5.	6.	7.	8.	9.
1. Video is Reebok	1								
2. Video is Sense	-.51^{+}								
3. Video Familiarity	-.14*	-.04							
4. Facebook Intensity	.04	.01	.03						
5. Social Impact	.01	-.03	.09	-.13					
6. Bridging Social Capital	.02	-.01	.02	.31^{+}	.00				
7. Advertisement Attitude	.21**	.06	.03	.09	.11	.11			
8. Advertisement Social Sharing	-.01	.08	.09	.19**	.03	.37^{+}	.55^{+}		
9. Brand Attitude	-.11	.24^{+}	.05	.06	.21**	.19**	.58^{+}	.43^{+}	
10. Purchase Intention	-.14*	.21**	-.03	.05	.02	.26^{+}	.31^{+}	.46^{+}	.58^{+}

Note. $^{*}p < .05$, $^{**}p < .01$, $^{+}p < .001$.

Table 4.7. Summary of Hierarchical Regression of Advertisement Attitude Predicting Brand Attitude ($N = 211$)

	Step 1			*Step 2*			*Step 3*		
Variables	*B*	*SE B*	β	*B*	*SE B*	β	*B*	*SE B*	β
Controls									
Video is Reebok	.07	.18	.03	.05	.18	.02	-.41	.15	-.18**
Video is Sense	.60	.18	.26**	.61	.18	.26**	.28	.15	.12
Video Familiarity	.14	.14	.07	.09	.13	.04	.001	.11	.001
Independent Variables									
Facebook Intensity				.03	.07	.03	-.01	.06	-.01
Social Impact				.61	.18	.22**	.42	.15	.16**
Bridging Social Capital				.21	.08	.19**	.16	.06	.14*
Advertisement Attitude							.56	.05	.58+

Note. * $p < .05$, ** $p < .01$, + $p < .001$.
Step 1: $R^2 = .06$, F (3, 207) = 4.51, $p < .01$.
Step 2: $\Delta R^2 = .09$, ΔF (3, 204) = 6.79, $p < .001$.
Step 3: $\Delta R^2 = .30$, ΔF (1, 203) = 107.98, $p < .001$.

Table 4.8. Summary of Hierarchical Regression of Advertisement Attitude Predicting Advertisement Social Sharing ($N = 211$)

	Step 1			*Step 2*			*Step 3*		
Variables	*B*	*SE B*	β	*B*	*SE B*	β	*B*	*SE B*	β
Controls									
Video is Reebok	.22	.26	.07	.17	.24	.05	-.42	.21	-.13*
Video is Sense	.39	.26	.12	.38	.25	.12	-.05	.21	-.02
Video Familiarity	.28	.19	.10	.24	.18	.09	.13	.15	.05
Independent Variables									
Facebook Intensity				.11	.10	.08	.06	.08	.04
Social Impact				.14	.25	.04	-.10	.21	-.03
Bridging Social Capital				.55	.11	.35+	.48	.09	.30+
Advertisement Attitude							.74	.08	.55+

Note. $^{*}p < .05$, $^{+}p < .001$.
Step 1: $R^2 = .02$, F (3, 207) = 1.27, $p > .05$.
Step 2: $\Delta R^2 = .14$, ΔF (3, 204) = 11.53, $p < .001$.
Step 3: $\Delta R^2 = .26$, ΔF (1, 203) = 92.65, $p < .001$.

Table 4.9. Summary of Hierarchical Regression of Brand Attitude Predicting Purchase Intention ($N = 211$)

	Step 1			*Step 2*			*Step 3*		
Variables	*B*	*SE B*	β	*B*	*SE B*	β	*B*	*SE B*	β
Controls									
Video is Reebok	-.13	.22	-.05	-.44	.22	-.16*	-.16	.19	-.06
Video is Sense	.52	.22	.19*	.31	.21	.11	.12	.19	.04
Video Familiarity	-.03	.17	-.03	-.15	.15	-.06	-.15	.14	-.06
Independent Variables									
Facebook Intensity				-.07	.08	-.05	-.06	.07	-.05
Social Impact				-.05	.21	-.01	-.34	.19	-.10
Bridging Social Capital				.34	.09	.24+	.23	.08	.17**
Advertisement Attitude				.37	.08	.32+	-.02	.09	-.02
Brand Attitude							.69	.09	.57+

Note. *$p < .05$, **$p < .01$, +$p < .001$.
Step 1: $R^2 = .05$, F (3, 207) = 3.36, $p < .05$.
Step 2: $\Delta R^2 = .16$, ΔF (4, 204) = 9.99, $p < .001$.
Step 3: $\Delta R^2 = .18$, ΔF (1, 202) = 59.56, $p < .001$.

Table 4.10. Summary of Regression of Brand Attitude Predicting Purchase Intention Moderated by Bridging Social Capital ($N = 211$)

Variables	β	*SE*	*95% CI*	
Covariates				
Facebook Intensity	-.08	.07	-.226,	.059
Social Impact	-.33	.19	-.706,	.038
Advertisement Attitude	-.03	.08	-.194,	.139
Video is Reebok	-.12	.19	-.499,	.260
Video is Sense	.15	.19	-.218,	.520
Video Familiarity	-.17	.13	-.433,	.099
Interaction				
Bridging Social Capital	.23**	.08	.069,	.387
Brand Attitude	.70+	.09	.524,	.873
Brand Attitude x Bridging Social Capital	.17*	.07	.020,	.313

Note. $^{*}p < .05$, $^{**}p < .01$, $^{+}p < .001$.
$R^2 = .40$, $F(9, 201) = 14.87$, $p < .001$.

Table 4.11. Conditional Effects of Brand Attitude on Purchase Intention Moderated by Bridging Social Capital ($N = 211$)

Bridging Social Capital	β	*SE*	*95% CI*	
One SD Below Mean (-.97)	.54[+]	.11	.318,	.757
At the Mean (.00)	.70[+]	.09	.524,	.873
One SD Above Mean (.97)	.86[+]	.12	.630,	1.09

Note. [+]$p < .001$.

