THE EFFECTIVENESS OF PRODUCT CONVERSATIONS IN SOCIAL MEDIA: FROM AN ATTRIBUTION THEORY PERSPECTIVE

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A DISSERTATION

Submitted to
Michigan State University
in partial fulfillment of the requirements
for the degree of

DOCTOR OF PHILOSOPHY

Communication Arts and Sciences - Media and Information Studies

2010

ABSTRACT

THE EFFECTIVENESS OF PRODUCT CONVERSATIONS
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With the growing power of peer-to-peer product conversations on the Internet, marketers have tried to manage consumer product conversations by rewarding consumers for initiating and/or spreading conversations about their products. This specific marketing tactic is referred to as WOM (word-of-mouth) marketing and recently has increased substantially. Despite that increase and interest in WOM marketing, little is known about how various WOM marketing tactics work. Thus, drawing on the attribution theory perspective, this research examined whether different types of product information sources (celebrities, web celebrities – i.e., persons famous primarily for creating or appearing in Internet-based content, and highly recognizable to a web-based audience, or close friends of participants) interact with information sponsorship (organic or sponsored) to influence consumer causal attributions and information effectiveness in the context of social media. Further, this dissertation investigated the mediating roles of causal attributions between the interaction effect of source types and information sponsorship and information effectiveness. Toward that end, in the Twitter context, two experiments were conducted with adult Twitter users. Study 1 was conducted with experience-based product information and Study 2 with promotional product information.

Study 1 results revealed significant interaction effects of source types and information sponsorship on causal attributions and information effectiveness. Specifically, when information was organic, product information posted by a close friend generated more information sharing

attributions (i.e., motives for sharing good product information) and greater information effectiveness, measured by brand attitude and compliance intention (i.e., intention to click the link), than did information by a celebrity or web celebrity. However, there was no difference between information posted by the celebrity and by the web celebrity in information sharing attributions and information effectiveness. On the other hand, when information was sponsored, product information posted by a web celebrity produced more information sharing attributions and greater information effectiveness than did information by a celebrity or by a close friend. No significant differences were found between information posted by the celebrity and by the close friend in other-centered attribution. With regard to information effectiveness, there were no differences among three sources when information was sponsored. Further, this study found information sharing attributions mediated the relationship between the two-way interaction effect and information effectiveness.

Study 2 further investigated whether the findings of Study 1 were replicated in the context of promotional (*versus* experienced-based) product information. Unlike the findings of Study 1, however, in Study 2 no interaction effect of source types and information sponsorship on consumer causal attributions and information effectiveness emerged. Theoretical and practical implications of the findings of this dissertation were discussed also.

ACKNOWLEDGMENTS

This dissertation reflects *inter alia* the precious efforts of advisors, colleagues, friends and family. My first and greatest gratitude goes to my dissertation committee chair Dr. Mira Lee who stood close to me during the whole process of my doctoral program. Never would I be able to repay her for the guidance, passion, kind concern, and total support she has afforded me. She has been not merely my advisor, but also my true and unique mentor who has supported my life goals inside and outside of university. I cannot express adequately my gratitude to her.

My appreciations also extend to my committee members. Dr. Hairong Li always helped me find solutions to problems in the dissertation process. Dr. Wei Peng addressed numerous questions which broadened and fertilized theoretical backgrounds in my dissertation. Dr. Nora Rifon always provided inspiration and encouragement. I also appreciate Dr. Hye-Jin Paek, Dr. Hee Sun Park, Dr Elizabeth Quilliam, and Dr. Thomas Hove for their extensive help and support. Additionally, I declare my appreciation to Michigan State University College of Arts and Letters faculty member Michael Morris for his strong, steady shepherding of my English language and writing structures. They all have been inspirational mentors to me, providing wisdom and warm concern.

Thank you also to my friends who also have been good colleagues. Sung-mi Lee, Hyun Ju Jeong, Hyegyu Lee, Hun Jung Oh, and Sookyong Kim were strong and enduring supporters during my doctoral program. And to Ji Hye Choi I express gratitude for her technical assistance. Then also, I am grateful to close friends in East Lansing, Michigan who shared my moments of sorrow and happiness: Seung-Hyun Kim, Jae-Min Cha, Eun-Sil Lee, Miran Kim, Sunhee Moon,

Sangeun Lee, Malsoon Lee, Jungah Lee, Hyunju Ha, Dan and Lisa Aylward, and Jim and Karen Gets.

My pleasure at reaching this outcome is shared with my family, to whom my infinite gratitude. My doctoral study could not have been completed without support and love from my parents, Hong-Dae Kim and Hyunim Ko, and parents-in-law, Jaebin Moon and Aeryun Kim. To each individually, and to all collectively, as befits family, my thanks for their endless prayers for me and help to me. And special thanks to my brother's and brother-in-law's families in Korea.

My sincerest, most loving and most extensive thanks are due my husband, Jin Woo Moon, my best supporter, helper, colleague, problem-solver, friend, and eternal love. Without his endurance, sacrifice, and beautiful spirit, I could not have completed this dissertation.

Finally, my deepest thanks go to God Who blessed me with these amazing people and made all this possible.

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CHAPTER I

INTRODUCTION

Advances in technologies have brought substantial changes in the marketing landscape. One such change is the declining power of traditional media. Due to disruptive technologies (e.g., TiVo), fragmentation of media consumption, and consumer skepticism toward traditional marketing attempts, traditional media are losing their effectiveness (Cheema and Kaikati 2007; Court, Gordon, and Perrey 2005).

Another change is consumers' burgeoning power. With the emergence of Web 2.0, consumers have more communicative power than before (Daugherty, Eastin, and Bright 2008). Participatory media provide faster and easier ways for consumers to become involved in creation, consumption, and distribution of various web contents (Verna 2009). One survey reported that 83 million US Internet users created some form of user-generated contents - UGC - and 116 million consumed these in 2008. Further, it is expected that UGC consumption will continue to grow and will reach 155 million by 2011 (Verna 2009). Consumer-generated product information, one type of UGC, has emerged as an essential source for consumer product information, due, in part, to its trustworthiness (Chevalier and Mayzlin 2006; Kim and Lee 2010; Park, Lee, and Han 2007; Sen and Lerman 2007; Senecal and Nantel 2004; Smith, Menon, and Sivakumar 2005). Indeed, about 89% of US online shoppers read consumer product reviews before purchasing a product (eMarketers 2008). On the Internet, various web platforms, such as review websites (e.g., epinions.com), retailer websites (e.g., amazon.com), and brand websites, allow consumers to share product-related information with a multitude of other consumers. Among various web platforms, social media (i.e., "a group of Internet-based applications that

build on the ideological and technological foundations of Web 2.0, and that allow the creation and exchange of UGC" (Kaplan and Haenlein 2010, p. 61) arguably have become the most prominent platform for sharing product information as they penetrate consumers' daily lives.

In this new marketing landscape, marketers have relocated their attentions to peer-to-peer product conversations as a new way to reach consumers. Specifically, marketers have tried to manage consumer product conversations directly by hiring and rewarding consumers for spreading information about their products. This specific marketing tactic is referred to as Word-of-mouth – WOM - marketing and recently has increased substantially (Cheema and Kaikaki 2007). According to PQ media (2009), marketers spent US$1.54 billion on WOM marketing in 2008 and it is expected to reach US$3 billion by 2013. Although WOM marketing practices can occur on any platform, one arena where marketers are eager to practice WOM marketing is social media. Sponsored tweets - i.e., a social media marketing technique in which brands provide financial or material compensation to Twitter users in exchange for spreading sponsored conversations about brands and products to their followers on Twitter (IZEA n.d.) - is an example of WOM marketing practices in the realm of social media. On Twitter, some people spread product information on behalf of advertisers in return for money (Gregory 2009).

Although rewards or compensations increase the likelihood of product recommendations (Bolton, Kannan, and Bramlett 2000; Ryu and Feick 2007), such compensation entails risks, such as increasing the salience of ulterior motives (Tuk et al. 2009). Since financial rewards can be viewed as a strong motive for product advocacy in the context of sponsored product information, consumers may doubt whether sponsored information (i.e., paid product information initiated or spread) reflects the true quality of the product. This dissertation seeks to examine whether and how sponsored product information and unsponsored product information

(or organic product information) differ in the effectiveness of information in the context of social media.

Despite increasing practices of, and interests in, WOM marketing, little is known about how various WOM marketing tactics work. This calls for more research on specific WOM marketing tactics that increase the effectiveness of product information. One WOM marketing tactic is related to types of people (WOM agents) who disseminate sponsored product information. Recently, WOM marketers hire various types of sources to spread their product information in social media. Three prominent types of such information sources are ordinary consumers, celebrities, and web celebrities (i.e., persons famous primarily for creating, or appearing in, Internet-based content, and highly recognizable to a web-based audience). This study investigates whether and how different types of product information sources (close friends, celebrities, and web celebrities) influence information effectiveness. Further, this study examines how different types of product information sources interact with information sponsorship (organic or sponsored) to influence information effectiveness.

Attribution theory - a set of theories explaining how people make causal inferences about others' behaviors or certain events they observe (Heider 1958; Jones and Davis 1965; Kelley 1967) and how these perceived motives influence subsequent attitudes and behaviors (Forehand and Grier 2003; Forkes 1988) - is employed as a theoretical framework. Attribution theory has been demonstrated as a robust theory in understanding consumers' causal inferences about marketing tactics or marketer motives (Campbell 1995; Campbell and Kirmani 2000; DeCarlo 2005; Forehand and Grier 2003; Friestad and Wright 1994; Rifon et al. 2004), celebrity endorsers' recommendations (Clonley et al 1999; Mowen and Brown 1981; Silvera and Austad 2004; Sparkman 1982; Tripp, Jensen, and Carlson 1994; Wiener and Mowen 1986), and peer

consumers' product reviews (DeCarlo et al. 2007; Laczniak, DeCarlo, and Ramaswami 2001; Lee and Youn 2009; Mizerski 1982; Sen and Lerman 2007).

Finally, two different types of information are examined in this dissertation. In social media, two types of product information are prevalent: experience-based product information and promotional product information. While experience-based product information includes consumers' subjective opinions based on their product use, promotional product information contains objective information regarding potential economic benefits. Since product information content differs between experience-based and promotional product information, its impacts on consumer causal inferences and information effectiveness may differ also. The final objective of this dissertation is to investigate whether the effects of information sponsorship and information sources on information effectiveness vary depending on the types of product information (experience-based or promotional information).

Toward these ends, two experiments were conducted in the Twitter context. Study 1 was conducted with experience-based product information and Study 2 with promotional product information.

The remainder of this dissertation is organized as follows. Chapter two covers background information pertaining to consumer-generated product information, WOM marketing, and social media. In chapter three, a theoretical framework of this study, attribution theory, is discussed. An extensive review of literature on source effects and information sponsorship, as well as hypotheses and theoretical explanations of the effects of these variables on consumer causal attributions and the effectiveness of information, is given in this chapter as well. Following this, the research methods and findings of two experimental studies are reported in chapter four. Finally, chapter five provides general discussion of two studies, theoretical and

practical implications of the findings, and limitations of this research. This dissertation concludes with recommendations for future research.

CHAPTER II

BACKGROUND

Consumer-Generated Product Information

Americans engage in 3.5 billion product-related conversations daily on average (Keller Fay Group 2008). Consumer-generated product information is not a new phenomenon. For several decades, consumers have shared product information with others in their social boundaries. Until the 1940s, however, marketers did not recognize the power of interpersonal, product-related conversations. A one-way process from the marketer to consumers was the dominant perspective of marketing communication. This perspective was challenged by research findings in the 1940s and 1950s (Katz and Lazarsfeld 1955; Lazarsfeld, Berelson, and Gaudet 1944; Lionberger 1951). Via the series of findings, interpersonal conversations regarding products or services came to be regarded as a strong channel of spreading product information. In general terms, these interpersonal conversations regarding products or services in the marketplace are known as Word of Mouth (WOM).

Since the 1940s, WOM, "informal, person-to-person communication between a perceived noncommercial communicator and a receiver regarding a brand, a product, an organization, or a service" (Harrison-Walker 2001, p.63), has been considered as one of the most influential sources in consumer purchase decision and choice behavior. Substantial research has demonstrated the significant role of WOM in various consumer behavior areas such as consumer product purchase (Arndt 1967; Bansal and Voyer 2000), product evaluations (Bone 1995; Herr, Kardes, and Kim 1991; Laczniak et al. 2001) cross-cultural marketing (Cheung, Anitsal, and Anitsal 2007), and perception of risk (Shrum and Bischak 2001; Murray 1991).

The power of WOM has become stronger and its role has become more important with the emergence of Web 2.0 technologies. Participatory media enable consumers to create and spread consumer-generated product information easier and faster than before. This consumer-generated product information in the online context is called electronic WOM (eWOM). More specifically, eWOM refers to "any positive or negative statement concerning a brand, product, or service made by consumers who are perceived as having no vested commercial interest in the communication subsequently made available to a large number of people via the Internet" (Hennig-Thurau et al. 2004, p.39). Due to the distinct characteristics of online communications (e.g., limited cues, anonymity, and potential for asynchronicity), eWOM differs from its traditional counterpart in many aspects. First, while traditional WOM occurs in oral forms in interpersonal contexts, eWOM occurs in written forms on various online platforms including review websites (e.g., epinions.com), retailer websites (e.g., amazon.com), brand websites, personal blogs, and social network sites (e.g., Facebook and Twitter). Unlike traditional WOM, consumers can seek information at their own pace and reread the same content of product reviews without time constraints (Daugherty et al. 2008; Riegner 2007). Additionally, compared to traditional WOM, which is limited to an information receiver and information provider on the spot, eWOM is shared among a multitude of consumers (Ellison and Fudenberg 1995). Thus, eWOM is disseminated faster and further than is traditional WOM (Dellarocas 2003; Helm 2000; Sun et al. 2006).

Another difference derives from the strength of social ties between an information receiver and an information source (Chatterjee 2001). While strong tie sources include people who are within information receivers' social circles (e.g., family, friends, and co-workers), weak tie sources are people who have no or little prior relationships with an information receiver

(Granovetter 1973). In terms of tie strength, product information sources of traditional WOM are usually strong. In contrast, eWOM often occurs among weak ties (e.g., strangers) and even anonymously (Dellarocas 2003). Although weak tie sources provide benefits to consumers by *inter alia* abundant, diverse, and expert product information (Chaterjee 2001; Constant, Sproull, and Kiesler 1996; Duhan et al. 1997), consumers often have difficulties in evaluating the credibility and quality of eWOM, due to the lack of identifiable cues about information sources (Schindler and Bickart 2005).

Recently, a growing body of research has examined the role of eWOM in general, and consumer product reviews in particular, on various consumer behavior aspects, such as brand evaluations (Chiou and Cheng 2003; Kim and Lee 2010; Lee, Rodgers, and Kim 2009; Xue and Phelps 2004), retailer evaluations (Chatterjee 2001), consumer causal attributions (Lee and Youn 2009; Sen and Lerman 2007), risk taking (Ha 2002), product preference and purchase (Park et al. 2007; Smith et al. 2005; Senecal and Nantel 2004), and product sales (Chevalier and Mayzlin 2006). Additionally, researchers have investigated motivations to engage in seeking (Goldsmith and Horowitz 2006; Hennig-Thurau and Walsh 2004) and providing eWOM (Dellarocas and Narayan 2006; Hennig-Thurau et al. 2004).

WOM Marketing

With the increasing power of consumer-generated product information, marketers have tried to manage this peer-to-peer product conversation for marketing purposes. Recently, marketers encourage WOM agents to spread positive information about their products and services to their social circles or even strangers (Lee, Nelson, and Kim 2010; Petty and Andrews 2008; Ryu and Feick 2007). This specific marketing practice is called WOM marketing. WOM marketing refers to “the intentional influencing of consumer-to-consumer communications by

professional marketing techniques" (Kozinets et al. 2010). For example, *MobiTech* along with one of the WOM marketing companies (Buzzablog) offered a free cell phone and accessories to 90 influential bloggers to promote a new camera-equipped mobile phone (i.e., MobiTech 3839) (Kozinets et al. 2010).

WOM marketing often involves material rewards (e.g., money, free product samples, and gift cards) for product recommendations (Kennett and Matthews 2008; Tuk et al. 2009). Although WOM marketing appears to be an attractive marketing strategy for marketers in that rewards increase likelihood of recommendations (Ryu and Feick 2007; Wirtz and Chew 2002), it also entails some risks such as increased consumer skepticism toward WOM marketing or the salience of ulterior motives of a product recommender (Godes et al. 2005; Tuk et al. 2009). These skepticisms and/or ulterior motives, in turn, may undermine the perceived sincerity of the product recommender and, subsequently, of WOM marketing effectiveness (Carl 2008; Shin 2006; Tuk et al. 2009).

Due to the potential negative effects of material connections between a marketer and a WOM agent on WOM marketing effectiveness, some marketers have been involved in stealth marketing, i.e., "the use of surreptitious marketing practices that fail to disclose or reveal the true relationship with the company that produces or sponsors the marketing message" (Martin and Smith 2008, p.45). However, disclosure of material connections between a marketer and a WOM agent has become especially important due to new guidelines for product endorsements and testimonials issued by the Federal Trade Commission (FTC) (FTC 2009). According to those guidelines, any type of endorser (e.g., consumers, experts, organizations, and celebrities) must disclose any material connections with the companies (e.g., either payments for an endorsement or free products) when endorsing a product. Any claim is deceptive if it fails to disclose the

financial relationship with the companies. This new rule is applied to WOM marketing practices in new media, such as paid or sponsored product reviews in social media as well as product endorsements in traditional media. The new rules went into effect on December 1, 2009; fines for violations of the rules will be up to US$11,000 per incident (Clifford 2009; FTC 2009; Learmonth 2009).

In this study, product information is classified into two categories depending on its sponsorship: *organic* product information and *sponsored* product information. Product information is organic if it occurs naturally and unpaid (Ahuja et al. 2007; Kozinets et al. 2010; Sernovitz 2009). In contrast, if product information is paid by the marketers, it is sponsored.

Social Media as a New Vehicle for WOM Marketing

Recently, as traditional media lose and/or experience decrease in their impact, marketers have been relocating their attentions to alternative media, to connect with consumers. One such alternative media is social media, i.e., "a group of Internet-based applications that build on the ideological and technological foundations of Web 2.0, and that allow the creation and exchange of UGC" (Kaplan and Haenlein 2010, p. 61). Social media have become one of the most popular online communication channels, attracting millions of Internet users. A recent survey reported that 46% of US adults (age 18 and over) use social networking sites (Pew Internet & American Life Project 2009) and that an increasing number of Internet users ages 18 to 34 uses Twitter or another status update service (Fox, Zickuhr, and Smith 2009).

Social media are an over-arching category for various types of online platforms. Although there is no systematic way to categorize social media, three general platforms fall under social media: online video sharing sites (e.g., YouTube), online social networking sites (e.g., Facebook, MySpace, and LinkedIn), and micro-blogging or status update services (e.g.,

Jaiku, Pownce, or Twitter). Although each social medium has its unique characteristics, all social media share common features, namely enabling people to visualize and articulate their social network publicly and engaging in social interactions dynamically using multi-modal forms on the Internet (Boyd 2006; Boyd and Ellison 2007).

When marketers use peer-to-peer product-related conversations for their marketing purposes, their goal is to "get the right people talking about the product or service without it appearing to be company-sponsored" (Kaikati and Kaikati 2004, p.6). In terms of connecting the right people, no traditional marketing forms can be more accurate than social media. Due to the characteristic of social media (i.e., visualize and articulate one's social network publicly), it is relatively easy for users including marketers to identify the influencers and opinion leaders through the number of friends or followers, the number of postings about the products or brands, and response rates from others. Taken together, the decreased effectiveness of traditional media and the benefits of social media (e.g., easy to find key influencers), marketers are eager to use social media as a new vehicle for stimulating consumers' product-related conversations. With this growing interest of marketers, new professional agencies that provide organized WOM programs or sponsored conversation services in social media recently emerged (e.g., IZEA, MyLikes, and ad.ly).

An example of sponsored product information in social media is a sponsored tweet (i.e., a social media marketing technique in which brands provide financial or material compensation to Twitter users in exchange for spreading sponsored conversations about brands and products to their followers on Twitter, IZEA n.d). WOM marketing agencies such as IZEA, ad.ly, and MyLikes encourage Twitter users to post sponsored product-related tweets on their own Twitter pages on behalf of the marketer. These Twitter users can choose either to post marketer-

generated product tweets or to write their own tweets about a product. After posting these sponsored tweets, they are paid by marketers based on the number of clicks they receive or on a flat rate per tweet (Morrissey 2009). According to Ted Murphy, CEO of IZEA, more than 7,000 Twitter users have currently signed up for sponsored tweets and about 500 advertisers are using the IZEA services (Gregory 2009). For example, a typical consumer, mother of two children, earns money for posting sponsored information for Kmart on a parenting website and on a college-information site (Gregory 2009). Due to the large number of followers and star power, marketers have hired celebrities as WOM agents as well. For example, a reality TV star, Kim Kardashian, is a noteworthy-celebrity, sponsored reviewer. Kardashian sends sponsored brand tweets to her 5.4 million followers and earns $10,000 per tweet (Klaassen 2009).

As with other paid endorsements, disclosure matters with regard to sponsored tweets. Ted Murphy, IZEA's CEO, says that disclosure is systematically enforced with their disclosure engine software. Generally, a sponsored tweet carries disclosure in the form of #spon or #ad hash-tags in the messages (e.g., "Bluelight Special Alert: This Saturday at Kmart all patio furniture is 70% off! For more deals follow http://bit.ly/tupjE #spon or #ad") (Gregory 2009). Even with full disclosure, however, there is still room for controversies such that people cannot recognize or understand that the review is sponsored even with the obligatory hash-tag (Van Grove 2009).

CHAPTER III

THEORETICAL FRAMEWORK

Attribution Theory: Theoretical Framework

When exposed to peer-to-peer product-related conversations (either organic or sponsored), consumers often infer *why* a person posts that particular information about a certain product or service (Campbell and Kirmani 2000; Laczniak et al. 2001; Lee and Youn 2009; Sen and Lerman 2007). The process by which consumers infer the information source's motives behind sharing product information can be explained by attribution theory.

Attribution theory is a set of theories explaining how people make causal inferences about the observed behaviors or events (Heider 1958; Jones and Davis 1965; Kelley 1967) and how these causal attributions influence subsequent decisions (Forehand and Grier 2003; Forkes 1988; Laczniak et al. 2001; Mizerski, Golden, and Kernan 1979; Mizerski 1982; Reinhard, Messner, and Sporer 2006; Sen and Lerman 2007). Although each attribution theory has its unique features, attribution theories share common natures (Forkes 1988; Gilbert and Malone 1995; Ross and Fletcher 1985). First, attribution theories focus on cognitive processes in forming attributions, rather than on the validity of the attributions. Second, attribution theories posit that people usually attribute others' behaviors to either internal properties of the person, or external factors.

Major theoretical concepts of attribution have been developed by Heider (1958). Heider's naïve or common-sense psychology posits that people draw naïve explanations about others' acts and social phenomena. A major contribution of naïve psychology is that it distinguishes two loci of causality: personal (internal/ dispositional) and environmental (external/ situational) causation

(Fiske and Taylor 1991; Folkes 1988; Ross and Fletcher 1985; Silvera and Laufer 2005). People tend to attribute others' behaviors either to personal traits or to situations. According to Heider, however, when making causal inferences about others, people prefer dispositional (*versus* situational) causal explanations. Heider's core ideas of attribution highly affected subsequent theoretical works of Jones and Davis (1965) and Kelley (1967).

Drawing from Heider's (1958) seminal analysis of causal attributions, Jones and Davis (1965) introduced correspondent inference theory. Correspondent inference theory suggests that people make inferences about other's personal dispositions or intentions directly from behaviors (Eagly and Chaiken 1993; Folkes 1988; Ross and Fletcher 1985; Silvera and Laufer 2005). Jones and Davis (1965) suggested that people undergo two stages in inferring personal dispositions: the attribution of intention and the attribution of disposition. According to the correspondence inference theory, perceivers make attributions only for intentional behaviors and they judge whether the behavior is intentional based on the belief that (1) the actor knows the consequences of the behavior and (2) the actor has the ability to achieve the consequences (Fiske and Taylor 1991; Ross and Fletcher 1985). If a perceiver judges that an act is intentional or freely chosen, then she or he attempts to infer the personal disposition. To infer others' personal dispositions, the perceiver often uses the principle of noncommon effect and desirability (Fiske and Taylor 1991; Ross and Fletcher 1985; Mizerski et al 1979). The principle of noncommon effect suggests that the perceiver makes a correspondent inference by identifying the distinctive or noncommon consequences of a chosen behavior. The perceiver can make inferences more confidently when the distinctive consequences of a chosen behavior are scarce (Jones and Davis 1965). If there are multiple noncommon effects of the behavior, ambiguity occurs. For example, suppose a consumer wants to buy a laptop computer and he or she has two brands in his or her

consideration set — brand X and brand Y. Between these two brands, the consumer chooses brand X. From a noncommon effect perspective, a perceiver infers why the consumer chooses brand X by comparing the distinctive consequences of buying brand X with the consequences of buying brand Y. When inferring what caused the purchase of brand X, common effects such as similar price, performance, and battery life are not useful information. However, if the perceiver knows that the portability of brand X is better than that of brand Y (one distinctive consequence or noncommon effect), this distinctive consequence leads the perceiver to infer the cause of purchasing brand X easily. In the case of multiple distinctive consequences (e.g., two laptop brands have different size, price, etc), however, it is difficult for the perceiver to make causal inferences for purchasing brand X.

To resolve the ambiguity of the behavior, the perceiver uses another cue, desirability of the behavior (Jones and Davis 1965). Generally, the more undesirable the behavior or the effect of the behavior, the more confidently the perceiver can make inferences. Combining noncommon effect and desirability, high correspondence occurs when both the number of noncommon consequences and assumed desirability are low (Jones and Davis 1965).

Another successor of Heider is Kelley (1967; 1972; 1973) who developed two formulations of attribution process: the covariation principle for multiple observations (1967) and the concept of causal schemata for a single observation (1972). Kelley's approach differs from that of Jones and Davis' (1965) correspondence inference theory in many ways. First, Kelley' models include both multiple observations and a single observation, while Jones and Davis' model includes only single observation. Second, Kelley's models provide more detailed information about the attributional processes of the self and environments, as well as those of other people (Fiske and Taylor 1991). Third, while the objective of correspondent inference

theory is to identify circumstances under which a perceiver justifies his or her dispositional inferences about the actor, Kelley's models focus on causality — what caused a certain event (Silvera and Laufer 2005).

With regard to multiple observations or events, Kelley (1967) suggested the covariation principle which posits a covariance exists between an observed effect and its possible causes. According to Kelley (1967; 1973), people make causal attributions as a stimulus or an entity, person (i.e., dispositional characteristics of a communicator), circumstance (times or situations), or a combination of these three. Among these possible causes, the covariation principle suggests that the stimulus attribution increases information persuasiveness (Eagly and Chaiken 1993; Mizerski 1982). In some cases, however, it is not clear whether the information is caused by the stimulus or by the non-stimulus. To resolve the attributional ambiguity, people often examine three types of information: consensus (e.g., Do other people experience the same effect with respect to this stimulus?), distinctiveness (e.g., Does the effect occur when the stimulus is there and not occur when it is absent?), and consistency (e.g., Does the effect occur each time the stimulus is present, regardless the form of the interactions?) (Kelley 1973). People can confidently make a stimulus attribution with high consensus, high distinctiveness, and high consistency (HHH). In contrast, the combination of low consensus, low distinctiveness, and high consistency (LLH) draws the person attribution and the combination of low consensus, high distinctiveness, while low consistency (LHL) draws the circumstance attribution (Kelley 1973). Other combinations of information, however, provide ambiguous information in terms of causal attributions (Ross and Fletcher 1985).

People make causal inferences for a single observation or event as well as for multiple observations or events. According to Kelley, when people make causal inferences on the basis of

a single observation or of limited information, they tend to use causal schemata, "a general conception the person has about how certain kinds of causes interact to produce a specific kind of effect" (Kelley 1972, p.151). For example, when a perceiver has only high consensus information about the event, he or she tends to assume that there are also high distinctiveness and high consistency to make the stimulus attribution. Likewise, given low distinctiveness, a person assumes the LLH pattern to complete the person attribution (Kelley 1973).

With a single observation, people use two other attributional principles as well as causal schema: the discounting principle and the augmenting principle (Kelley 1972; 1973). First, the discounting principle maintains that a perceiver discounts any specific cause for an event when alternative causes also exist (Kelley 1972; 1973). Specifically, the presence of alternative causes (e.g., a communicator's personal characteristics or situational pressure) lessens the plausibility of stimulus as a primary cause of the observed behavior and thus perceivers discount the stimulus as a cause of the event (Eagly, Wood, and Chaiken 1978). Generally, non-stimulus attributions of the communicator's information (e.g., a communicator's personality or situational pressure) lead message recipients to perceive that the communicator is biased (Eagly and Chaiken 1993). Regarding the communicator bias, Eagly and her colleagues suggested two types of bias: knowledge bias and reporting bias. Information recipients infer a knowledge bias by believing that a communicator's knowledge about external reality is nonveridical. Information recipients also involve in inferring a reporting bias by believing that a communicator's willingness to inform an accurate version of external reality is undermined (Eagly et al. 1978). In any case, information recipients believe that the information does not reflect external reality accurately and thus the persuasiveness of the information decreases. In contrast, the augmentation principle suggests that when an alternative cause also exists but serves as an inhibitory cause (i.e.,

suppressing the observed effect) of the observed effect, the presence of this alternative cause enhances the explanation power of a facilitative cause (i.e., increasing the likelihood of the occurrence of the observed effect) (Kelley 1973). This, in turn, makes the information unbiased and increases persuasiveness.

Many studies have applied attribution theory, as discussed above, in exploring consumers' causal inferences about marketing tactics or marketer motives (Campbell 1995; Campbell and Kirmani 2000; DeCarlo 2005; Forehand and Grier 2003; Friestad and Wright 1994; Rifon et al. 2004); service delays (Taylor 1994); product failures (Forkes 1984; Maxham and Netemeyer 2002); message appeal (Eisend 2006; Kamins 1989; Pechmann 1992; Sparkman and Locander 1980); product endorsers' recommendations (Cronley et al 1999; DeCarlo 2005; Mowen and Brown 1981; Silvera and Austad 2004; Sparkman 1982; Tripp, Jensen, and Carlson 1994; Wiener and Mowen 1986); and peer consumers' motives for product reviews (DeCarlo et al. 2007; Laczniak et al. 2001; Lee and Youn 2009; Mizerski 1982; Sen and Lerman 2007).

In terms of inferring marketer motives, two basic motives, concerns for the well-being of consumers *versus* concerns for the firm itself, frequently have been identified although different labels are used often in different studies: other-centered *versus* self-centered (Ellen, Webb, and Mohr 2006); public-serving *versus* firm-serving (Forehand and Grier 2003); altruistic motive *versus* self-serving motive (Rifon et al. 2004); and customer-oriented motive *versus* suspicion-oriented motive (DeCarlo 2005). These perceived marketer motives, in turn, influence subsequent evaluations toward the firms or tactics (Campbell and Kirmani 2000; DeCarlro 2005; Forehand and Grier 2003; Rifon et al. 2004). For example, Rifon et al (2004) found that consumers were more likely to attribute altruistic motives (e.g., the sponsor's concern for its customer's welfare) to the sponsor when there was high sponsor-cause fit (e.g., when products of

Ortho-McNeil Pharmaceuticals were included in the banner ad on a website with contraception information content) than were when there was low sponsor-cause fit (e.g., when products of Reebok were included in the banner ad on a website with contraception information content). This inference of altruistic motives, in turn, led to positive attitudes toward the sponsor. Likewise, DeCarlo (2005) found that consumers attributed the salesperson's strong sales messages (e.g., when a salesperson stated that he or she needed only one more sale to make it into the "Top Gun Summer Intern Club") to suspicion-oriented motives (e.g., to make a commission; does not care about the customer), and this attribution, in turn, deteriorated attitude toward the salesperson and purchase intention.