Table 4.12. Summary of Regression of Advertisement Attitude Predicting Advertisement Social Sharing Moderated by Bridging Social Capital ($N = 211$)

Variables	β	*SE*	*95% CI*	
Covariates				
Facebook Intensity	.03	.08	-.129,	.188
Social Impact	-.13	.21	-.540,	.273
Video is Reebok	-.44*	.21	-.854,	-.029
Video is Sense	-.05	.21	-.458,	.353
Video Familiarity	.11	.15	-.188,	.403
Interaction				
Bridging Social Capital	.48+	.09	.303,	.651
Advertisement Attitude	.76+	.08	.606,	.907
Advertisement Attitude x Bridging Social Capital	.21*	.09	.038,	.384

Note. $^{*}p < .05$, $^{+}p < .001$.
$R^2 = .44$, $F(8, 202) = 19.80$, $p < .001$.

Table 4.13. Conditional Effects of Advertisement Attitude on Advertisement Social Sharing Moderated by Bridging Social Capital ($N = 211$)

Bridging Social Capital	β	*SE*	*95% CI*	
One SD Below Mean (-.97)	.55^{+}	.11	.339,	.766
At the Mean (.00)	.76^{+}	.08	.606,	.907
One SD Above Mean (.97)	.96^{+}	.12	.725,	1.20

Note. $^{+}p < .001$.

Table 4.14. Summary of Regression of Social Impact Predicting Brand Attitude Moderated by Bridging Social Capital ($N = 211$)

Variables	β	*SE*	*95% CI*	
Covariates				
Facebook Intensity	-.02	.06	-.134,	.095
Advertisement Attitude	.57^{+}	.05	.459,	.673
Video is Reebok	-.41**	.15	-.703,	-.113
Video is Sense	.28	.15	-.007,	.573
Video Familiarity	.01	.11	-.201,	.223
Interaction				
Bridging Social Capital	.16*	.06	.031,	.280
Social Impact	.42**	.15	.129,	.710
Social Impact x Bridging Social Capital	-.11	.14	-.395,	.168

Note. $^{*}p < .05$, $^{**}p < .01$, $^{+}p < .001$.
$R^2 = .44$, $F(8, 202) = 20.22$, $p < .001$.

Table 4.15. Summary of Regression of Advertisement Attitude Predicting Brand Attitude Moderated by Bridging Social Capital ($N = 211$)

Variables	β	*SE*	*95% CI*	
Covariates				
Facebook Intensity	-.02	.06	-.132,	.095
Social Impact	.41**	.15	.124,	.705
Video is Reebok	-.41**	.15	-.707,	-.117
Video is Sense	.28	.15	-.010,	.569
Video Familiarity	-.01	.11	-.216,	.206
Interaction				
Bridging Social Capital	.16*	.06	.034,	.282
Advertisement Attitude	.57+	.05	.461,	.675
Advertisement Attitude x Bridging Social Capital	.06	.06	-.063,	.184

Note. $^{*}p < .05$, $^{**}p < .01$, $^{+}p < .001$.
$R^2 = .45$, $F(8, 202) = 20.28$, $p < .001$.

Table 4.16. Hypotheses and Research Question Conclusions

Hypotheses & Research Questions		*Conclusion*
H1:	The presence of social cues in Facebook advertisements leads to positive brand attitudes.	Supported
H2:	Stronger network ties in social context cues in Facebook advertisements lead to more positive brand attitudes.	Not Supported
H3:	Greater numbers in social context cues in Facebook advertisements lead to more positive brand attitudes.	Not Supported
H4:	Higher intensity Facebook users have more positive brand attitudes of Facebook advertisements containing social cues.	Not Supported
H5:	Positive advertising attitude predicts positive brand attitude.	Supported
H6:	Positive advertising attitude predicts social media sharing of the advertisement.	Supported
H7:	Positive brand attitude predicts purchase intention.	Supported
H8:	Bridging social capital positively moderates the relation between brand attitude and purchase intention for Facebook advertisements with social cues.	Supported
H9:	Bridging social capital positively moderates the relation between advertising attitude and social sharing intention for Facebook advertisements with social cues.	Supported
RQ1:	Is there an interaction between network tie strength, number, and intensity exerting influence on brand attitudes in Facebook advertisements containing social cues?	There does not appear to be an interaction; results were marginal, at best.
RQ2:	Does bridging social capital moderate the relation between advertising social impact and brand attitude for Facebook advertisements with social cues?	Bridging social capital does not appear to moderate this relation.
RQ3:	Does bridging social capital moderate the relation between advertising attitude and brand attitude for Facebook advertisements with social cues?	Bridging social capital does not appear to moderate this relation.

APPENDIX C

STUDY MEASURES

Bridging Social Capital

Measured on seven-point, Likert scales ranging from "strongly disagree" to "strongly agree."

1. Interacting with people on Facebook makes me interested in things that happen outside of my town.
2. Interacting with people on Facebook makes me want to try new things.
3. Interacting with people on Facebook makes me interested in what people unlike me are thinking.
4. Talking with people on Facebook makes me curious about other places in the world.
5. Interacting with people on Facebook makes me feel like part of a larger community.
6. Interacting with people on Facebook makes me feel connected to the bigger picture.
7. Interacting with people on Facebook a reminds me that everyone in the world is connected.
8. I am willing to spend time to support general community activities on Facebook.
9. Interacting with people on Facebook gives me new people to talk to.
10. On Facebook, I come in contact with new people all the time.

Video Familiarity

Prior to viewing the video during this study, about how many times have you seen this video before?

1. Never
2. Once
3. Several Times
4. Many Times

Privacy

Measured on a seven-point, semantic differential scale.

Thinking about my privacy, I feel this advertisement was …

1. very invasive / not at all invasive

Advertising Attitude

Measured on a seven-point, semantic differential scale.

I feel this advertisement was …

1. unpleasant / pleasant
2. unlikable / likeable
3. boring / interesting
4. tasteless / tasteful
5. artless / artful
6. bad / good

Brand Attitude

Measured on a seven-point, semantic differential scale.