In addition to attributions about marketers' motives, consumers often infer why other consumers recommend or do not recommend a certain product. When inferring other consumers' motives, consumers tend to make causal attributions of either the stimulus (e.g., product-related) or the non-stimulus (e.g., the dispositional characteristics of reviewers or circumstance) (DeCarlo et al. 2007; Laczniak et al. 2001; Lee and Youn 2009; Mizerski 1982; Sen and Lerman 2007). Previous studies have suggested that the stimulus attributions increase information persuasiveness (Laczniak et al. 2001; Mizerski 1982; Sen and Lerman 2007). For example, Laczniak et al. (2001) found that consumers exposed to negative WOM with the configuration of high consensus, high distinctiveness, and high consistency tended to attribute the negativity of the review toward the brand (stimulus) (e.g., brand performance). This brand attribution of the negativity, in turn, diminished brand evaluations. On the other hand, with low consensus, low distinctiveness, and high consistency WOM, consumers made communicator (non-stimulus) attributions (e.g., the personal characteristics of the WOM provider such as lack of product expertise) about the negativity of the review, hence increased brand evaluations. Similarly, Sen

and Lerman (2007) found that consumers tended to make product (stimulus) attributions (e.g., product quality) when exposed to the reviewer's negative review about a utilitarian product, and perceive the review as useful. In contrast, when exposed to the negative review about a hedonic product, consumers made the reviewer's internal (non-stimulus) attributions (e.g., the reviewer's personal motivations) and thus did not find the negative reviews as useful.

Among various attribution theories discussed in this section, Kelley's (1973) discounting principles will be mainly used in this study.

Information Sponsorship

Traditionally, it is believed that peer-to-peer product conversations occur naturally. However, with the growing power of consumer product conversations on the Internet, marketers have tried to manage consumer WOM activities directly by rewarding consumers for initiating and/or spreading conversations about their products. These marketers' attempts introduce the notion of sponsored product information. As mentioned in the previous chapter, *sponsored* product information is paid information, whereas *organic* product information is unpaid information (Kozinets et al. 2010; Sernovitz 2009).

As sponsored product information penetrates the realm of social media, a tension occurs. How WOM marketing works (e.g., compensating consumers in return for initiating and/or spreading product information) is not consistent with what consumers expect in social media. People are likely to perceive social media as *their* sphere, not marketers' sphere.

Therefore, by nature (i.e., the presence of monetary compensation), sponsored product information is more likely to draw negative outcomes than its organic counterpart. Indeed, product information persuasiveness decreases when consumers are aware of a financial relationship between the source and the marketers (Harkins and Petty 1983). There is evidence

for the superiority of organic product information (*versus* sponsored product information). In the context of advertising, previous studies have shown that product information from unpaid or uncompensated sources induced higher source credibility (Sparkman 1982), positive attitude toward the source (DeCarlo 2005; Moore, Mowen, and Reardon 1994; Straughan and Lynn 2002), and positive brand attitudes (Moore et al. 1994; Wei et al. 2008) than did information from paid or compensated sources. For example, Moore et al. (1994) found that in the context of print advertising, product information (e.g., multivitamin tablets) endorsed by unpaid consumers (e.g., volunteered and unpaid for endorsing the product) led to more positive thoughts, attitude toward the source (i.e., perceived trustworthiness of the source), attitude toward the product, and attitude toward the brand than did information by paid sources (e.g., recruited by the manufacturing company and paid for endorsing the product). Likewise, Wei et al. (2008) demonstrated that consumers had less favorable brand attitudes when they knew that the brands (either Kraft or Carriage Trade) embedded in a college radio show (e.g., The Hungry Student) was sponsored by the marketer than consumers had when they did not know the brand sponsorship (e.g., participants were not told that brands paid for the show).

When consumers are exposed to product information, they try to infer why a certain person posts that particular information (Laczniak et al. 2001; Lee and Youn 2009; Sen and Lerman 2007). Although consumers can infer several available motives, this study will focus on two particular motives for providing product information in social media: information-sharing motives and monetary-gain motives. Studies on motivations for providing product information or WOM suggest that a major motive of information providers is a desire to share good product information for other consumers (Hennig-Thurau et al. 2004; Phelps et al. 2004; Sundaram, Mitra, and Webster 1998; Walsh, Gwinner, and Swanson 2004). To help other consumers'

purchase decisions and show his or her concern for them, an information provider shares good product information without expecting any reward in return (Hennig-Thurau et al. 2004; Sundaram et al. 1998; Walsh et al. 2004). Another plausible motive that consumers infer is a monetary gain motive. Previous studies on celebrity endorsements have indicated that consumers attributed the celebrities' product endorsements either to the product affects or to monetary gains in return for the endorsement (Mowen and Brown 1981; Sparkman 1982; Tripp et al. 1994). Likewise, monetary gain is one of the motivations for providing electronic WOM as well (Hennig-Thurau et al. 2004). Consumers are motivated to provide product information on the Internet to receive economic incentives such as web points or coupons offered by web platforms (Hennig-Thurau et al. 2004). In line with findings of previous studies, this study posits that consumers infer either information sharing motives (to share good product information; care about others' benefits) and monetary gain motives (to make money; care about self benefits) for proving product information in social media. Between these two motives, which one is attributed to product information will be influenced by information sponsorship (i.e., sponsored *versus* organic product information).

According to the discounting principle, any specific cause tends to be discounted as a primary explanation for a certain behavior when other plausible causes exist (Kelley 1973). In the case of sponsored product information, the presence of financial compensations introduces another possible motive of providing product information to consumers. Given that other plausible causes (e.g., financial compensations) also exist, consumers' suspicion of ulterior motives (i.e., to question the motives that underlie another person's behavior or to question the genuineness of that behavior) is heightened (DeCarlo 2005; Fein 1996; Hilton, Fein and Miller 1993; Tuk et al. 2009). Consequently, information sharing motives may be discounted as a

primary cause for providing product information. On the other hand, in the case of organic product information, since no alternative causes for providing information exist, consumers may not suspect ulterior motives of the information source. Due to less accessible ulterior motives, information sharing motives may not be discounted.

Consistent with the discounting principle (Kelley 1973), it is expected that organic product information will generate more information sharing motives than will sponsored product information. Given the absence of alternative causes (e.g., financial compensations), consumers will not discount the information sharing motive as a primary cause for providing product information. In contrast, since financial compensations arouse the suspicion of ulterior motives and other plausible causes (monetary gain), consumers will discount information sharing motives as a cause of providing product information. Therefore, it is predicted that consumers will generate more monetary gain attributions toward sponsored product information than toward organic product information. These predictions are consistent with what Sparkman (1982) found in the context of celebrity endorsement, namely that consumers had less monetary gain attributions and more product affect attributions when they were informed that the celebrity endorser (e.g., Frank Sinatra) received only one dollar in his year contract, than when they assumed that celebrity received full fees for the endorsement. Thus, it is hypothesized that:

> **H1a:** Organic product information will generate more information sharing attributions than will sponsored product information.
>
> **H1b:** Organic product information will generate less monetary gain attributions than will sponsored product information.

Furthermore, it is predicted that information sponsorship (e.g., sponsored product information *versus* organic product information) influences the effectiveness of information (e.g., brand attitude and compliance intention). Specifically, consistent with the previous studies that

found a detrimental effect of paid source on product evaluations (e.g., Moore et al. 1994), we expect that organic product information will lead to a greater effect on information effectiveness than will sponsored product information. Thus, we hypothesize:

> **H2a-b**: Organic product information will lead to greater (a) brand attitude and (b) compliance intention than will sponsored product information.

Source Effects

WOM marketers attempt to find tactics maximizing effectiveness of their product information. One such attempt is hiring appropriate information sources (WOM agents). Recently, WOM marketers hire various types of people to disseminate their product information in social media. Three noticeable information sources in social media are one's friends, celebrities, and web celebrities. Although all three sources seem to influence consumers' information processing, attitudes, and behaviors, each source's own characteristics, and the degree to which each source influences consumers, differ.

First, a major product information source in social media can be friends of consumers. Indeed, friends account for a major share of one's social circle in social media because maintaining existing offline relationships is the primary reason for people to use social networking sites (Ellison, Steinfield, and Lampe 2007). Several previous studies have demonstrated friends' substantial influences on consumer behavior (Bachmann, John, and Rao 1993; Bearden and Etzel 1992; Childers and Rao 1992; Goodrich and Mangleburg 2010; Lachance, Beaudoin, and Robitaille 2003; Mangleburg, Doney, and Bristol 2004). For example, Goodrich and Mangleburg (2009) found that friends substantially impact teens' purchase behavior through referent power (e.g., teens personally identify with friends), reward power (e.g., teens perceive friends as being able to confer rewards on them) and coercive power (e.g., teens perceive friends as being able to visit punishment on them).

However, there are varying degrees of a person's friendships (casual to close) and friends' effects on consumers also vary depending on social and emotional closeness, i.e., tie strength (Bansal and Voyer 2000; Brown and Reingen 1987; Ryu and Han 2009; Stefanone and Jang 2007). The strength of one's ties is determined by the emotional intensity of a relationship, the frequency of their exchanges, the intimacy of their exchanges, and reciprocal services (Granovetter 1973; Marsden and Campbell 1984). In terms of tie strength, close friends (strong ties) carry the characteristics of frequent and reciprocal communication in multiple contexts, a long relational history, intimacy, and self-disclosure of feelings and personal problems (Cladwell and Peplau 1982; Holiday and Kerns 1999; Stefanone and Jang 2007). Conversely, casual friends (weak ties) are characterized by infrequent communication, low reciprocity, and lack of emotional closeness (Cladwell and Peplau 1982; Holiday and Kerns 1999; Stefanone and Jang 2007). Researchers have suggested that, in consumer behavior, close friends (strong ties) are more influential a source than are casual friends (weak ties) (Bansal and Voyer 2000; Frenzen and Davis 1990). For example, Bansal and Voyer (2000) indicated that WOM provided by the strong tie source had greater impact on the receiver's purchase decision than had that by the weak tie source. In particular, a considerable amount of product information is more likely to be shared within strong ties than within weak ties (Bone 1992).

The superiority of close friends in consumer behaviors is explained by relationship norms. People form one of two types of relationships with others, i.e., either communal relationships or exchange relationships (Clark 1979; Clark and Mills 1993). In the former, people give benefits to relational partners because they take care of benefit recipients' needs and have concerns for recipients' welfare without expecting any reward (Aggarwal 2004; Ryu and Han 2009). Contrarily, in exchange relationships, people give benefits to other parties with expectations of

getting benefits back in return (Aggarwal 2004). Generally, people form communal relationships with strong ties (e.g., close friends and family), whereas they form exchange relationships with weak ties to whom they do not feel responsibilities (Aggarwal 2004; Frenzen and Nakamoto 1993; Ryu and Feick 2007; Ryu and Han 2009). Since information recipients know that close friends provide information with a good intention (e.g., take care of information recipients' welfare), they may accord more weight to information from close friends than to information from casual friends. Due to this strong-tie superiority, this study focuses solely on the effects of close friends on causal attributions and information effectiveness.

Another information source in social media is celebrities. Traditionally, celebrities, i.e., people well known for their accomplishments in areas such as sports and entertainment (Friedman, Termini, and Washington 1976), have been perceived to be those whom people admire but cannot access personally (Childers and Rao 1992). As social media have become a mainstream, however, distance between celebrities and ordinary people or fans lessens. An increasing number of celebrities have posted messages about their personal lives and thoughts in various social media platforms such as social networking sites (e.g., MySpace) and micro-blogging sites (e.g., Twitter). Today, a growing number become a friend (on MySpace) or a follower (on Twitter) of celebrities in social media to get to know the real personalities behind the celebrities. Among personal messages posted by celebrities, some are about products and brands (e.g., "The Four Seasons in Bora Bora is such an amazing hotel. The staff and service were incredible, had the best time! Can't wait to go back!" Tweet by Paris Hilton).

Although the role of celebrities as a product information source is a less developed research domain in both online and traditional WOM context, the effects of celebrities on consumer behaviors are particularly evident in a traditional advertising context. A celebrity

endorser, “any individual who enjoys public recognition and who uses this recognition on behalf of a consumer good by appearing with it in an advertisement” (McCracken 1980, p.310), has been the most popular endorser in advertising. The extensive practice of celebrity endorsements is attributable to its benefits. Previous studies have demonstrated that celebrity endorsers facilitate positive outcomes such as attention-getting (Kaikati 1987; Sternthal, Phillips and Dholakia 1978), brand recall (Friedman and Friedman 1979; Petty, Cacioppo, and Schumann 1983), advertisement or product evaluations (Atkin and Block 1983; Choi and Rifon [in press]; Friedman et al. 1976; Kamins 1989; Kamins and Gupta 1994; Stafford, Stafford, and Day 2002), and financial profits (Agrawal and Kamakura 1995; Marthur, Marthur, and Rangan 1997) (for detailed reviews, see Erdogan 1999; Amos, Holmes, and Strutton 2007). For example, Kamins (1989) found that the celebrity endorser (e.g., Leonard Nimoy) induced more favorable brand attitude and higher purchase intention than did non-celebrity endorser (e.g., an accountant).

In addition to one’s friends and celebrities, a brand new influential information source, web celebrities, recently emerged on the Internet. A web celebrity is referred to as “a person famous primarily for creating or appearing in Internet-based content, and who is highly recognizable to a web-based audience” (Ewalt 2010). This definition excludes celebrities whose fame comes from outside the Internet. Some famous examples of web celebrities are Perez Hilton (a celebrity gossip blogger), Michael Arrington (a tech blogger and founder of TechCrunch.com), Pete Cashmore (a tech blogger and founder of Marshable.com) (Ewalt 2010).

Web celebrities may be perceived as newly-emerged information sources who stand between ordinary people and celebrities. Although web celebrities are popular in the online context, they are ordinary in the offline context. Most people may not recognize web celebrities in the street (Ewalt 2010). However, like celebrities, web celebrities are popular and have their

own fans in the realm of the Internet. For example, web celebrities such as each Perez Hilton and Pete Cashmore have over one million Twitter followers (Ewalt 2010) and each of their blogs attract more than three million visitors a month. Web celebrities also share commonalities with offline experts in terms of expertise. Generally, expertise, "the extent to which a communicator is perceived to be a source of valid assertions" (Endogan 1999, p.298), derives from the knowledge, experience, skills or education of the communicator (Engogan 1999; Horai and Fatoullah 1974). Given that both web celebrities and experts possess knowledge and experience on a specific area, both parties may be perceived as having expertise. However, web celebrities have some distinguishable characteristics from experts. First, experts are not necessarily popular (Biswas, Biswas and Das 2006), whereas web celebrities are popular and recognizable to Internet users (Edwalt 2010). Second, while experts have verified authority (e.g., receive the advanced degree such as PhD, MD, and JD or have qualified occupations such as professor, doctor, etc) (Friedman et al. 1976; Schiffman and Kanuk 2007; Weiner and Mowen 1986), it is not necessary for web celebrities to have such verified authority. Instead, web celebrities are often ordinary people who raise their fames via their Internet activities and other Internet users' word of mouth. Third, the knowledge and experience of web celebrities are more accessible than those of experts because web celebrities tend to post updated information on their blogs.

Three types of information sources (close friends, celebrities, and web celebrities) influence consumer behaviors via different characteristics of each source. Source effect models (e.g., source credibility model and source attractiveness model) suggest sets of source characteristics that enhance information source persuasiveness (Erdogan 1999). These characteristics sets comprise credibility, trustworthiness (source credibility model; Hovland,

Janis, and Kelley 1953; Ohanian 1991), familiarity, similarity, and liking (source attractiveness model; McGuire 1969).

According to the source credibility model, effectiveness of information source depends on perceived level of expertise and trustworthiness (Dholakia and Sternthal 1977; Hovland et al. 1953; Ohanian 1991). Expertise is defined as "the extent to which a communicator is perceived to be a source of valid assertions" (Endogan 1999, p.298). Generally, perceived expertise derives from the knowledge, experience or skills of the communicator (Engogan 1999). Previous studies on source effects have demonstrated that the sources' perceived expertise generates more favorable evaluations of information, and influences the message-recipients' beliefs, attitudes, or behaviors (Ohanian 1990, 1991; Perse, Nathanson, and McLeod 1996). Among celebrities, web celebrities, and close friends, expertise seems closely related to web celebrities. On the other hand, trustworthiness refers to "the degree of confidence in the communicator's intent to communicate the assertions he considers most valid" (Ohanian 1991, p. 41). Trustworthiness is considered to be linked with one's close friends because via a long relational history one may have confidence in one's close friends' intention.

In addition to expertise and trustworthiness, source attractiveness model (McGuire 1985) suggests that source's attractiveness accounts for the effectiveness of information source. Source attractiveness is determined by similarity (i.e., a resemblance between source and the information recipients), familiarity (i.e., knowledge of source through exposure), and liking a source (i.e., affection for source as a result of source's physical appearance and behavior) (McGuire 1985). Regarding perceived similarity, considering it derives from certain attributes of the source such as demographics, shared values, and common experiences (Feick and Higie 1992; Salmon and Atkin 2003), it is expected that consumers perceive their close friends as more

similar than celebrities or web celebrities. Due to high profile and status, celebrities often are perceived to be those whom people admire but who differ from them (Childers and Rao 1992). As mentioned earlier, however, consumers may perceive web celebrities to be more similar than celebrities, because web celebrities are ordinary people in the offline context. In terms of familiarity, although slight differences may exist, it is assumed that all three sources (celebrities, web celebrities, and close friends) are perceived to be familiar to consumers. This is because consumers, Internet users in particular, are exposed to all three sources somewhat frequently. Regarding likeability, since this characteristic is closely related to physical attractiveness, consumers may have higher likeability for celebrities than for web celebrities or close friends.

In sum, characteristics that enhance the persuasiveness of each source are different. For close friends, attributes of perceived trustworthiness, similarity, and familiarity make information from close friends persuasive. In contrast, information from celebrities is persuasive due to their familiarity and likability. Finally, web celebrities' information is received weights due to perceived expertise, similarity, and familiarity. Each of these qualities operates through different processes of social influence.

According to Kelman (1961), three processes of social influences led people's opinion and attitude change: compliance, identification, and internalization. First, compliance occurs when a person conforms to the expectations of information sources to achieve rewards or avoid punishments (Kelman 1961). Second, identification occurs when a person adopts influences from sources to establish positive self-image (Kelman 1961). A person's self-esteem is boosted to the extent that one's ego-ideal overlaps with that of the sources (Bagozzi and Dholakia 2002; Bagozzi and Lee 2002; Kamin et al. 1989). Finally, internalization occurs when a person accepts influences because a source's information is perceived as useful for attaining one's goal and as

being congruent with one's value or belief system. Knowledge or expertise of sources is considered an important aspect in the internalization process (Hass 1981; Kelman 1961).

Among these three processes, the effectiveness of celebrities occurs through the identification process (Austin et al. 2008; Basil 1996; Biswas et al. 2006; Kamins 1989; Kamins and Gupta 1994). Consumers accept influences from celebrities as a result of aspirations to be like them (e.g., wanting to be attractive or popular like them). Consumers believe that the product use that celebrities promote helps to enhance their own self-images (Bearden and Etzel 1982; Bearden et al. 1989). In this sense, celebrities are effective sources in promoting physical-attractiveness-related products (e.g., perfume, cosmetics, or hair-care products) (Choi and Rifon, [in press]; Kahle and Homer 1985; Kamins 1990). Effectiveness of celebrities as an information source, however, disappears when celebrities promote products incongruent with their images (Choi and Rifon [in press]; Kamins and Gupta 1994). It seems that celebrities can be a more effective information source than can web celebrities or close friends in promoting attractiveness-related products.

Regarding web celebrities, given that they have commonalities with offline experts, it is predicted that web celebrities' effectiveness on consumers occurs through internalization processes. Previous studies show that consumers adopt product information from experts because they believe those experts provide helpful solutions to particular problems (Biswas et al. 2006; Friedman and Friedman 1979; Mangleburg et al. 2004). As with celebrities, however, previous studies show that experts work as an influential information source only when they promote products matching their expertise (Biswas et al. 2006; Friedman and Friedman 1979). This suggests that marketers can maximize WOM marketing effectiveness through hiring web celebrities for products that match their expertise.

Unlike celebrities and web celebrities, the influence of close friends operates through all three processes (Mangleburg et al. 2004). Close friends' influence works through the compliance process by obtaining emotional rewards (e.g., acceptance by, and/or approval of, friends) and avoiding punishments (e.g., rejection by, and/or disapproval of, friends) because people's need for conformity tends to be more activated among close friends (strong ties) than among casual friends (weak ties) (Ryu and Han 2009). Additionally, when consumers enhance their self-esteem through associating themselves with their close friends, the identification process occurs (Burnkrant and Cousineau 1975; Mangleburg et al. 2004). Consumers also internalize information from their close friends. Since close friends often know well the recipients' personal tastes, needs, and lifestyle, they can provide useful and accurate information about, or solutions to, problems in consumer decision-making (Kiecker and Harman 1994). This internalization process can be accelerated when close friends have prior experiences with the product or service (Friedman and Friedman 1979). The fact that consumers engage in all three processes suggest that close friends are strong influencers in consumer purchase-decisions.

Applying the different effects of each source, it is predicted that consumers will generate more information-sharing attributions and less monetary gain attributions toward information from close friends than toward information from celebrities or web celebrities. Since close friends are perceived as trustworthy in providing information, consumers are likely to take information from close friends at face value, and not to harbor ulterior-motive doubts. However, regarding celebrities and web celebrities, if the product about which celebrities and web celebrities provide information is incongruent with their particular characteristics (e.g., attractiveness or expertise), consumers may suspect ulterior motives. Furthermore, it is predicted

that information posted by close friends will have a greater effect on information effectiveness than will information by celebrities or by web celebrities. Thus, we hypothesize:

> **H3a:** Product information posted by a close friend will generate more information sharing attributions than will information by a celebrity and by a web celebrity.
>
> **H3b:** Product information posted by a close friend will generate less monetary gain attributions than will information by a celebrity and by a web celebrity.
>
> **H4a-b**: Product information posted by a close friend will lead to greater (a) brand attitude and (b) compliance intention than will information by a celebrity and by a web celebrity.

Interaction Effect of Source Types and Information Sponsorship

Previous sections predicted that both information sponsorship (organic or sponsored) and source types (close friends, celebrities, or web celebrities) would have an independent effect on consumer causal attributions and information effectiveness. Furthermore, this study expects two-way interaction effect of the source types and the information sponsorship on consumer causal attributions and information effectiveness. Specifically, it is expected that the aforementioned source effects will appear *only* when product information is organic.

According to discounting principles, when consumers detect other salient rival causes for a certain behavior, one possible cause is discounted (Kelley 1973). The presence of strong alternative cause often heightens consumers' suspicion of ulterior motives (Tuk et al. 2009) and draws a reporting bias (i.e., "the belief that a communicator's willingness to convey an accurate version of external reality is compromised," Eagly et al. 1978, p.424). In the case of sponsored product information, financial compensations will raise the suspicion of ulterior motive (monetary gain) and, information sharing motives will be discounted as a major cause of providing information. Additionally, consumers will infer a reporting bias toward the information source by believing that the source's willingness to convey accurate product information will be compromised. Due to the presence of alternative causes, it is assumed that

the superiority of close friends will disappear. Thus, the following two-way interaction hypotheses are suggested:

> **H5a:** When product information is organic, information posted by a close friend will generate more information sharing attributions than will information by a celebrity and by a web celebrity.
>
> **H5b:** When product information is sponsored, there will be no differential effect of source types on information sharing attributions.
>
> **H6a:** When product information is organic, information posted by a close friend will generate less monetary gain attributions than will information by a celebrity and by a web celebrity.
>
> **H6b:** When product information is sponsored, there will be no differential effect of source types on monetary gain attributions.
>
> **H7a:** When product information is organic, information posted by a close friend will lead to more favorable brand attitude than will information by a celebrity and by a web celebrity.
>
> **H7b:** When product information is sponsored, there will be no differential effect of source types on brand attitude.
>
> **H8a:** When product information is organic, information posted by a close friend will lead to greater compliance intention than will information by a celebrity and by a web celebrity.
>
> **H8b:** When product information is sponsored, there will be no differential effect of source types on compliance intention.

Furthermore, previous research suggests that causal attributions influence subsequent brand evaluations (DeCarlo et al. 2007; Laczniak et al. 2001; Rifon et al. 2004; Sen and Lerman 2007). For example, Laczniak et al. (2001) found that causal attributions mediated the effect of negative WOM on brand evaluations. Specifically, consumers exposed to the negative WOM message with high consistency, high consensus, and high distinctiveness, tended to attribute negativity of the WOM message toward the brand, and in turn this brand attribution influenced brand evaluations negatively. In contrast, consumers exposed to the negative WOM message

with high consistency, low consensus, and low distinctiveness tended to make the communicator attributions, thus brand evaluations were not undermined. Likewise, Sen and Lerman (2007) demonstrated that causal attributions about the reviewer's motives mediated the interaction effect of product type (utilitarian *versus* hedonic) and review valence (positive *versus* negative) on consumers' perceived usefulness of the review. Consistent with previous research, it is expected that interaction effects of source types and information sponsorship will influence information effectiveness via causal attributions. Thus, it is hypothesized that:

> **H9**: Causal attributions about the source's motives will mediate the interaction effect of source types and information sponsorship on information effectiveness.

CHAPTER IV

STUDY 1: EXPERIENCE-BASED PRODUCT INFORMATION

Method

The purpose of this study is to examine main effects of the information sponsorship and source types, as well as the two-way interaction effect of source types and information sponsorship on consumer causal attributions and the effectiveness of information in the context of social media. Toward that end, Twitter was selected as a type of social media. To test the proposed hypotheses, a 3 (Source type: a celebrity, a web celebrity, or a close friend) x 2 (Information sponsorship: organic or sponsored) between-subjects experiment design was employed.

Participants

Overall, 282 adult Twitter users in the United States participated in this study. Participants were recruited from Survey Sampling International (SSI). The original panel consists of 799,397 people from all states in the United States. Among those 799,397, this study's samples were limited to 1) only Twitter users and 2) those aged 18 to 34. Using a national adult sample seems appropriate for this study. According to the results of US Twitter user analysis (http://www.quantcast.com), the largest age group in US Twitter users is young adults aged 18 to 34. Female (55%) slightly outnumber male (45%). The majority of US Twitter users are White (69%), the rest being Black (16%), Hispanic (11%), Asian (3%), and other (1%). About half the participants (51%) have earned at least a college degree.

In the SSI panel, 702 confirmed Twitters users were found and e-mail invitations including study URL were sent to 282 randomly-selected Twitter users aged 18 to 34, for this

study. Generally, two types of incentives were offered. First is a US $25,000 quarterly drawing. Any participant who completed the questionnaire for any study during the quarter is eligible. The other incentive is 300 points (the equivalent of US$3). Specific demographic characteristics of final samples are described in the result section.

Stimuli

Six versions of Twitter pages were created by modifying existing Twitter pages: (1) organic product information posted by a celebrity, (2) organic product information posted by a web celebrity, (3) organic product information posted by a close friend, (4) sponsored product information posted by a celebrity, (5) sponsored product information posted by a web celebrity, and (6) sponsored product information posted by a close friend. Across the conditions, all six Twitter pages had identical layouts, a picture (a scenic image), and eight tweets that consist of seven non-product related tweets[1] and a target tweet with product information, except for the manipulations of the source (a celebrity, a web celebrity, or a close friend) and information sponsorship (organic or sponsored).

Product Category Selection. To select an appropriate product category, this study considered two conditions: 1) the product category should not be closely associated with a specific type of source (especially for a celebrity and a web celebrity in terms of credibility, product expertise, and popularity) and 2) the expected selling price of the product category should not vary across the source types. As mentioned in the previous section, specific characteristics of celebrities and web celebrities (e.g., attractiveness and expertise) enhance the

[1] Life isn't about waiting for the storm to pass… its about learning to dance in the rain/ I'm so thankful for my family and my best friends!/ I'm tired and I feel like crap 2day. Thought I'd share that so the sickest among us can feel better by comparison/ I love my life! Wish you all the same!/ Trying something today that I've never done before! Always good to step outside of your box/ Congrats @dickc

persuasiveness of product information. Additionally, if the product category has a wide selling-price range, each participant may estimate a different price for the target product; however, product price can influence participants' product evaluations. To control these potential confounding factors, two conditions were considered.

A pretest was conducted with 49 undergraduate students at a major Midwestern university. In the pretest, participants were given a description about a source (a celebrity or a web celebrity) and a list of nine different product categories: fitness center, MP3 player, restaurants, athletic shoes, digital camera, sunblock, electric toothbrush, sunglasses, and energy drinks.[2] Participants were asked to indicate the degree to which they perceived the source has expertise on each product category (1= not an expert, 7 = an expert) and to estimate and write down the expected selling price of each product category (open-ended question).

Based on the pretest results, an electric toothbrush was chosen. The independent t-test results revealed that two sources were similar in perceived expertise on an electric toothbrush ($M_{\text{celebrity}} = 2.96$, $SD = 1.43$; $M_{\text{webcelebrity}} = 3$, $SD = 1.22$; $t\ (47) = .11$, n.s) and the expected selling prices ($M_{\text{celebrity}} = \$36.33$, $SD = \$28.79$; $M_{\text{webcelebrity}} = \$31.72$, $SD = \$25.54$, $t\ (47) = -.59$, n.s). A fictitious brand name, *Lumen*, was used to control for pre-existing attitudes toward the brand.

Product Information. To choose attributes to be included in the product information, various websites that contain consumer product reviews about electric toothbrushes (e.g., retailer

[2] The list of product categories was created based on the findings of content analysis of 1,000 sponsored tweets (not reported in this study). The content analysis indicated that among 20 identified product categories, services (e.g., transportations, hotel, restaurant, fitness center, telecommunications, etc) (26.7%), apparel and accessories (8.8%), pharmacy and health (8.3%), and electronics (7.6%) were four most frequently appearing product categories in sponsored tweets.

websites such as amazon.com and review websites such as epinions.com) were investigated carefully. Three most-frequently-mentioned attributes in consumer reviews were gentleness, ease of use, and battery life. Therefore, these three attributes were included in the target tweet. The following product information was used in this study.

> My new Lumen electric toothbrush is great! It's gentle on my teeth and gums, easy to use, and has long battery life. Check it out!

Source Type. For celebrity and web celebrity conditions, this study created a fictitious character, Phil Johnson, the name being adopted from a previous study (Till and Busler, 2000), to overcome potential problems with using a real celebrity and a real web celebrity. As described in the previous section, both celebrities and web celebrities are perceived as popular. To control the potential effect of popularity on information effectiveness, the perceived levels of popularities need to be equivalent. However, in reality it would be difficult to find celebrities and web celebrities equivalent in popularity. It is believed that the use of fictitious celebrities and web celebrities minimizes unintentional confounds.

A pretest was conducted whether participants correctly identified each source as given. In the pretest, participants (n = 51) were given a description about one of three sources. In the celebrity (i.e., someone well known to the public for his or her accomplishments in areas such as sports and entertainment) condition, participants received the following written description of Phil Johnson, an English actor, to increase believability. Had the celebrity been described as American, participants might suspect Phil Johnson is a fictitious character.

> **Phil Johnson** (born 11 May 1977) is an English actor. He began acting in 1996 and has had several leading roles in British movies. He was nominated for the British Independent Film Award in 2008 for his performance in the film *Dream*. Today, he is one of the top 100 most-bankable movie stars in England.

In the web celebrity (i.e., persons famous primarily for creating or appearing in Internet-based content, and highly recognizable to a web-based audience) condition, participants received the following written description of Phil Johnson as being a blogger because two thirds of *Forbes'* 25 web celebrities owned personal blogs.

> **Phil Johnson** (born 11 May 1977) is one of Forbes' 50 web celebrities. Phil rose to fame via his personal blog in 2008, which contains breaking web news, trend analyses, and social media resources and guides. His blog attracts more than 5000 people a month, putting it among the 1000 most-visited sites on the Internet. Today he gives speeches about social media trends and is frequently quoted in the media.

Finally, participants in the close friend condition were asked to think of one of their close friends and to provide his or her initials (Ryu and Feick 2007).

Information Sponsorship. Two versions of the product information were created. These two versions were identical except for the presence of the disclosure term of sponsored information (#ad) and website link. While sponsored information contained the disclosure term and sponsored product website link, organic information did not contain any disclosure term and/or regular product website link. The following product information was used in this study.

> Organic information: My new Lumen electric toothbrush is great! It's gentle on my teeth and gums, easy to use, and has long battery life. Check it out! http://bit.ly.lt
>
> Sponsored information: #ad My new Lumen electric toothbrush is great! It's gentle on my teeth and gums, easy to use, and has long battery life. Check it out! http://spn.tw/lt

Article about Sponsored Product Information. The purpose of this article was to inform participants of the existence of sponsored product information on Twitter. Since sponsored product information and/or sponsored tweets are new phenomena, participants may not know that sponsored product information can be in other people's Twitter timeline (i.e., a collected stream of tweets listed in real-time order). However, knowledge about sponsored product information is important in this study because an objective of this study is to examine whether

information sponsorship (organic or sponsored) produces different outcomes. Toward that end, the article included what sponsored tweet is, how sponsored tweet works, and how consumers can discern sponsored tweets (see Appendix A).