I feel that [brand name] is …

1. bad / good
2. very dislikable / very likeable
3. pleasant / unpleasant *
4. poor quality / high quality

* Recoded for analysis

Purchase Intention

Measured on a seven-point, semantic differential scale.

1. Regarding [product name] I am … not likely to buy / very likely to buy.
2. To purchase [product name] would be … foolish / wise.

Sharing Intention

Measured on a seven-point, Likert scales ranging from "strongly disagree" to "strongly agree."

I am likely to …

1. pass-along this video to others on Facebook.
2. tell others about this video on Facebook.
3. talk about this video on Facebook.
4. like this video on Facebook.
5. share this video on Facebook.

6. send this video in a private message on Facebook.

Facebook Intensity

Measured by numeric entry.

1. How many hours did you spend on Facebook yesterday?
2. How many hours do you spend on Facebook on a typical day?
3. How many friends do you have on Facebook?

Demographics

1. What is your age?
2. What is your gender?

   Male / Female / Other
3. What is your ethnic background?

   Hispanic or Latino / Black or African American / Asian / Native Hawaiian or Other Pacific Islander / Middle Eastern / American Indian or Alaska Native / White

REFERENCES CITED

Adler, P. S., & Kwon, S. (2016). Social capital: Prospects for a new concept. *Academy of Management Review*, *27*(1), 17–40. doi:10.5465/AMR.2002.5922314

Ajzen, I., & Fishbein, M. (1980). *Understanding attitudes and predicting social behavior*. New Jersey: Prentice-Hall.

An update to Facebook ads. (2014, January 9). Retrieved from https://www.facebook.com/notes/facebook-and-privacy/an-update-to-facebook-ads/643198592396693/

Anderson, B. L. R., Mellor, J. M., & Milyo, J. (2004). Social capital and contributions in a public-goods experiment. *The American Economic Review*, *94*(2), 373–376.

Argo, J. J., Dahl, D. W., & Manchanda, R. V. (2012). The influence of a mere social presence in a retail context. *Journal of Consumer Research*, *32*(2), 207–212. doi:10.1086/432230

Aronson, E., Wilson, T. D., Akert, R. M., & Sommers, S. R. (2015). *Social Psychology* (Ninth Edit.). Boston: Pearson.

Babbie, E. (2013). *The Practice of Social Research* (13th ed.). Belmont, CA: Wadsworth.

Bakshy, E., Eckles, D., Yan, R., & Rosenn, I. (2012). Social influence in social advertising: evidence from field experiments. *Proceedings of the 13th ACM Conference on Electronic Commerce*, *1*(212), 146–161. doi:10.1145/2229012.2229027

Batra, R., & Ray, M. L. (1986). Affective acceptance responses of mediating advertising. *Journal of Consumer Research*, *13*(2), 234–249. doi:10.1086/209063

Beyens, I., Frison, E., & Eggermont, S. (2016). "I don't want to miss a thing": Adolescents' fear of missing out and its relationship to adolescents' social needs, Facebook use, and Facebook related stress. *Computers in Human Behavior*, *64*, 1–8.

Bourdieu, P., & Wacquant, L. J. D. (1992). *An invitation to reflexive sociology*. Chicago: University of Chicago Press.

Branscombe, N. R., Spears, R., Ellemers, N., & Doosje, B. (2012). Intragroup and Intergroup Evaluation Effects on Group Behavior. *Personality & Social Psychology Bulletin*, *28*(6), 744–753. doi:10.1177/0146167202289004

Brown, M. R., Bhadury, R. K., & Pope, N. K. L. (2010). The Impact of Comedic Violence on Viral Advertising Effectiveness. *Journal of Advertising*, *39*(1), 49–66. doi:10.2753/JOA0091-3367390104

Burke, M., & Kraut, R. (2013). Using Facebook after losing a job: Differential benefits of strong and weak ties. *Proceedings of the 2013 Conference on Computer Supported Cooperative Work*, 1419–1430. doi:10.1145/2441776.2441936

Burke, M., Kraut, R., & Marlow, C. (2011). Social capital on Facebook: Differentiating uses and users. In *Proceedings of the SIGCHI conference on human factors in computing systems* (pp. 571–580). doi:10.1145/1978942.1979023

Burke, M., Marlow, C., & Lento, T. (2010). Social network activity and social well-being. *Proceedings of the 28th International Conference on Human Factors in Computing Systems - CHI '10*, 1909–1912. doi:10.1145/1753326.1753613

Burt, R. S. (1999). The social capital of opinion leaders. *Annals of the American Academy of Political and Social Science*, *566*, 37.

Cacioppo, J. T., & Petty, R. E. (1982). The need for cognition. *Journal of Personality and Social Psychology*, *42*(1), 116–131.

Chan, K. W., & Li, S. Y. (2010). Understanding consumer-to-consumer interactions in virtual communities: The salience of reciprocity. *Journal of Business Research*, *63*(9–10), 1033–1040. doi:10.1016/j.jbusres.2008.08.009

Chandrasekhar, S. (2017, March 21). Is there no end to Google's and Facebook's ad revenue growth momentum? Retrieved from http://1reddrop.com/2017/03/21/no-end-google-facebook-ad-revenue-growth-momentum/

Chang, Y. P., & Zhu, D. H. (2012). The role of perceived social capital and flow experience in building users' continuance intention to social networking sites in China. *Computers in Human Behavior*, *28*(3), 995–1001. doi:10.1016/j.chb.2012.01.001

Chiu, C. M., Hsu, M. H., & Wang, E. T. G. (2006). Understanding knowledge sharing in virtual communities: An integration of social capital and social cognitive theories. *Decision Support Systems*, *42*(3), 1872–1888. doi:10.1016/j.dss.2006.04.001

Chu, S. C., & Kim, Y. (2011). Determinants of consumer engagement in electronic Word-Of-Mouth (eWOM) in social networking sites. *International Journal of Advertising*, *30*(1). doi:10.2501/IJA-30-1-047-075

Cialdini, R. B., & Goldstein, N. J. (2004). Social influence: compliance and conformity. *Annual Review of Psychology*, *55*(1974), 591–621. doi:10.1146/annurev.psych.55.090902.142015