Procedures

The experiment was conducted online. Panel members were given the URL to the experiment website. On the first page of the website, participants were asked to read the consent form and press the NEXT button if they wish to participate in the study. The Java Script of the webpage led participants to one of six randomly-assigned conditions. Participants first were asked to read a trade journal article regarding sponsored product information. Immediately after reading the article, participants were asked to answer the sponsored information knowledge questions.

On the next page, participants were asked to read the description about a celebrity or a web celebrity or to think specifically of one of their close friends and provide his or her initials. Participants then were asked to indicate the source's attractiveness, credibility, perceived similarity, likeability, and popularity (for a celebrity or a web celebrity condition) or closeness (for a close friend condition). Finally, participants were instructed to read one of six Twitter pages. After reading the Twitter page, they were asked to complete the remaining part of a questionnaire including manipulation checks, dependent measures, demographic information and Twitter usage behaviors.

Measures

Two mediators (information sharing attributions *versus* monetary gain attributions), two dependent variables (brand attitude and compliance intention), and sample characteristics (demographics and Twitter usage behaviors) were measured.

Causal Attributions. Two types of causal attributions were measured in this study: information sharing attribution and monetary gain attribution. Causal attribution toward information sharing motive was measured by asking participants to indicate their level of agreement or disagreement with each of the following three statements on a seven-point scale: "(The source) posted the tweet about Lumen electric toothbrush to provide useful product information," "(The source) posted the tweet about Lumen electric toothbrush because he wanted to share the information about a good product with others," and "(The source) posted the tweet about Lumen electric toothbrush because he wanted to inform others of the product" ($\alpha = .89$). The first item was modified from a previous study (Sen and Lerman 2007), while other two items were created for this study. Similarly, causal attribution toward monetary gain motive was measured with the following three statements: "I think (the source) posted the tweet about Lumen electric toothbrush because he is paid for doing so" (Sparkman 1982), "(The source) posted the tweet about Lumen electric toothbrush solely for the money" (Mowen and Brown 1981), and "(The source) posted the tweet about Lumen electric toothbrush to receive compensation" (Campbell and Kirmani 2000) ($\alpha = .92$). For subsequent analyses, scores of all items were averaged to construct information sharing attributions and monetary gain attributions.

Information Effectiveness. To measure information effectiveness, participants' brand attitudes and compliance intentions were measured. First, brand attitude was measured with four seven-point semantic differential items anchored by "dislike/like," "negative/ positive," "unfavorable/favorable," and "bad/good" (Holbrook and Batra 1987) ($\alpha = .96$). Compliance intentions [3] was measured by asking participants to indicate their intention to click the link provided in the target tweet with four seven-point items anchored by "unlikely/likely,"

[3] The target product information included "Check it out" as a call to action.

"improbable/probable," "impossible/possible," and "uncertain/certain" (Bearden, Lichtenstein, and Teel 1984) ($\alpha = .90$). All items were averaged to create an index of brand attitude and compliance intentions.

Demographics. Participants' demographic information was measured using various questions (e.g., gender, ethnicity, marital status, education, etc). For detailed information, see Table 1.

Twitter Usage. Participants' experience with Twitter was measured by asking them about various indicators of Twitter experience: usage period, amount of time spent on Twitter, and number of followers and followings. First, usage period was measured by asking participants to specify years and months that they have used Twitter. Amount of time spent on Twitter was measured by asking participants to answer the following question: "In the past week, on average, approximately how many minutes/hours per day did you spend on Twitter?" The responses ranged from 1 (less than one hour) to 6 (more than 5 hours) (Ellison, Steinfield, and Lampe 2007). Number of followings was measured by asking participants to answer the following question: "As of today, how many followings (i.e., following someone or something on Twitter means you are subscribing to his/her/their/those Tweets) do you have on Twitter?" Likewise, number of followers was measured with the following question: "As of today, how many followers (i.e., people who are subscribing to your tweets) do you have on Twitter?" Participants were asked to select a response ranging from 1 (100 or less) to 11 (more than 1,000) (modified from Ellison et al., 2007).

Results

Characteristics of Final Sample

More rigorously to test the proposed hypotheses, it was important that participants distinguished sponsored information from organic information. To check whether the manipulation of information sponsorship is successful, immediately after reviewing the Twitter page, participants were asked to answer the following statement with True, False, and Don't know: "Phil Johnson's tweet about Lumen electric toothbrush is a sponsored tweet." Sixty-two participants who failed to correctly identify the information sponsorship were removed from final analyses.

Additionally, participants' knowledge about the sponsored product information was measured by asking them to answer the following sponsored information knowledge questions with three options, True, False, and Don't know: (1) Advertisers provide financial compensation to Twitter users in exchange for spreading sponsored conversations about their brand and products on Twitter, (2) All Twitter users under the sponsored program are paid the same amount per sponsored tweet, (3) Tweets about products or services, which carry terms such as spon, #spon, #ad, or AD, are sponsored tweets, and (4) All tweets about products or services are sponsored tweets. To make a composite index of knowledge about the sponsored product information, the correct answers were recoded as "1" and the rest as "0," and answers were summed. A higher score indicated a higher level of knowledge and the highest possible score was 4 (M = 3.06, SD = 1.05). Twenty-seven participants who skipped questions about sponsored information knowledge were excluded from the final sample.

After cleaning the data, 193 usable responses from a total 282 remained in the final sample. The following are demographic characteristics and Twitter usage behaviors of the sample.

Demographics. Average age of the sample was 27.4 (*SD* = 4.04), with ages ranging from 19 to 35. There were slightly more females (57%) than males (43%). Most participants are White (61.7%), while the rest are Black (15.5%), Hispanic (9.3%), Asian (8.3%), and other (5.1%). About half the participants (52.8%) earned at least a university- or advanced- degree (See Table 1 for demographics).

Table 1
Descriptive Statistics of Sample

	Mean or Percent (n)	S.D.
Gender		
Female	57% (110)	
Male	43% (83)	
Age	27.4	4.04
Ethnicity		
Asian	8.3% (16)	
Black or African American	15.5% (30)	
Hispanic	9.3% (18)	
White (Not Hispanic/Not Latino)	61.7% (119)	
Others	5.1% (10)	
Marital Status		
Never married	47.7% (92)	
Married	43.5% (84)	
Divorced	4.7% (9)	
Separated	.5% (1)	
Others	3.6% (7)	
Education		
High school diploma or equivalent	18.8% (36)	
Some college or university but did not graduate	28.1% (54)	
Associate degree	8.9% (17)	
Bachelor degree	34.9% (67)	
Master degree	5.7% (11)	
Professional degree (MD, DVM, DDS, JD, DD)	3.1% (6)	
Doctoral degree (PhD, EdD, DS, etc)	.5% (1)	
Employment Status		
Not employed	27.5% (53)	
Self-employed	9.8% (19)	
Works for someone else, part time	11.4% (22)	
Works for someone else, full time	40.4 % (78)	
Full time student	10.9 % (21)	

Table 1 (Continued)

Personal Income	
$20,000 or less	28.5% (55)
$20,001 - $40,000	31.6% (61)
$40,001 - $60,000	21.2% (41)
$60,001 - $80,000	5.2% (10)
$80,001 - $100,000	4.1% (8)
$100,001 - $120,000	1% (2)
$120,001 - $140,000	1% (2)
$140,001 - $160,000	.5 % (1)
$160,000 - $180,000	1% (2)
$180,001 - $200,000	.5 % (1)
$200,001 or more	0% (0)
I do not know	1% (2)
I prefer not to answer	4.1% (8)
Household Income	
$20,000 or less	14% (27)
$20,001 - $40,000	27.5% (53)
$40,001 - $60,000	20.7% (40)
$60,001 - $80,000	13% (25)
$80,001 - $100,000	9.3% (18)
$100,001 - $120,000	4.1% (8)
$120,001 - $140,000	1.6% (3)
$140,001 - $160,000	1.6% (3)
$160,000 - $180,000	1.6% (3)
$180,001 - $200,000	1% (2)
$200,001 or more	.5% (1)
I do not know	1 % (2)
I prefer not to answer	4.1 % (8)

***Twitter Usage*.** Participants, on average, have used Twitter for more than one year (*M* = a year and four months, *SD* = 10.15 months). More than half the participants (56%) reported spending less than an hour on Twitter each day. The majority of participants (74.6%) had less than 100 followers and 69.1% of them followed less than 100 people or items (See table 2 for more details).

Table 2
Sample Twitter Usage

	Mean or Percent (n)	S.D.
Usage Period	16.21 Months	10.15
Usage Hours		
Less than 1 hour	56% (108)	
1 hour – less than 2 hours	19.2% (37)	
2 hours – less than 3 hours	14.5% (28)	
3 hours – less than 4 hours	3.6% (7)	
4 hours – less than 5 hours	2.6% (5)	
More than 5 hours	4.1% (8)	
Number of Followers		
100 or less	75% (144)	
101 - 200	10.4 % (20)	
201 - 300	4.2% (8)	
301 - 400	5.2% (10)	
401 - 500	1.6% (3)	
501 - 600	0 % (0)	
601 - 700	1% (2)	
701 - 800	1% (2)	
801 - 900	0% (0)	
901 - 1000	0% (0)	
More than 1000	1.6 % (3)	
Number of Followings		
100 or less	69.1% (132)	
101 - 200	11.5 % (22)	
201 - 300	7.3% (14)	
301 - 400	6.3% (12)	
401 - 500	2.1% (4)	
501 - 600	1.6% (3)	
601 - 700	0% (0)	
701 - 800	. 5% (1)	
801 - 900	.5% (1)	
901 - 1000	0% (0)	
More than 1000	1% (2)	

Manipulation Check

Source Type. To see whether manipulations for the types of information sources were successful, those in the celebrity condition and in the web celebrity condition were asked to rate their agreement with each of four statements: “I think Phil Johnson is recognizable to the general

public", "I think Phil Johnson is recognizable to a web-based audience," "I think Phil Johnson's popularity depends on his accomplishments in the entertainment area," and "I think Phil Johnson's popularity depends on his accomplishments on the Internet" (1 = extremely inaccurate, 7 = extremely accurate). An analysis of variance (ANOVA) revealed significant main effects of the source type on perceived recognition of the source and on the perceived basis of source's popularity. Participants in the celebrity condition were more likely to perceive that Phil Johnson was recognizable to the general public ($M = 4.82$) and his popularity depended on his accomplishments in the entertainment area ($M = 6.07$) than were those in the web celebrity condition ($M = 3.76$, F (1, 130) = 11.95, $p <. 01$ for the recognition; $M = 3.94$, F (1, 130) = 69.32, $p <. 001$ for the basis of popularity). In contrast, participants in the web celebrity condition were more likely to perceive that Phil Johnson was recognizable to the web-based audience ($M = 5.76$) and his popularity depended on his accomplishments on the Internet ($M = 5.96$) than were those in the celebrity condition ($M = 4.47$, F (1, 130) = 27.17, $p <. 001$ for the recognition; $M = 3.59$, F (1, 130) = 90.65, $p <. 001$ for the basis of popularity). No other significant effects were found.

Participants in the close friend condition were asked to rate the degree of the friend's closeness to themselves (1 = not close to me, 7 = very close to me) (Frenzen and Davis 1990). Participants reported that they had very close relationship with the friend whose initials they provided ($M = 6.12$, $SD = 1.22$). Additionally, to verify whether manipulation of source characteristics was successful, participants were asked to rate their perceived attractiveness (1= unattractive, 7 = attractive), credibility (1=not credible, 7 = credible), similarity (1 = very different from me, 7 = very similar to me), and popularity (1= not popular, 7 = popular) (measured for celebrities and for web celebrities only) respectively. As expected, a celebrity and web celebrities were similarly perceived in popularity, t (132) = .56, n.s., but differed in

attractiveness, t (132) = 4.39, $p < .01$. There were no differences among three sources in perceived credibility, F (2, 190) = 2.83, n.s. In perceived similarity, the celebrity was perceived as very different from the participants, compared to the web celebrity or the close friend, F (2, 190) = 19.85, $p < .001$. Finally, all three sources were not perceived as having expertise on the electric toothbrush, F (2, 190) = 1.21, n.s. (See Table 3). Thus, manipulation of the source types was successful.

Table 3
Source Characteristics

	Source Type	Mean	S.D.
Attractiveness	Celebrity	5.42	1.19
	Web celebrity	4.46	1.34
	Close friend	5.81	1.42
Credibility	Celebrity	5.52	1.44
	Web celebrity	5.6	1.15
	Close friend	6.03	1.29
Perceived similarity	Celebrity	3.31	1.7
	Web celebrity	3.93	1.2
	Close friend	5	1.59
Popularity	Celebrity	6.03	1.13
	Web celebrity	5.91	1.28
	Close friend	n/a	
Product expertise	Celebrity	2.84	1.56
	Web celebrity	3.09	1.76
	Close friend	3.32	1.80

Measurement Model

Before testing the proposed hypotheses, a confirmatory factor analysis (CFA) was performed using Amos 18 to obtain evidence for the four-factor model. CFA results showed a satisfactory fit for the four-factor model, χ^2 (71) = 123.10, $p < .001$, RMSEA = .06, GFI = .92, NFI = .96, CFI= .98 (see Table 4 for factor loadings).

Table 4
Four-Factor Confirmatory Factor Analysis

	Constructs				R^2
Items	Information Sharing (IS)	Monetary Gain (MG)	Brand Attitude (BA)	Intention to Comply (IC)	
IS item1	.89				.67
IS item2	.90				.82
IS item3	.87				.75
MG item1		.96			.92
MG item2		.95			.91
MG item3		.78			.61
BA item1			.88		.78
BA item2			.89		.79
BA item3			.96		.92
BA item4			.94		.88
IC item1				.94	.89
IC item2				.97	.95
IC item3				.78	.61
IC item4				.64	.40

χ^2 (71) = 123.10, p < .001, RMSEA = .06, GFI = .92, NFI = .96, CFI= .98

Note. All coefficients are completely standardized and statistically significant at $p < .001$.

Hypotheses Testing

To test the stated hypotheses, a Multivariate Analysis of Variance (MANOVA) was conducted. The MANOVA revealed a significant multivariate main effect for information sponsorship, Wilk's $\lambda = .85$, F (4, 184) = 8.27, $p < .001$ and a significant two-way interaction effect between source types and information sponsorship, Wilk's $\lambda = .90$, F (8, 368) = 2.39, $p < .05$. The main effect for the source types was not significant, Wilk's $\lambda = .98$, F (8, 368) = .55, n.s.

Main Effects of Information Sponsorship on Causal Attributions. H1predicted the main effect of information sponsorship on information sharing attributions (H1a) and monetary gain

attributions (H1b). In support of H1a, a univariate analysis revealed a significant main effect of information sponsorship on information sharing attribution, F (1, 187) = 7.30, $p < .01$. Specifically, a pairwise comparison test with the Bonferroni method indicated that participants were more likely to infer information sharing motives toward organic product information (M = 4.79) than toward sponsored information (M = 4.16) ($p < .01$). In support of H1b, sponsored product information (M = 5.33) drew more monetary gain motives than did organic product information (M = 4.10) ($p < .001$), F (1, 187) = 25.93, $p < .001$. Thus, H1a and H1b were supported.

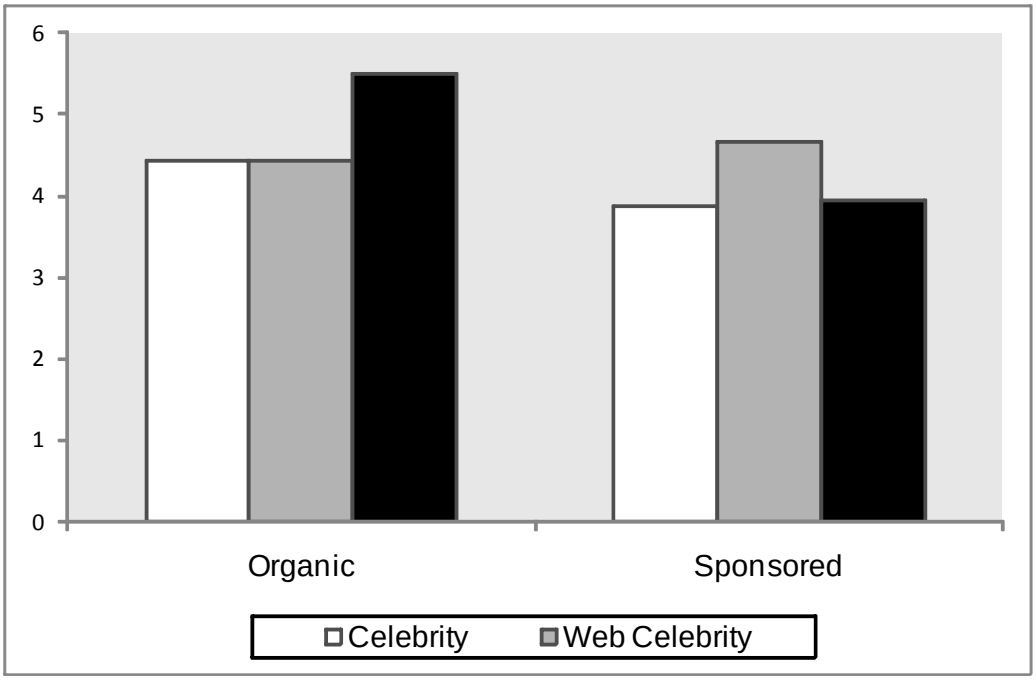
Main Effects of Information Sponsorship on Information Effectiveness. H2 predicted that information sponsorship would influence brand attitude (H2a) and compliance intention (H2b). Unlike H2a, a univariate analysis showed that the main effect of information sponsorship on brand attitude (H2a) was not significant, F (1, 187) = .33, n.s. As expected, information sponsorship had significant effect on compliance intention (H2b), F (1, 187) = 9.23, $p < .01$. A pairwise comparison test with the Bonferroni method indicated that participants exposed to organic product information (M = 4.41) had higher compliance intention than had those exposed to sponsored product information (M = 3.68) ($p < .01$). Therefore, H2a was not supported, but H2b was.