Cialdini, R. B., & Trost, M. R. (1998). Social influence: Social norms, conformity and compliance. *The Handbook of Social Psychology, Vol. 2*. doi:10.2307/2654253

Cohen, J. B., Fishbein, M., & Ahtola, O. T. (1972). The Nature and Uses of Expectancy-Value Models in Consumer Attitude Research. *Journal of Marketing Research (JMR)*, *9*(November), 456–460. doi:10.1016/0167-8116(85)90021-7

Coleman, J. S. (1988). Social capital in the creation of human capital. *American Journal of Sociology*, *94*(1988), S95–S120. doi:10.1086/228943

comScore releases February 2016 U.S. desktop online video rankings. (2016, March 21). Retrieved from http://www.comscore.com/Insights/Rankings/comScore-Releases-February-2016-US-Desktop-Online-Video-Rankings

Digital ad spending to surpass TV next year. (2016, March 8). Retrieved from http://www.emarketer.com/Article/Digital-Ad-Spending-Surpass-TV-Next-Year/1013671

Dittes, J. E., & Kelley, H. H. (1956). Effects of different conditions of acceptance upon conformity to group norms. *Journal of Abnormal Psychology*, *53*(1), 100–107. doi:10.1037/h0047855

Edell, J. A., & Burke, M. C. (1987). Power of feelings effects in understanding advertising. *Journal of Consumer Research*, *14*(3), 421–433. doi:10.1086/209124

Ellison, N. B., Steinfield, C., & Lampe, C. (2007). The benefits of facebook "friends:" Social capital and college students' use of online social network sites. *Journal of Computer-Mediated Communication*, *12*(4), 1143–1168. doi:10.1111/j.1083-6101.2007.00367.x

Ellison, N. B., Steinfield, C., & Lampe, C. (2010). Connection Strategies: Social Capital Implications of Facebook-enabled Communication Practices. *New Media & Society*, *13*(6), 873–892. doi:10.1177/1461444810385389

Ellison, N. B., Vitak, J., Gray, R., & Lampe, C. (2014). Cultivating social resources on social network sites: Facebook relationship maintenance behaviors and their role in social capital processes. *Journal of Computer-Mediated Communication*, *19*(4), 855–870. doi:10.1111/jcc4.12078

Empson, R. (2013, April 30). Facebook, Google ad execs spar over the value of a click. Retrieved from https://techcrunch.com/2013/04/30/facebook-google-ad-execs-spar-over-the-value-of-a-click/

Fabrigar, L. R., Maccallum, R. C., Wegener, D. T., & Strahan, E. J. (1999). Evaluating the use of exploratory factor analysis in psychological research. *Psychological Methods*, *4*(3), 272–299. doi:10.1037/1082-989X.4.3.272

Feltham, T. S. (1994). Assessing viewer judgement of advertisements and vehicles: Scale development and validation. In C. T. Allen & D. R. John (Eds.), *Advances in Consumer Research* (Vol. 21, pp. 531–535). Provo, UT: Association for Consumer Research.

Fishbein, M. (1963). An investigation of the relationships between beliefs about an object and the attitude toward that object. *Human Relations*, *16*(3), 233–239. doi:10.1177/001872676301600302

Fishbein, M., & Ajzen, I. (1975). *Belief, attitude, intention, and behavior*. Reading, MA: Addison-Wesley.

Fu, P. W., Wu, C. C., & Cho, Y. J. (2017). What makes users share content on facebook? Compatibility among psychological incentive, social capital focus, and content type. *Computers in Human Behavior*, *67*, 23–32. doi:10.1016/j.chb.2016.10.010

George, L. K. (1986). *Caregiver burden: conflict between norms of reciprocity and solidarity.* New York: Auburn House.

Gil de Zúñiga, H., Jung, N., & Valenzuela, S. (2012). Social media use for news and individuals' social capital, civic engagement and political participation. *Journal of Computer-Mediated Communication*, *17*(3), 319–336. doi:10.1111/j.1083-6101.2012.01574.x

Gouldner, A. W. (1960). The norm of reciprocity : A preliminary statement. *American Sociological Review*, *25*(2), 161–178.

Granovetter, M. S. (1973). The strength of weak ties. *American Journal of Sociology*, *78*(6), 1360–1380. doi:10.1086/225469

Ha, A. (2013, June 11). Yep, Facebook ads are better with social context (according to a Salesforce "benchmark" report). Retrieved from https://techcrunch.com/2013/06/11/salesforce-facebook-ads-benchmark/

Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E., & Tatham, R. L. (2006). *Multivariate data analysis* (Vol. 6.). Upper Saddle River, NJ: Pearson Prentice Hall.

Handley, L. (2017, March 21). Facebook and Google predicted to make $106 billion from advertising in 2017, almost half of world's digital ad spend. Retrieved from http://www.cnbc.com/2017/03/21/facebook-and-google-ad-youtube-make-advertising-in-2017.html

Hayes, A. F. (2013). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach*. New York, NY: Guilford Press.

Haythornthwaite, C., & Wellman, B. (1998). Work, friendship, and media use for information exchange in a networked organization. *Journal of the American Society for Information Science*, *49*(12), 1101–1114.

Heinonen, K. (2011). Consumer activity in social media: Managerial approaches to consumers' social media behavior. *Journal of Consumer Behaviour*, *10*(6), 356–364. doi:10.1002/cb.376

Hendricks, D. (2014, January 16). Facebook to drop sponsored stories: What does this mean for advertisers? Retrieved from http://www.forbes.com/sites/drewhendricks/2014/01/16/facebook-to-drop-sponsored-stories-what-does-this-mean-for-advertisers/#45e0ac996897

Huang, J., Su, S., Zhou, L., & Liu, X. (2013). Attitude toward the viral ad: Expanding traditional advertising models to interactive advertising. *Journal of Interactive Marketing*, *27*(1), 36–46. doi:10.1016/j.intmar.2012.06.001

Huang, L. V., & Liu, L. (2017). Ties that Work: Investigating the Relationships among Coworker Connections, Work-related Facebook Utility, Online Social Capital, and Employee Outcomes. *Computers in Human Behavior*. doi:http://dx.doi.org/10.1016/j.chb.2017.02.054