Main Effects of Source Types on Causal Attributions. H3 predicted the main effect of source types (a celebrity, a web celebrity, and a close friend) on information sharing attribution (H3a) and on monetary gain attribution (H3b). Unlike the prediction, overall model (a multivariate effect for source types) was not significant. Since a multivariate effect was not found, a univariate analysis was not conducted. Thus, H3a and H3b were not supported.

Main Effects of Source Types on Information Effectiveness. The set of H4 predicted the main effect of source types on brand attitude (H4a) and compliance intention (H4b). Inconsistent with the prediction, no multivariate effect for source types was detected. Thus, H4a and H4b were not supported.

Interaction Effects of Source Types and Information Sponsorship on Causal Attributions. H5 and H6 posited interaction effects of source types and information sponsorship on information sharing attributions (H5a-b) and monetary gain attributions (H6a-b). Consistent with H5, a univariate analysis revealed that a two-way interaction between source types and information sponsorship had a significant effect on information sharing attributions, F (2, 187) = 5.06, p<.01 (see Figure 1). As expected, contrast tests indicated that when product information was organic, participants exposed to product information posted by a close friend (M = 5.49) were more likely to infer information sharing motives than were those exposed to information by a web celebrity (M = 4.44), F (1, 187) = 4.84, $p < .05$, or by a celebrity (M = 4.43), F (1, 187) = 5.64, $p < .05$. However, no significant difference was found between information posted by the web celebrity and by the celebrity in information sharing attributions, F (1, 187) = .01, n.s. However, when product information was sponsored, participants exposed to product information posted by a web celebrity (M = 4.67) were more likely to produce information sharing attributions than were those exposed to either information by a close friend (M = 3.94), F (1, 187) = 3.78, p =.05, or by a celebrity (M = 3.88), F (1, 187) = 4.84, $p < .05$. There was no significant difference between information posted by the close friend and by the celebrity in information sharing attributions, F (1, 187) = .02, n.s. Thus, H5a was supported but H5b not.

Figure 1.
Interaction Effect of Source Types and Information Sponsorship on Information Sharing Attributions

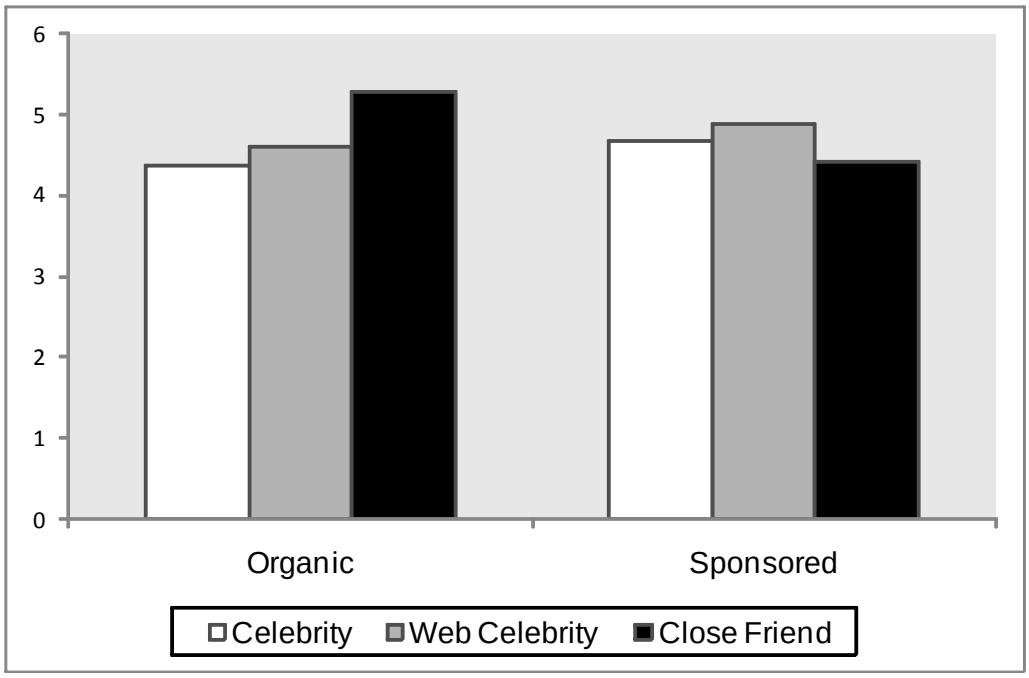


Inconsistent with H6, a univariate analysis revealed that two-way interaction between the source types and information sponsorship on monetary gain attribution was not significant, F (2, 187) = 2.17, n.s. Thus, H6a and H6b were not supported.

Interaction Effects of Source Types and Information Sponsorship on Information Effectiveness. The set of H7 and H8 predicted a two-way interaction effect of source types and information sponsorship on brand attitude (H7a-b) and compliance intention (H8a-b). Consistent with H7, a univariate analysis revealed a significant two-way interaction effect of source types and information sponsorship on brand attitude, F (2, 187) = 4.5, $p<.05$ (see Figure 2). As expected, contrast tests indicated that when information was organic, participants exposed to product information posted by a close friend (M = 5.28) were more likely to have favorable brand attitude than were those exposed to information by a web celebrity (M = 4.61), F (1, 187)

= 4.43, $p < .05$, or by a celebrity ($M = 4.38$), F (1, 187) = 7.02, $p < .01$. However, brand attitudes were similar between those exposed to information by the web celebrity and those exposed to information by the celebrity, F (1, 187) = .52, n.s. In support of H7b, when information was sponsored, there were no differences among three sources in brand attitude ($M = 4.67$ for the celebrity; $M = 4.88$ for the web celebrity; $M = 4.42$ for the close friend). Thus, both H7a and H7b were supported.

Figure 2.
Interaction Effect of Source Types and Information Sponsorship on Brand Attitude



For H8a-b, a significant two-way interaction effects of source type and information sponsorship on compliance intention appeared, F (2, 187) = 2.96, p =.05 (see Figure 3). As expected, contrast tests indicated that when information was organic, participants exposed to

product information posted by a close friend ($M = 5.01$) had higher compliance intention than had those exposed to information by a celebrity ($M = 3.88$), $F\ (1, 187) = 5.86$, $p < .05$. However, information posted by a web celebrity ($M = 4.35$) was not different from information by a celebrity, $F\ (1, 187) = 1.14$, n.s. and from information by the close friend, $F\ (1, 187) = 2.27$, n.s. Consistent with H8b, when information was sponsored, there were no differences among three sources in compliance intention ($M = 3.79$ for the celebrity; $M = 3.76$ for the web celebrity; $M = 3.47$ for the close friend). Thus, H8a was partially supported and H8b was supported. Findings for H5 through H8 are summarized in Table 5.

Figure 3.
Interaction Effect of Source Types and Information Sponsorship on Compliance intention

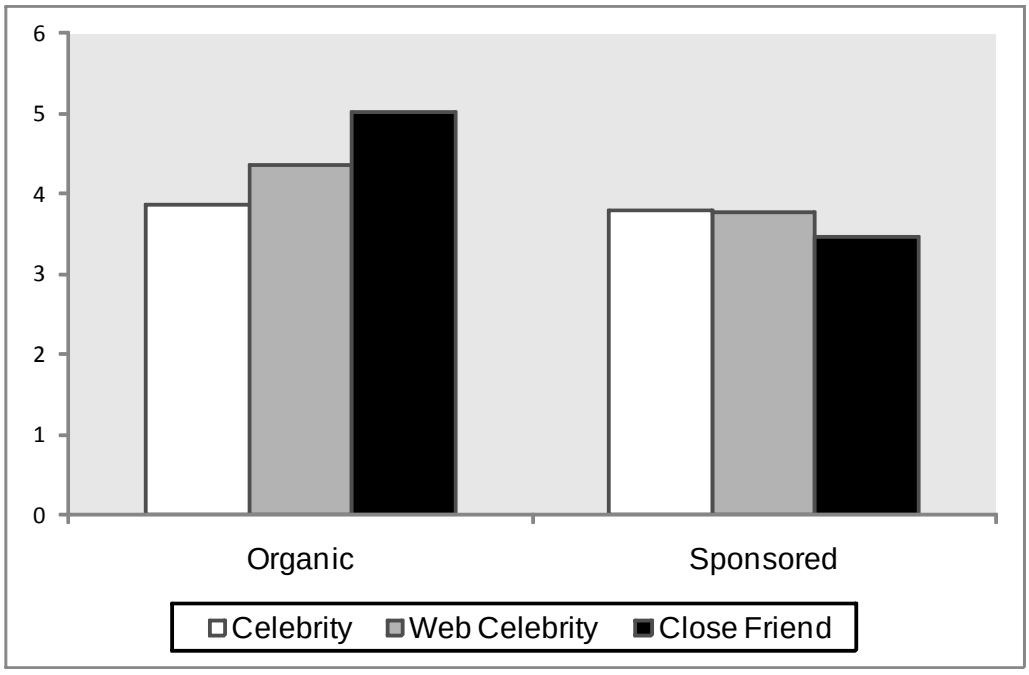


Table 5.
Means and Standard Deviations of Two-way Interactions of Source Types and Information Sponsorship on Dependent Variables

	Organic Information			Sponsored Information		
Dependent Variables	Celebrity	Web Celebrity	Close Friend	Celebrity	Web Celebrity	Close Friend
Information sharing attributions	4.43[a]	4.44[a]	5.49[b]	3.88[c]	4.67[d]	3.94[c]
	(1.51)	(1.89)	(1.51)	(1.46)	(1.42)	(1.62)
Brand attitude	4.38[a]	4.61[a]	5.28[b]	4.67[a]	4.88[a]	4.42[a]
	(1.55)	(1.24)	(1.05)	(1.09)	(1.13)	(1.22)
Compliance intention	3.88[a]	4.35[ab]	5.01[b]	3.79[a]	3.76[a]	3.47[a]
	(1.87)	(1.36)	(1.54)	(1.7)	(1.85)	(1.55)

Note: For each dependent variable, means with a different superscript are significantly different from each other at the $p<.05$ level.
Standard deviations are in parentheses.

Mediating Role of Causal Attributions. H9 predicted the mediating role of causal attributions in the two-way interaction effect on information effectiveness. To test this moderated mediation hypothesis, conditional indirect effect analyses, suggested by Preacher, Rucker, and Hayes (2007)[4], were performed. As expected, conditional indirect effect analyses indicated that the information sharing attributions served as the mediator in the interaction effect of the source types and the information sponsorship on information effectiveness. Specifically, for brand attitude, when information was organic, information posted by a close friend led to greater information sharing attributions than did information by a celebrity or by a web celebrity (coefficient = 1.38, $p < .01$). Further, information sharing attribution significantly predicted brand attitude (coefficient = .44, $p < .001$). Finally, the indirect effect of the information posted

[4] The conditional indirect effect is defined as "the magnitude of an indirect effect at a particular value of a moderator" (Preacher et al., 2007, p. 186).

by the close friend (*versus* information by the celebrity or by the web celebrity) on brand attitude through information sharing attributions was significant (the indirect effect = .46, $p < .01$). However, when information was sponsored, information posted by a web celebrity generated greater information sharing attributions than did information by a celebrity or by a close friend (coefficient = 1.22, $p < .05$). Information sharing attributions significantly predicted brand attitude (coefficient = .46, $p < .001$). Finally, the indirect effect of information posted by the web celebrity (*versus* information by the celebrity or by the close friend) on brand attitude through information sharing attribution was significant (the indirect effect = .35, $p < .05$).

Similarly, for compliance intention, when information was organic, information posted by a close friend led to greater information sharing attributions than did information by a celebrity or by a web celebrity (coefficient = 1.38, $p < .01$). Further, information sharing attributions significantly predicted compliance intention (coefficient = .54, $p < .001$). Finally, this study found a significant indirect effect of information posted by the close friend (*versus* information by a celebrity or by a web celebrity) on compliance intention through information sharing attributions (the indirect effect = .57, $p < .01$). However, when information was sponsored, information posted by a web celebrity generated greater information sharing attributions than did information by a celebrity or by a close friend (coefficient = 1.22, $p < .05$). Further, information sharing attributions significantly predicted compliance intention (coefficient = .57, $p < .001$). Finally, the indirect effect of the information posted by the web celebrity (*versus* information by a celebrity or by a close friend) on compliance intention through information sharing attributions was significant (the indirect effect = .43, $p < .05$).

However, the conditional indirect effect analyses with monetary gain attributions as a potential mediator revealed that there were no indirect effects of the interaction effect on either brand attitude or compliance intention (n.s. for all indirect effects).

In sum, these results indicated that information sharing attributions worked as a mediator which influences the interaction effect of the source types and information sponsorship on information effectiveness (i.e., brand attitude and compliance intention), whereas monetary gain attributions did not. Thus, H9 was partially supported.

Summary of Study 1 Findings

The purpose of study 1 was to examine how different information sponsorship (organic or sponsored) and different information sources (a celebrity, a web celebrity, and a close friend) influence consumer causal attributions and information effectiveness in the context of social media. Furthermore, this study examined a two-way interaction effect of source types and information sponsorship on consumer causal attributions and information effectiveness. Finally, this study tested whether the effect of source types and information sponsorship on information effectiveness operates through consumer causal attributions.

Findings of study 1 indicate that information sponsorship is an important indicator in information effectiveness. Consistent with predictions, organic (non-sponsored) product information is more effective than is sponsored product information in inducing information sharing attributions, favorable brand attitude, and high compliance intention. Regarding different types of information sources, findings suggest that different source effects are bounded by information sponsorship. On Twitter, when consumers were exposed to *organic* experience-based product information, they were more likely to attribute to the information sharing motive, information posted by a close friend than information by a celebrity or by a web celebrity.

Additionally, given the organic product information, information posted by a close friend led to more favorable brand attitude and higher compliance intention than did information by a celebrity or by a web celebrity. Furthermore, mediation analyses indicated information sharing attribution worked as an underlying mechanism of these findings. However, there were no differences between information by a celebrity and by a web celebrity in information sharing attributions, brand attitude, and compliance intention.

Interestingly, when product information was *sponsored*, information posted by a web celebrity drew more information sharing attributions than did information by a celebrity or by a close friend. Consumers' information sharing attributions did not differ between information posted by a celebrity and by a close friend. In line with predictions, consumers' brand attitude and compliance intention were not significantly different among three sources under the sponsored product information.

STUDY 2: PROMOTIONAL PRODUCT INFORMATION

Study 1 suggests that organic product information is more effective in drawing information sharing attributions, favorable brand attitude, and compliance intention, than is sponsored product information. Results also indicate that under a certain type of information sponsorship (either organic or sponsored), information sources matter in consumer causal attributions and information effectiveness. However, a question to pursue is whether the findings of study 1 would be replicated with other types of product information. For further insights, this second study is designed to examine the main effects of source types and information sponsorship as well as two-way interaction effects on consumer causal attributions and information effectiveness with promotional product information.

Promotional Product Information

Promotion, "temporary and tangible monetary or nonmonetary incentives intended to have a direct impact on consumer behavior" (Chandon, Wansink, and Laurent 2000 p.65), is one of the most prevalent marketing actions (Hardesty and Bearden 2003). Daily, consumers encounter sales promotion flyers both offline and online, including social media (e.g., "Get an additional 25% off sale items at J Jill! Online exclusive at jjill.com"). Although marketers promote variously, such as in-store displays, feature advertising, and temporary price reductions (Blattberg and Neslin 1990), the most dominant promotional mode in the marketplace is price promotion (e.g., price discounts, coupons, etc) (Darke and Chung 2005; Han, Gupta, and Lehmann 2001; Hardesty and Bearden 2003).

Extensive implementations of price promotions can be attributable to their effectiveness. Previous studies show that price promotions boosted consumer purchase behaviors (Anderson

and Simester 1998; Chandon et al. 2000; Dhar and Hoch 1996; Inman and McAlister 1993; Leone and Srinivasan 1996), purchase intentions (Chen, Monroe, and Lou 1998), store traffic (Grewal, Monroe, and Krishman 1998; Lichtenstein and Bearden 1989), and brand choices (Inman, McAlister, and Hoyer 1990). For example, Inman et al. (1990) found that mere posting of a promotion sign as well as real price cut increased likelihood of choosing a promoted brand. With regard to purchase intention, Chen et al. (1998) demonstrated that consumers were more likely to have higher purchase intention for a promoted product with coupon promotions than they were with simple price discount.

Effectiveness of price promotions can be explained by the perceived benefits that promotions offer (Chandon et al. 2000). According to transaction utility theory (Thaler 1985), product purchase generates two types of value or utility, acquisition utility and transaction utility. While acquisition utility is related to the economic gain or loss from a purchase, transaction utility is related to the perceived benefits of the deal or promotions. Price promotions provide both acquisition utility and transaction utility (Darke and Chung 2005). First, by lowering the amount paid to buy the product, offering free samples, or providing refunds or rebates, price promotions provide consumers with acquisition utility (economic benefits). Additionally, price promotions provide transaction utility by raising consumer expectations of the regular price of the promoted product.[5] Considering that the total utility from a product purchase depends on the sum of acquisition and transaction utility (Thaler 1985), price promotions provide substantial benefits to consumers.

[5] Transaction utility is calculated with consumers' internal reference price (i.e., the mentally-stored price against which other prices are evaluated (Rosch 1975) minus the purchase price (Thaler 1985).

This perceived benefits perspective specifically fits well with today's consumers, who take into account "What's in it for me?" or "What benefits that I can receive?" when they consider product purchase (Barrows 2010; Han et al. 2001). Consumers in social media are no exception. According to online reports, the primary motive for people becoming fans or followers of a company and brand in social media, is to receive discounts and promotions or receive free samples and coupons (Subscribers, Fans, and Followers, n.d).

Information Sponsorship

Parallel to the perceived benefits perspective, when exposed to promotional product information in social media, consumers may perceive the information as worthy and useful due to its economic benefits. However, when information is sponsored, the perceived benefits of promotional product information will be offset by the salience of ulterior motives. Since financial compensations can be seen as a rival cause in inferring motives for providing information, consumers will be more likely to discount the information sharing motive as a primary cause of providing product information when exposed to sponsored product information than when exposed to organic product information. Thus, as found in Study 1, consumers will be more likely to generate monetary gain attributions and less information sharing attributions toward sponsored product information than toward organic product information. Consequently, organic product information will lead to greater information effectiveness than will sponsored product information. Thus:

> **H1a:** Organic product information will generate more information sharing attributions than will sponsored product information.
>
> **H1b:** Organic product information will generate less monetary gain attributions than will sponsored product information.
>
> **H2a-b**: Organic product information will lead to greater (a) brand attitude and (b) compliance intention than will sponsored product information.

Source Effects

Additionally, as with study 1, this study expects that different types of information sources influence consumer causal attribution and subsequent information effectiveness. When celebrities or web celebrities provide product information that does not match their particular characteristics (e.g., attractiveness or expertise), consumers may suspect the sources' true motives. However, consumers may not suspect friends' motives for providing product information because in most cases they trust friends. Thus, information posted by close friends will generate more information sharing attributions and less monetary gain attributions than will information by celebrities or by web celebrities. Consequently, information posted by close friends will be more effective than will information by celebrities or by web celebrities. Thus, following hypotheses are developed:

> **H3a:** Product information posted by a close friend will generate more information sharing attributions than will information by a celebrity and by a web celebrity.
>
> **H3b:** Product information posted by a close friend will generate less monetary gain attributions than will information by a celebrity and by a web celebrity.
>
> **H4a-b**: Product information posted by a close friend will lead to greater (a) brand attitude and (b) compliance intention than will information by a celebrity and by a web celebrity.

Furthermore, this study predicts the effect of different sources on consumer causal attributions and information effectiveness will vary depending on the information sponsorship. Specifically, it is expected that the proposed effect of source types on causal attribution and information effectiveness (H3a-b and H4a-b) will emerge only under organic product information. Given sponsored product information, financial compensations for providing information may make ulterior motives (monetary gain motives) become salient. Given this obvious external cause, the perceived economic benefits that promotional product information provides may decrease and information sharing attributions will be discounted. Consistent with

study 1, due to the presence of alternative causes and a reporting bias, it is assumed that the superiority of close friends will be undermined thus each source has similar effect on consumers' information judgments. Accordingly:

> **H5a:** When product information is organic, information posted by a close friend will generate more information sharing attributions than will information by a celebrity and by a web celebrity.
>
> **H5b:** When product information is sponsored, there will be no differential effect of the source types on information sharing attributions.
>
> **H6a:** When product information is organic, information posted by a close friend will generate less monetary gain attributions than will information by a celebrity and by a web celebrity.
>
> **H6b:** When product information is sponsored, there will be no differential effect of the source types on monetary gain attributions.
>
> **H7a:** When product information is organic, information posted by a close friend will lead to more favorable brand attitude than will information by a celebrity and by a web celebrity.
>
> **H7b:** When product information is sponsored, there will be no differential effect of the source types on brand attitude.
>
> **H8a:** When product information is organic, information posted by a close friend will lead to greater compliance intention than will information by a celebrity and by a web celebrity.
>
> **H8b:** When product information is sponsored, there will be no differential effect of the source types on compliance intention.

Finally, as with study 1, the mediating role of causal attributions between the two-way interaction and information effectiveness is hypothesized.

> **H9**: Causal attributions about the source's motives will mediate the effect of source types and information sponsorship on information effectiveness.

Method

To test the proposed hypotheses, a 3 (Source type: a celebrity, a web celebrity, or a close friend) x 2 (Information sponsorship: organic or sponsored) between-subjects experiment design

was used. Like Study 1, adult Twitter users in the United States were recruited via Survey Sampling International (SSI). A total of 239 adult Twitter users participated in Study 2.

Stimuli, procedures, and measures used in Study 2 were identical to those in Study 1, except for the type of product information. In Study 2, the target product information was promotional information (*versus* experience-based information) (see below).

> Organic tweet: I found a great deal for Lumen electric toothbrushes! Lumen's got free shipping & 25% off with promo code L25. Check it out! http://bit.ly.lt
>
> Sponsored tweet: #ad I found a great deal for Lumen electric toothbrushes! Lumen's got free shipping & 25% off with promo code L25. Check it out! http://spn.tw/lt

As in Study 1, all Cronbach α values were high (α = .91 for information sharing motives; α = .92 for monetary gain motives; α = .93 for brand attitude; and α = .89 for intention to click the link).

Results

Characteristics of Final Sample

As in Study 1, responses of participants 1) who failed to identify correctly the information sponsorship (either organic or sponsored tweet) they were exposed to (n = 32) and 2) who skipped questions about the knowledge regarding sponsored tweets (n = 21) were removed from the final sample. After cleaning data, a total of 184 usable responses remained in the final sample. The followings are demographic characteristics and Twitter usage behaviors of the sample.

Demographics. Demographic characteristics of the sample are similar to those in Study 1. Average age of the sample was 26.86 (*SD* = 4.01), ranging from 19 to 35. There were slightly more females (55.4%) than males (44.6%). Most participants are White (61.5%), while the rest are Black (14.3%), Hispanic (9.9%), Asian (8.8%), and others (5.5%). More than half the

participants (54.1%) earned at least a university- or an advanced- degree (See Table 6 for demographics).

Table 6
Descriptive Statistics of Sample

	Mean or Percent (n)	S.D.
Gender		
Female	55.4% (102)	
Male	44.6% (82)	
Age	26.86	4.01
Ethnicity		
Asian	8.8% (16)	
Black or African American	14.3% (26)	
Hispanic	9.9% (18)	
White (Not Hispanic/Not Latino)	61.5% (112)	
Others	5.4% (10)	
Marital Status		
Never married	56% (103)	
Married	34.8% (64)	
Divorced	3.3% (6)	
Separated	2.2% (4)	
Others	3.3% (6)	
Education		
Elementary school	1.1% (2)	
High school diploma or equivalent	16.9% (31)	
Some college or university but did not graduate	27.9% (51)	
Associate degree	11.5% (21)	
Bachelor degree	34.4% (63)	
Master degree	6% (11)	
Professional degree (MD, DVM, DDS, JD, DD)	1.6% (3)	
Doctoral degree (PhD, EdD, DS, etc)	.5% (1)	
Employment Status		
Not employed	23% (42)	
Self-employed	8.7% (16)	
Works for someone else, part time	10.9% (20)	
Works for someone else, full time	42.6 % (78)	
Full time student	14.8 % (27)	

Table 6 (Continued)

Personal Income	
$20,000 or less	28.8% (53)
$20,001 - $40,000	24.5% (45)
$40,001 - $60,000	24.5% (45)
$60,001 - $80,000	9.2% (17)
$80,001 - $100,000	3.3% (6)
$100,001 - $120,000	0% (0)
$120,001 - $140,000	1.1% (2)
$140,001 - $160,000	1.1% (2)
$160,000 - $180,000	0% (0)
$180,001 - $200,000	0% (0)
$200,001 or more	.5% (1)
I do not know	2.2% (4)
I prefer not to answer	4.9% (9)
Household Income	
$20,000 or less	17.5% (32)
$20,001 - $40,000	21.9% (40)
$40,001 - $60,000	21.9% (40)
$60,001 - $80,000	16.9% (31)
$80,001 - $100,000	6% (11)
$100,001 - $120,000	2.7% (5)
$120,001 - $140,000	1.1% (2)
$140,001 - $160,000	1.6% (3)
$160,000 - $180,000	.5% (1)
$180,001 - $200,000	.5% (1)
$200,001 or more	1.6% (3)
I do not know	2.7 % (5)
I prefer not to answer	4.9 % (9)

***Twitter Usage*.** Participants, on average, have used Twitter for more than one year (*M* = a year and four months, *SD* = 10.06 months). More than half the participants (56%) reported spending less than an hour on Twitter each day. The majority of participants (71.3%) have less than 100 followers and 67.6% also have less than 100 followings (See table 7 for more details).

Table 7
Sample Twitter Usage

	Mean or Percent (n)	S.D.
Usage Period	16.21 Months	10.06
Usage Hours		
Less than 1 hour	56% (108)	
1 hour – less than 2 hours	19.2% (37)	
2 hours – less than 3 hours	14.5% (28)	
3 hours – less than 4 hours	3.6% (7)	
4 hours – less than 5 hours	2.6% (5)	
More than 5 hours	4.1% (8)	
Number of Followers		
100 or less	71.3% (129)	
101 - 200	11 % (20)	
201 - 300	6.6% (12)	
301 - 400	3.3% (6)	
401 - 500	3.3% (6)	
501 - 600	1.1 % (2)	
601 - 700	.6% (1)	
701 - 800	.6% (1)	
801 - 900	0% (0)	
901 - 1000	.6% (1)	
More than 1000	1.7 % (3)	
Number of Followings		
100 or less	67.6% (123)	
101 - 200	12.6 % (23)	
201 - 300	6.6% (12)	
301 - 400	5.5% (10)	
401 - 500	4.9% (9)	
501 - 600	0% (0)	
601 - 700	. 5% (1)	
701 - 800	. 5% (1)	
801 - 900	0% (0)	
901 - 1000	. 5% (1)	
More than 1000	1.1% (2)	

Manipulation Check

Source Type. ANOVAs revealed a significant main effect of the source type on perceived recognition of the source and on perceived basis of source's popularity. As expected, participants in the celebrity condition were more likely to perceive that Phil Johnson was recognizable to the

general public (M = 4.87) and his popularity depended on his accomplishments in the entertainment area (M = 5.83) than were those in the web celebrity condition (M = 3.4, F (1, 104) = 21.81, p <. 01 for the recognition; M = 3.84, F (1, 104) = 46.28, p <. 001 for the basis of popularity). By contrast, participants in the web celebrity condition were more likely to perceive that Phil Johnson was recognizable to the web-based audience (M = 6.01) and his popularity depended on his accomplishments on the Internet (M = 6.29) than were those in the celebrity condition (M = 4.42, F (1, 104) = 38.64, p <. 001 for the recognition; M = 3.54, F (1, 104) = 108.72, p <. 001 for the basis of popularity). There were no other significant effects on perceived recognition of the source and on perceived basis of source's popularity. Also, as expected, participants in the close friend condition showed a high level of closeness with the friend whose initials they provided (M = 6.17, SD = 1.25). Additionally, to verify whether manipulation of source characteristics was successful, participants were asked to rate their perceived attractiveness, credibility, similarity, and popularity (measured for celebrities and for web celebrities only). As expected, a celebrity and web celebrities were similarly perceived in popularity, t (106) = -.65, n.s., but differed in attractiveness, t (106) = 3.07, p < .01. There were no differences among three sources in perceived credibility, F (2, 177) = 2.93, n.s. In perceived similarity, the celebrity was perceived as very different from the participants, compared to the web celebrity or the close friend, F (2, 177) = 13.7, p < .001. Finally, all three sources were not perceived as having expertise on the electric toothbrush, F (2, 177) = 2.29, n.s. (See Table 8). Thus, manipulation of source types was successful.

Table 8
Source Characteristics

	Source Type	Mean	S.D.
Attractiveness	Celebrity	5.19	1.40
	Web celebrity	4.35	1.46
	Close friend	5.84	1.17
Credibility	Celebrity	5.57	1.37
	Web celebrity	5.59	1.45
	Close friend	6.17	1.00
Perceived similarity	Celebrity	3.98	1.55
	Web celebrity	4.20	1.62
	Close friend	5.24	1.43
Popularity	Celebrity	5.55	1.65
	Web celebrity	5.75	1.54
	Close friend	n/a	
Product expertise	Celebrity	2.81	1.84
	Web celebrity	3.02	1.80
	Close friend	3.47	1.71

Measurement Model

Before testing hypotheses, a confirmatory factor analysis (CFA) was performed using Amos 18 to confirm the four-factor model. CFA results showed a satisfactory fit for four-factor model, χ^2 (71) = 152.14, $p < .001$, RMSEA = .07, GFI = .90, NFI = .94, CFI= .97 (see Table 9 for factor loadings).

Table 9
Four-Factor Confirmatory Factor Analysis

	Constructs				R^2
Items	Information Sharing (IS)	Monetary Gain (MG)	Brand Attitude (BA)	Intention to Comply (IC)	
IS item1	.80				.65
IS item2	.94				.89
IS item3	.91				.82
MG item1		.97			.94
MG item2		.94			.87
MG item3		.78			.60
BA item1			.80		.64
BA item2			.85		.72
BA item3			.95		.89
BA item4			.92		.84
IC item1				.95	.90
IC item2				.97	.94
IC item3				.78	.61
IC item4				.60	.36

χ^2 (71) = 152.14, $p < .001$, RMSEA = .07, GFI = .90, NFI = .94, CFI= .97

Note. All coefficients are completely standardized and statistically significant at $p < .001$.

Hypotheses Testing

To test the stated hypotheses, a MANOVA was conducted. The MANOVA showed a significant multivariate main effect of the information sponsorship, Wilk's $\lambda = .79$, F (4, 175) = 11.17, $p < .001$ and of source types, Wilk's $\lambda = .91$, F (8, 350) = 2.04, $p < .05$. However, a two-way interaction effect of source types and information sponsorship was not significant, Wilk's $\lambda = .96$, F (8, 350) = .89, n.s.