Huang, Y., Phau, I., & Lin, C. (2010). Consumer animosity, economic hardship, and normative influence. *European Journal of Marketing*, *44*(7/8), 909–937. doi:10.1108/03090561011047463

Inkpen, A. C., & Tsang, E. W. K. (2005). Social capital, networks, and knowledge transfer. *The Academy of Management Review*, *30*(1), 146–165. doi:10.5465/AMR.2005.15281445

Jackson, J. M., & Latané, B. (1981). All alone in front of all those people: Stage fright as a function of number and type of co-performers and audience. *Journal of Personality and Social Psychology*, *40*(1), 73–85. doi:10.1037/0022-3514.40.1.73

Ji, Y. G., Hwangbo, H., Yi, J. S., Rau, P. L. P., Fang, X., & Ling, C. (2010). The Influence of Cultural Differences on the Use of Social Network Services and the Formation of Social Capital. *International Journal of Human-Computer Interaction*, *26*(11–12), 1100–1121. doi:10.1080/10447318.2010.516727

Johnston, K., Tanner, M., Lalla, N., & Kawalski, D. (2011). Social capital: The benefit of Facebook friends. *Behaviour & Information Technology*, *32*(1), 1–13. doi:10.1080/0144929X.2010.550063

Jones, S. (2014, June 17). The art and science of viral videos. Retrieved from https://blog.hubspot.com/marketing/art-science-viral-videos#sm.00123hl217x5ewx10gx2rjeoerbex

Jung, J., Shim, S. W., Jin, H. S., & Khang, H. (2016). Factors affecting attitudes and behavioural intention towards social networking advertising: A case of facebook users in South Korea. *International Journal of Advertising*, *35*(2), 248–265. doi:10.1080/02650487.2015.1014777

Karau, S. J., & Williams, K. D. (1993). Social Loafing: A Meta-Analytic Review and Theoretical Integration. *Interpersonal Relations and Group Processes*, *65*(4), 681–706. doi:10.1037/0022-3514.65.4.681

Karlan, D. S. (2005). Using experimental economics to measure social capital and predict financial decisions. *The American Economic Review*, *95*(5), 1688–1699.

Katz, E., Blumler, J. G., & Gurevitch, M. (1974). Utilization of mass communication by the individual. In J. G. Blumler & E. Katz (Eds.), *The uses of mass communication* (pp. 19–32). Beverly Hills, CA: Sage.

Katz, E., & Foulkes, D. (1962). On the use of the mass media as "escape": Clarification of a concept. *The Public Opinion Quarterly*, *26*(3), 377–388.

Katz, E., Haas, H., & Gurevitch, M. (1973). On the use of the mass media for important things. *American Sociological Review*, *38*(2), 164–181. doi:10.1086/267111

Kawachi, I., Kennedy, B. P., Lochner, K., & Prothrow-Stith, D. (1997). Social capital, income inequality, and mortality. *American Journal of Public Health*, *87*(9), 1491–1498. doi:10.1084/jem.176.3.719

Kessler, S. (2011, June 28). The history of advertising on Facebook. Retrieved from http://mashable.com/2011/06/28/facebook-advertising-infographic/#cA5bJ6wpOkq4

Kinard, B. R., Capella, M. L., & Kinard, J. L. (2009). The Impact of Social Presence on Technology Based Self-Service Use: The Role of Familiarity. *Services Marketing Quarterly*, *30*(3), 303–314. doi:10.1080/15332960902993593

Kincaid, D. L. (2004). From innovation to social norm: Bounded normative influence. *Journal of Health Communication*, *9*(S1), 37–57. doi:10.1080/10810730490271511

Kirk, R. (2009). Experimental Design. In R. E. Millsap & A. Maydeu-Olivares (Eds.), *The SAGE handbook of quantitative methods in psychology2*. Sage.

Ko, H., Cho, C. H., & Roberts, M. S. (2005). Internet uses and gratifications: A structural equation model of interactive advertising. *Journal of Advertising*, *34*(March 2015), 57–70. doi:10.1080/00913367.2005.10639191

Kobayashi, T., Ikeda, K., & Miyata, K. (2006). Social capital online: Collective use of the Internet and reciprocity as lubricants of democracy. *Information, Community & Society*, *9*(5), 582–611. doi:10.1080/13691180600965575

Krasnova, H., Veltri, N. F., Eling, N., & Buxmann, P. (2017). Why men and women continue to use social networking sites: The role of gender differences. *The Journal of Strategic Information Systems*. doi:http://dx.doi.org/10.1016/j.jsis.2017.01.004

Kulviwat, S., Bruner, G. C., & Al-Shuridah, O. (2009). The role of social influence on adoption of high tech innovations: The moderating effect of public/private consumption. *Journal of Business Research*, *62*(7), 706–712. doi:10.1016/j.jbusres.2007.04.014

Kumlin, S., & Rothstein, B. (2005). Making and breaking social capital. *Comparative Political Studies*, *38*(4), 339–365. doi:10.1177/0010414004273203

Kwahk, K.-Y., & Ge, X. (2012). The Effects of Social Media on E-Commerce: A Perspective of Social Impact Theory. *2012 45th Hawaii International Conference on System Sciences*, 1814–1823. doi:10.1109/HICSS.2012.564

Latané, B. (1981). The psychology of social impact. *American Psychologist*, *36*(4), 343–356. doi:10.1037/0003-066X.36.4.343

Latané, B., & L'Herrou, T. (1996). Spatial clustering in the conformity game: Dynamic social impact in electronic groups. *Journal of Personality and Social Psychology*, *70*(6), 1218–1230. doi:10.1037/0022-3514.70.6.1218

Latané, B., Liu, J. H., Nowak, A., Bonevento, M., & Zheng, L. (1995). Distance matters: Physical space and social impact. *Personality and Social Psychology Bulletin*, *21*(8), 795–805. doi:10.1177/0146167295218002

Lawson, C., & Greene, K. F. (2014). Making clientelism work: How norms of reciprocity increase voter compliance. *Comparative Politics*, *47*(1), 61–85. doi:10.5129/001041514813623173

Lee, C. S., & Ma, L. (2012). News sharing in social media: The effect of gratifications and prior experience. *Computers in Human Behavior*, *28*(2), 331–339. doi:10.1016/j.chb.2011.10.002

Lee, C., & Sohn, D. (2016). Mapping the social capital research in Communication: A bibliometric analysis. *Journalism & Mass Communication Quarterly*, *93*(4), 728–749. doi:10.1177/1077699015610074

Lee, Y. C. (2017). Effects of branded e-stickers on purchase intentions: The perspective of social capital theory. *Telematics and Informatics*, *34*(1), 397–411. doi:10.1016/j.tele.2016.06.005

Levene, H. (1960). Robust tests for equality of variances. In I. Olkin & H. Hotelling (Eds.), *Contributions to probability and statistics* (Vol. 1, pp. 278–292). Stanford University.

Levordashka, A., Utz, S., & Ambros, R. (2016). What's in a like? Motivations for pressing the like button. *Proceedings of the Tenth International AAAI Conference on Web and Social Media (ICWSM 2016)*, (Icwsm), 623–626.

Lewis, B., & Porter, L. (2010). In-game advertising effects: Examining player perceptions of advertising schema congruity in a massively multiplayer online role-playing game. *Journal of Interactive Advertising*, *10*(2), 46–60. doi:10.1080/15252019.2010.10722169

Lin, N. (1999). Building a Network Theory of Social Capital. *Connections*, *22*(1), 28–51. doi:10.1108/14691930410550381

Loewenstein, G. F., Thompson, L., & Bazerman, M. H. (1989). Social utility and decision making in interpersonal contexts. *Journal of Personality and Social Psychology*, *57*(3), 426–441.

Luqman, A., Cao, X., Ali, A., Masood, A., & Yu, L. (2017). Do you get exhausted from too much socializing? Empirical investigation of Facebook discontinues usage intentions based on SOR paradigm. *Computers in Human Behavior*. doi:10.1016/j.chb.2017.01.020

Lutz, R. J. (1977). An Experimental Investigation of Causal Relations among Cognitions, Affect, and Behavioral Intention. *Journal of Consumer Research*, *3*(4), 197. doi:10.1086/208668

Lutz, R. J., & Bettman, J. R. (1977). Multiattribute models in marketing: A bicentennial review. *Consumer and Industrial Buying Behavior*, 137–149.

Machleit, K. a., & Wilson, R. D. (1988). Emotional Feelings and Attitude toward the Advertisement: The Roles of Brand Familarity and Repetition. *Journal of Advertising*, *17*(3), 27–35. doi:10.1080/00913367.1988.10673121

MacKenzie, S. B., Lutz, R. J., & Belch, G. E. (1986). The Role of Attitude toward the Ad as a Mediator of Advertising Effectiveness: A Test of Competing Explanations. *Journal of Marketing Research*, *23*(2), 130–143. doi:10.2307/3151660

Madden, T. J., Allen, C. T., & Twible, J. L. (1988). Attitude toward the Ad : An assessment of diverse measurement indices under different processing "Sets." *Journal of Advertising Research*, *25*(3), 242–252. doi:10.2307/3172527

Martin, B. A. S., Wentzel, D., & Tomczak, T. (2008). Effects of susceptibility to normative influence and type of testimonial on attitudes toward print advertising. *Journal of Advertising*, *37*(1), 29–43. doi:10.2753/JOA0091-3367370103

Mason, W. A., Conrey, F. R., & Smith, E. R. (2007). Situating Social Influence Processes: Dynamic, Multidirectional Flows of Influence Within Social Networks. *Personality and Social Psychology Review*, *11*(3), 279–300. doi:10.1177/1088868307301032

Mathwick, C. (2002). Understanding the online consumer: A typology of online relational norms and behavior. *Journal of Interactive Marketing*, *16*(1), 40–55. doi:10.1002/dir.10003

Mawhinney, J. (2016, January 13). 37 visual content marketing statistics you should know in 2016. Retrieved from http://blog.hubspot.com/marketing/visual-content-marketing-strategy#sm.00003e9c1c18bmfemqsc66rs5p11d

Menard, S. (1995). *Applied logistic regression analysis: Sage university series on quantitative applications in the social sciences*. Thousand Oaks, CA: Sage.

Miller, M. D., & Brunner, C. C. (2008). Social impact in technologically-mediated communication: An examination of online influence. *Computers in Human Behavior*, *24*(6), 2972–2991. doi:10.1016/j.chb.2008.05.004

Mir, I., & Zaheer, A. (2012). Verification of social impact theory claims in social media context. *Journal of Internet Banking and Commerce*, *17*(1), 1–15.

Mitchell, A. A., & Olson, J. C. (1981). Are product attribute beliefs the only mediator of advertising effects on brand attitude? *Journal of Marketing Research*, *18*, 318–332. doi:10.1353/asr.2000.0010

Mitchell, V., Macklin, J. E., & Paxman, J. (2007). Social uses of advertising: An example of young male adults. *International Journal of Advertising*, *26*(2), 199–222. doi:10.1080/10803548.2007.11073007

Mo, R., & Leung, L. (2015). Exploring the roles of narcissism, uses of, and gratifications from microblogs on affinity-seeking and social capital. *Asian Journal of Social Psychology*, *18*(2), 152–162. doi:10.1111/ajsp.12087

Muntinga, D. G., Moorman, M., & Smit, E. G. (2011). Introducing COBRAs: Exploring motivations for Brand-Related social media use. *International Journal of Advertising*, *30*(1), 12–46. doi:10.2501/IJA-30-1-013-046

Naylor, R. W., Lamberton, C. P., & West, P. M. (2012). Beyond the "Like" Button: The Impact of Mere Virtual Presence on Brand Evaluations and Purchase Intentions in Social Media Settings. *Journal of Marketing*, *76*(6), 105–120. doi:10.1509/jm.11.0105

Ng, C. S. P. (2013). Intention to purchase on social commerce websites across cultures: A cross-regional study. *Information and Management*, *50*(8), 609–620. doi:10.1016/j.im.2013.08.002

Ni, S., Weng, W., & Zhang, H. (2011). Modeling the effects of social impact on epidemic spreading in complex networks. *Physica A: Statistical Mechanics and Its Applications*, *390*(23–24), 4528–4534. doi:10.1016/j.physa.2011.07.042

Nowak, A., Szamrej, J., & Latané, B. (1990). From private attitude to public opinion: A dynamic theory of social impact. *Psychological Review*, *97*(3), 362–376. doi:10.1037/0033-295X.97.3.362

Nunnally, J. C. (1978). Assessment of reliability. In *Psychometric theory* (2nd ed., pp. 245–246). New York: McGraw-Hill.

Oh, C., & Yergeau, S. (2017). Social capital, social media, and TV ratings. *International Journal of Business Information Systems*, *24*(2), 242–260. doi:10.1504/IJBIS.2017.081450

Orth, U. R., & Kahle, L. R. (2008). Intrapersonal variation in consumer susceptibility to normative influence: toward a better understanding of brand choice decisions. *The Journal of Social Psychology*, *148*(4), 423–447. doi:10.3200/SOCP.148.4.423-448

Palmgreen, P., & Rayburn, J. D. (1982). Gratifications sought and media exposure: An expectancy value model. *Communication Research*, *9*(4), 561–580. doi:10.1177/009365082009004004

Pan, Y., & Jackson, R. T. (2008). Ethnic difference in the relationship between acute inflammation and serum ferritin in US adult males. *Epidemiology and Infection*, *136*(3), 421–31. doi:10.1017/S095026880700831X

Papacharissi, Z., & Mendelson, A. (2011). Toward a New(er) Sociability: Uses, Gratifications, and Social Capital on Facebook. In S. Papathanassopoulos (Ed.), *Media Perspectives for the 21st Century* (pp. 212–230). New York: Routledge.

Park, H. S., Dailey, R., & Lemus, D. (2002). The use of exploratory factor analysis and principal components analysis in communication research. *Human Communication Research*. doi:10.1093/hcr/28.4.562

Park, N., Kee, K. F., & Valenzuela, S. (2009). Being immersed in social networking environment: Facebook groups, uses and gratifications, and social outcomes. *Cyberpsychology & Behavior : The Impact of the Internet, Multimedia and Virtual Reality on Behavior and Society*, *12*(6), 729–733. doi:10.1089/cpb.2009.0003

Perse, E. M., & Ferguson, D. A. (1993). The impact of the newer television technologies on television satisfaction. *Journalism & Mass Communication Quarterly*, *70*(4), 843–853. doi:10.1177/107769909307000410

Pham, M. T., Geuens, M., & De Pelsmacker, P. (2013). The influence of ad-evoked feelings on brand evaluations: Empirical generalizations from consumer responses to more than 1000 TV commercials. *International Journal of Research in Marketing*, *30*(4), 383–394. doi:10.1016/j.ijresmar.2013.04.004

Phua, J., Jin, S. V., & Kim, J. J. (2017). Uses and Gratifications of Social Networking Sites for Bridging and Bonding Social Capital: A Comparison of Facebook, Twitter, Instagram, and Snapchat. *Computers in Human Behavior*, *72*(February), 115–122. doi:10.1016/j.chb.2017.02.041

Przybylski, A. K., Murayama, K., Dehaan, C. R., & Gladwell, V. (2013). Motivational, emotional, and behavioral correlates of fear of missing out. *Computers in Human Behavior*, *29*(4), 1841–1848. doi:10.1016/j.chb.2013.02.014

Putnam, R. D. (2000). *Bowling alone: The collapse and revival of American community*. New York: Simon & Schuster.

Quan-Haase, A., & Young, A. L. (2010). Uses and gratifications of social media: A comparison of Facebook and instant messaging. *Bulletin of Science, Technology & Society*, *30*, 350–361. doi:10.1177/0270467610380009

Raacke, J., & Bonds-Raacke, J. (2008). MySpace and Facebook: applying the uses and gratifications theory to exploring friend-networking sites. *Cyberpsychology & Behavior : The Impact of the Internet, Multimedia and Virtual Reality on Behavior and Society*, *11*(2), 169–74. doi:10.1089/cpb.2007.0056

Rayburn, J. D., & Palmgreen, P. (1984). Merging uses and gratifications and expectancy-value theory. *Communication Research*, *11*(4), 537–562. doi:10.1177/009365084011004005

Ritson, M., & Elliott, R. (1999). The Social Uses of Advertising: An Ethnographic Study of Adolescent Advertising Audiences. *Journal of Consumer Research*, *26*(3), 260–277. doi:10.1086/209562

Ruggiero, T. E. (2000). Uses and gratifications theory in the 21st century. *Mass Communication and Society*, *3*(1), 3–37. doi:10.1207/S15327825MCS0301_02

Sanyal, P. (2009). From credit to collective action: The role of microfinance in promoting women's social capital and normative influence. *American Sociological Review*, *74*(4), 529–550. doi:10.1177/000312240907400402

Seinen, I., & Schram, A. (2006). Social status and group norms: Indirect reciprocity in a repeated helping experiment. *European Economic Review*, *50*(3), 581–602. doi:10.1016/j.euroecorev.2004.10.005

Sheehan, K. B. (2015). A change in the climate: Online social capital and the spiral of silence. *First Monday*, *20*(5). doi:10.5210/fm.v20i5.5414

Sherif, M. (1936). *The psychology of social norms*. Oxford, England: Harper.

Sobel, J. (2002). Can we trust social capital? *Journal of Economic Literature*, *40*(1), 139–154.

Sobel, M. (2009). Causal inference in randomized and non-randomized studies. In R. E. Millsap & A. Maydeu-Olivares (Eds.), *The SAGE handbook of quantitative methods in psychology*. Sage.

Social network ad revenues accelerate worldwide. (2015, September 23). Retrieved October 13, 2016, from http://www.emarketer.com/Article/Social-Network-Ad-Revenues-Accelerate-Worldwide/1013015

Steinfield, C., DiMicco, J. M., Ellison, N. B., & Lampe, C. (2009). Bowling Online : Social Networking and Social Capital within the Organization. *Distribution*, 245–254. doi:10.1145/1556460.1556496

Steinfield, C., Ellison, N. B., & Lampe, C. (2008). Social capital, self-esteem, and use of online social network sites: A longitudinal analysis. *Journal of Applied Developmental Psychology*, *29*(6), 434–445. doi:10.1016/j.appdev.2008.07.002

Steinfield, C., Ellison, N. B., Lampe, C., & Vitak, J. (2012). Online social network sites and the concept of social capital. *Frontiers in New Media Research*, 115–131. doi:10.4324/9780203113417

Su, C. C., & Chan, N. K. (2017). Predicting social capital on Facebook: The implications of use intensity, perceived content desirability, and Facebook-enabled communication practices. *Computers in Human Behavior*, *72*, 259–268. doi:10.1016/j.chb.2017.02.058

Swank, C. (1979). Media uses and gratifications: Need salience and source dependence in a sample of the elderly. *American Behavioral Scientist*, *23*(1), 95–117. doi:10.1177/000276427902300106

Tavakol, M., & Dennick, R. (2011). Making sense of Cronbach's alpha. In *International Journal of Medical Education* (Vol. 2, pp. 53–55). doi:10.5116/ijme.4dfb.8dfd

Thorson, E., Wicks, R., & Leshner, G. (2012). Experimental methodology in journalism and mass communication research. *Journalism & Mass Communication Quarterly*, *89*(1), 112–124. doi:10.1177/1077699011430066

Toner, L. (2013, September 26). The history of Facebook advertising. Retrieved from http://blog.hubspot.com/marketing/history-facebook-adtips-slideshare#sm.00003e9c1c18bmfemqsc66rs5p11d

Trafimow, D., & Finlay, K. A. (1996). The importance of subjective norms for a minority of people: Between-subjects and within-subjects analyses. *Personality and Social Psychology Bulletin*, *22*, 820–828. doi:10.1177/0146167296228005

Trepte, S., & Reinecke, L. (2012). The reciprocal effects of social network site use and the disposition for self-disclosure: A longitudinal study. *Computers in Human Behavior*, *29*(3), 1102–1112. doi:10.1016/j.chb.2012.10.002

Utz, S., & Kramer, N. C. (2004). The privacy paradox on social network sites revisited: The role of individual characteristics and group norms. *Cyberpsychology: Journal of Psychosocial Research on Cyberspace*, *3*(2), 1.

Valenzuela, S., Park, N., & Kee, K. F. (2009). Is there social capital in a social network site?: Facebook use and college student's life satisfaction, trust, and participation. *Journal of Computer-Mediated Communication*, *14*(4), 875–901. doi:10.1111/j.1083-6101.2009.01474.x

Vitak, J., Ellison, N. B., & Steinfield, C. (2011). The ties that bond: Re-examining the relationship between Facebook use and bonding social capital. *Proceedings of the Annual Hawaii International Conference on System Sciences*, 1–10. doi:10.1109/HICSS.2011.435

Waardenburg, T., Winkel, R., & Lamers, M. H. (2012). Normative social influence in persuasive technology: Intensity versus effectiveness. In *International Conference on Persuasive Technology* (pp. 145–156). Berlin Heidelberg: Springer. doi:10.1007/978-3-642-31037-9_13

Wang, X., Yu, C., & Wei, Y. (2012). Social media peer communication and impacts on purchase intentions: A consumer socialization framework. *Journal of Interactive Marketing*, *26*(4), 198–208. doi:10.1016/j.intmar.2011.11.004

Wang, Z., Tchernev, J. M., & Solloway, T. (2012). A dynamic longitudinal examination of social media use, needs, and gratifications among college students. *Computers in Human Behavior Journal*, *28*, 1829–1839. doi:10.1016/j.chb.2012.05.001

Wasko, M. M., & Faraj, S. (2005). Why should I share? Examining social capital and knowledge contribution in electronic networks of practice. *MIS Quarterly*, *29*(1), 35–57.

Waterhouse, D. (2015, September 3). What is the ideal length of an online video ad? Retrieved from https://unruly.co/blog/article/2015/03/09/what-is-the-ideal-length-for-an-online-video-ad/

Web Video Marketing Council, Flimp Media, & ReelSEO. (2015). *2015 B2B Video Content Marketing Survey Results*.

Weiksner, G. M., Fogg, B. J., & Liu, X. (2008). Six patterns for persuasion in online social networks. In *International Conference on Persuasive Technology* (pp. 151–163). doi:10.1007/978-3-540-68504-3_14

Wells, W. D., Leavitt, C., & McConville, M. (1971). A reaction profile for TV commercials. *Journal of Advertising Research*, *22*, 11–17.

Whiting, A., & Williams, D. (2013). Why people use social media: A uses and gratifications approach. *Qualitative Market Research: An International Journal*, *16*(4), 362–369. doi:10.1108/QMR-06-2013-0041

Wilkie, W. L., & Pessemier, E. A. (1973). Issues in marketing's use of multi-attribute attitude models. *Journal of Marketing Research*, *10*(4), 428–441. doi:10.2307/3149391

Williams, D. C. (2006). On and off the 'Net: Scales for social capital in an online era. *Journal of Computer-Mediated Communication*, *11*(2), 593–628. doi:10.1111/j.1083-6101.2006.00029.x

Wise, K., Bolls, P. D., Kim, H., Venkataraman, A., & Meyer, R. (2008). Enjoyment of advergames and brand attitudes: The impact of thematic relevance. *Journal of Interactive Advertising*, *9*(1), 27–36. doi:10.1080/15252019.2008.10722145

Wolf, S., & Latané, B. (1983). Majority and minority influence on restaurant preferences. *Journal of Personality and Social Psychology*, *45*(2), 282–292. doi:10.1037/0022-3514.45.2.282

Wright, P. L. (1973). The cognitive processes mediating acceptance of advertising. *Journal of Marketing Research*, *10*(1), 53–62. doi:10.2307/3149409