Main Effects of Information Sponsorship on Causal Attributions. H1a-b predicted the main effect of information sponsorship on information sharing attribution (H1a) and monetary gain attribution (H1b). Consistent with H1a, univariate analysis revealed a significant main effect

of information sponsorship on information sharing attribution, F (1, 178) = 8.81, $p < .01$. Specifically, a pairwise comparison test with the Bonferroni method indicated that participants were more likely to infer information sharing motives toward organic product information (M = 4.61) than toward sponsored information (M = 3.91) ($p < .01$). In support of H1b, sponsored product information (M = 5.51) drew more monetary gain motives than did organic product information (M = 4.02) ($p < .001$), F (1, 178) = 44.04, $p < .001$. As expected, Thus, H1a and H1b were supported.

Main Effects of Information Sponsorship on Information Effectiveness. H2 predicted that information sponsorship would influence brand attitude (H2a) and compliance intention (H2b). Unlike H2a and H2b, univariate analyses showed that neither brand attitude (H2a) nor compliance intention (H2b) differed between organic product information and sponsored product information, F (1, 178) 2.57, n.s. for brand attitude; F (1, 178) = 3.17, p = .08 for intention to comply with recommendation (H2b). Therefore, H2a and H2b were not supported.

Main Effects of Source Types on Causal Attributions. H3 predicted that different types of sources (a celebrity, a web celebrity, and a close friend) would influence consumer information sharing attribution (H3a) and monetary gain attribution (H3b). Inconsistent with H3a, a univariate analysis revealed that the main effect of source types on information sharing attribution was not significant, F (2, 178) = 2.81, p = .06. Consistent with H3b, a significant main effect of source types on monetary gain attribution was detected, F (2, 178) = 6.44, $p < .01$. Specifically, a Bonferroni comparison test indicated that participants were more likely to infer monetary gain motives toward information from a celebrity (M = 5.1) than toward information from a close friend (M = 4.22) ($p < .05$). However, consumers' monetary gain attribution was not different between information from a close friend and information from a web celebrity (M =

4.97) (n.s.) as well as between information from the celebrity and information from the web celebrity (n.s.). Thus, while H3a was not supported, H3b was partially supported.

Main Effects of Source Types on Information Effectiveness. H4 predicted the main effect of source types on brand attitude (H4a) and compliance intention (H4b). Unlike the predictions, however, univariate analyses showed that there were no main effects of the source types on brand attitude, F (2, 178) = .12, n.s. and compliance intention, F (2, 178) = 1.09, n.s. Thus, H4a and H4b were not supported.

Interaction Effects of Source Types and Information Sponsorship on Causal Attributions. H5 and H6 posited interaction effects of source types and information sponsorship on information sharing attribution (H5a-b) and monetary gain attribution (H6a-b). As mentioned above, however, no multivariate effect for the two-way interaction effects was obtained. Thus, H5a-b and H6a-b were not supported.

Interaction Effects of Source Types and Information Sponsorship on Information Effectiveness. H7 and H8 predicted an interaction effect of source types and information sponsorship on brand attitude (H7a-b) and compliance intention (H8a-b). However, there was no significant multivariate effect for the two-way interaction. Thus, H7a-b and H8a-b were not supported.

Mediating Role of Causal Attributions. H9 posited that the effect of source types and information sponsorship on information effectiveness would be mediated by causal attributions. However, since significant interaction effects were not found, the mediation analysis was not conducted. Therefore, H9 was not supported.

Summary of Study 2 Findings

Study 2 did not replicate the findings of Study 1. Regarding information sponsorship, as with Study 1, organic product information draws more information sharing motives and less monetary gain motives than does sponsored product information.

Given promotional product information, source matters only in monetary gain attribution. Promotional product information posted by a celebrity generated more monetary gain attribution than did information by a close friend. However, no other significant effects were obtained.

CHAPTER V

GENERAL DISCUSSION AND CONCLUSION

With the growing power of peer-to-peer product conversations on the Internet, marketers strive to use consumer product conversations as a viable alternative to traditional marketing tactics. One such attempt is WOM (word-of-mouth) marketing. By offering financial compensations, WOM marketers hire and have consumers spread positive product information to their social circles. This new marketing tactic has drawn substantial attention among researchers and practitioners. Despite that increasing interest in WOM marketing, little is known about the effectiveness of WOM marketing practices in the marketplace. Thus, this research examined how consumers' product conversations would be evaluated in social media.

The objectives of this dissertation were fivefold. The first was to investigate whether and how organic (unpaid) product information and sponsored (paid) product information differed in information effectiveness. The second was to examine whether and how the specific WOM tactic, hiring different information sources, influenced information effectiveness. The third was to examine two-way interaction effects of source types and information sponsorship on information effectiveness. The fourth was to test the mediation effect of consumer causal attributions (information sharing attribution and monetary gain attribution) on the interaction effects of source types and information sponsorship - information effectiveness linkage. Final objective was to investigate whether effects of information sponsorship and information sources on information effectiveness varied depending on types of product information (experience-based or promotional information). Toward these ends, two experiments, i.e., study 1 with experience-based product information and study 2 with promotional product information, were conducted.

The following discussion contains a summary of the key findings of two studies, discussion about the meanings of the findings, theoretical and practical implications, limitations and suggestions for future research.

Main Effects of Information Sponsorship on Information Effectiveness

Across the two types of information (experience-based and promotional product information), organic product information induces more information sharing attribution and less monetary gain attribution than does sponsored product information. However, consumers' compliance intention (i.e., comply with a call-to-action claim such as "Check it out!" in information) was different only in study 1(with experience-based information). Given experience-based product information, organic product information is more effective in increasing consumers' compliance intention than is sponsored product information. When information is promotional, however, consumers' compliance intention was similar between organic product information ($M = 4.10$) and sponsored product information ($M = 3.66$) (n.s.). Possible explanation for the differences across the type of information is probably related to the nature of the information. While experience-based information contains source's personal experiences with the product and subjective opinions, promotional information contains objective claims regarding sales promotions (e.g., % off or promo code, etc). For information containing subjective opinions, the presence of financial compensations may be important because it strongly can influence content itself and the credibility of information content (e.g., strong product advocacy). In contrast, regarding promotional product information, consumers do not need to check whether information contents are true or not. Thus, information sponsorship does not influence consumers' compliance intention.

Different effects of information sponsorship on causal attributions and information effectiveness (e.g., compliance intention) coincide with existing research. Previous studies have demonstrated that product information provided by unpaid sources (either celebrities or ordinary consumers) induced more product affect attribution, less monetary gain attribution, and more positive product evaluations than did information by paid sources (Moore et al. 1994; Sparkman 1982; Tripp et al. 1994; Wei et al. 2008). Additionally, results confirm Kelley's discounting principles, "the role of a given cause in producing a given effect is discounted if other plausible causes are also present" (Kelley 1973, p. 113). Following this logic, information sharing attribution is discounted when another plausible cause (e.g., financial compensation) coexists. The effectiveness of sponsored product information seems to suffer from the salience of ulterior motives.

Unexpectedly, however, information sponsorship does not impact brand attitude, regardless the information types. In both studies 1 and 2, we fail to find a significant different effect between organic product information and sponsored product information on brand attitude. One plausible explanation of this is that information sponsorship alone may not be a sufficient condition for consumers' brand attitude formation. Support for this notion, the main effect of information sponsorship (e.g., an unpaid source *versus* a paid source) on brand attitude was not significant in Moore et al.'s (1994) study as well. However, Moore et al. (1994) found the significant interaction effect of information sponsorship and the number of sources in that as the number of unpaid sources increased (four *versus* one), unpaid sources led to more favorable brand attitude than did paid sources. This is also true in study 1 of this dissertation. In study 1, consumers' brand attitudes differed significantly depending on the interaction effect between

source types and information sponsorship. More detailed discussions regarding interaction effects are in a later section.

Main Effects of Source Types on Information Effectiveness

Consistent with predictions regarding source types, source types only had a significant effect on consumer monetary gain attribution toward promotional product information (study 2). As expected, promotional product information posted by close friends generates less monetary gain attribution than does information by celebrities. However, given promotional product information, there are no differences among three sources in information sharing attribution, brand attitude, and compliance intention (study 2). Unexpectedly, with experience-based product information (study 1), types of sources did not play an important role in inducing consumer causal attributions, brand attitude, and compliance intention. Such insignificant findings may be due to the use of fictitious celebrities and web celebrities. Although using fictitious celebrities and web celebrities helps minimize potential confounding when using real celebrities and web celebrities (e.g., different levels of popularities, familiarities, and likeability), fictitious celebrities and web celebrities may decrease the power that real celebrities and web celebrities have (Till and Busler 1998). Another possibility is that source types alone may not be a sufficient condition for generating brand attitude and compliance intention. It is plausible that a specific boundary condition is necessary for information sources to become effective in persuasion. For example, studies on celebrity endorsers often have examined the congruence between celebrities and a product category as a boundary condition (Friedman and Friedman 1979; Kahle and Homer 1985; Kamins 1990; Lynch and Schuler 1994; Till and Busler 1998; 2000). Similarly, source types matter when they interact with information sponsorship in study 1. More detailed discussion of interaction effects are described in the next section.

Interaction Effects of Source Types and Information Sponsorship

Although there is no main effect of source types on information effectiveness, along with information sponsorship, source types become an important factor for consumers to make causal attributions, form brand attitude, and have compliance intention. Significant interaction effects between source types and information sponsorship on information effectiveness emerged *only* with experience-based product information (study 1). In study 1, as expected, when information is organic, consumers are more likely to generate information sharing attribution toward information posted by a close friend than they are toward information by a celebrity or by a web celebrity. Further, organic information posted by a close friend generates more favorable brand attitude than does organic information by a celebrity or by a web celebrity. Moreover, consumers exposed to information posted by a close friend have higher compliance intention than do those exposed to information by a celebrity. However, information posted by the web celebrity does not differ from information by the celebrity and information by the close friend.

These findings support the predictions of this research. Consistent with Kelley's discounting principles (1973), since there is no salient alternative cause (e.g., financial compensations) under organic product information, information sharing motive may not be discounted as a primary explanation for providing product information. Given that other conditions are equal, consumers tend to give more weight to information from close friends than they do to information from celebrities or from web celebrities, due to the trustworthiness of friends. Additionally, since close friends influence consumers through all three social influence processes (e.g., compliance, identification, and internalization) (Mangleburg et al. 2004), close friends can be strong influencers in a person's decision making. Conversely, previous studies have suggested some boundary conditions for the effectiveness of information from celebrities

and experts (those who share commonality with web celebrities in terms of expertise). For example, when consumers accept celebrities' influence, they often undergo an identification process with the desire to be like celebrities (Biswas et al. 2006; Kamins 1989; Kamins and Gupta 1994). Thus, research suggests that celebrities are effective product information sources when they promote attractiveness-related products (e.g., perfume, cosmetics, etc) (Choi and Rifon [in press]; Kahle and Homer 1985; Kamins 1990). With regard to web celebrities, parallel to research on offline experts (Biswas et al. 2006; Friedman and Friedman 1979), consumers may adopt influences from web celebrities through internalization process because web celebrities are perceived as having knowledge in a specific area. Therefore, the effectiveness of web celebrities may increase when they provide information matching their expertise. However, information effectiveness from celebrities or web celebrities is attenuated when they promote products lacking attractiveness or expertise (Choi and Rifon [in press]; Kamins and Gupta 1994). Previous studies further suggest that incongruence between source and the product category triggers the salience of ulterior motives (Choi 2002; Rifon et al. 2004). Since this research used the electric toothbrush, a product category irrelevant to attractiveness or specific expertise, information effectiveness of celebrities and web celebrities may be lowered.

Interestingly, unlike the prediction, when information is sponsored, information posted by web celebrities draws more information sharing attribution than does information by a celebrity or by a close friend. Given the presence of salient external causes (e.g., financial compensations) for providing product information, another possible cause (e.g., information sharing motive) can be discounted. Additionally, financial compensations in sponsored product information heighten consumers' suspicions of ulterior motive (Tuk et al. 2009). When the alternative cause (monetary gain) is salient, the superiority of information from close friends may

be weakened. Between celebrities and web celebrities, since web celebrities are perceived as opinion leaders on the Internet (Edwalt 2010), information from web celebrities may receive more weight than may information from celebrities.

Consistent with predictions, when information is sponsored, there are no differences among three sources in monetary gain attribution, brand attitude, and compliance intention. These insignificant findings coincide with the findings of Carl (2008) and Tuk et al. (2009). In the context of WOM marketing, Carl (2008) found that when consumers knew their conversational partners were involved in WOM marketing campaigns, the likelihood to inquire, purchase, or relay information to others was not significantly different, regardless WOM agents' tie strength (e.g., strong-ties such as best friends, romantic partners/spouses, and relatives and weak ties such as strangers, acquaintances, and co-workers). In line with this, Tuk et al. (2009) did not find a significant difference in consumers' compliance intention (e.g., subscribe to the recommended magazine) when a WOM agent told that he received 10 Euro per information-recipients' magazine subscriptions. These findings suggest that financial compensations may play a role as a strong indicator in inferring information sources' monetary gain motives and this, in turn, may attenuate source effects.

With promotional product information (study 2), two-way interaction effects between source types and information sponsorships on consumers causal attributions and information effectiveness were insignificant. The reason for insignificant interaction effects on information effectiveness is unclear. One possible reason relates to economic benefits that promotional information provides. Considering that consumers tend to be sensitive to deals or promotions (Han et al. 2001), the perceived economic benefits may suppress the effects of different sources and information sponsorship on information effectiveness. Presumably, since this research used a

utilitarian product (e.g., electric toothbrush) as the target product, the degree of perceived economic benefits for promotional information is increased. Indeed, Shavitt (1990) demonstrated that consumers' attitude toward a utilitarian product (e.g., an air conditioner) was more influenced by advertisements emphasizing utilitarian benefits than by those emphasizing hedonic benefits.

Mediating Role of Causal Attributions

This research finds that consumer causal attribution, information sharing attribution in particular, serves as an underlying cognitive mechanism of the effects of source types and information sponsorship on information effectiveness. Specifically, when product information is organic, the superiority of close friends as an information source on information effectiveness (brand attitude and compliance intention) operates through information sharing attribution. When product information is sponsored, the effect of the web celebrity on information effectiveness works through information sharing attribution. However, results indicate that monetary gain attribution does not work as a mediator in the relationship between interaction effects and information effectiveness. The significant mediating role of causal attributions in this research converges with the findings of previous studies (DeCarlo et al. 2007; Laczniak et al. 2001; Rifon et al. 2004; Sen and Lerman 2007).

Theoretical Contributions

This dissertation makes several theoretical contributions. First, this research advances WOM marketing literature by identifying factors that influence the effectiveness of WOM marketing in social media. Although previous studies on WOM marketing have investigated the role of disclosure of WOM agents' financial affiliations with marketers (Carl 2008; Tuk et al. 2009), return on investment (ROI) (Furguson 2008), and execution of WOM marketing

campaigns (Kozinets et al. 2010), few studies have scrutinized the effects of WOM marketing tactics on information effectiveness. The results of this study add knowledge about the effectiveness of WOM marketing, by investigating the roles of various WOM information related aspects such as information sponsorship (organic or sponsored), information source types (celebrities, web celebrities, or close friends), and types of information (experience-based or promotional). Further, employing attribution theory as a theoretical framework, this research finds that consumer attributions work as a cognitive mechanism underlying the effectiveness of WOM marketing.

Second, this research broadens the literature on source effects by comparing three different types of information sources in the context of social media. Source effects have been widely explored in the area of traditional adverting (Biswas et al. 2006; Friedman and Friedman 1979; Friedman et al. 1976; Kamins 1989; Kamins and Gupta 1994). In the advertising and marketing area, marketers carefully examine characteristics of sources (e.g., celebrities, experts, or ordinary consumers) and the conditions under which the effectiveness of sources enhanced selection of the appropriate product endorser (Erdogan 1999). However, relatively few studies have focused on various source effects in the context of WOM marketing. Due to the anonymous nature of the Internet, previous studies regarding consumer-generated product information have focused mainly on different anonymous-other consumers and experts (Huang and Chen 2006; Paek et al. [in press]; Wang 2005). By comparing three different types of information sources (celebrities, web celebrities, and close friends), this research adds knowledge about under what condition each source influences consumers' information processing and subsequent product evaluations.

Implications for WOM Marketers

Findings of this research have several implications for WOM marketers. Most obviously, it always would be better for WOM marketers to encourage or facilitate peer-to-peer product conversations naturally, than to manage the flow of product information by offering financial compensations. Results of two studies show that organic (unpaid) product information is more effective and powerful than is sponsored (paid) product information, in increasing information effectiveness in social media, regardless the type of information (experience-based or promotional information). WOM marketers try to make consumers active content creators rather than passive lurkers in social media. WOM marketers may facilitate consumers' product conversations by initiating those conversations. For example, marketers can post questions to draw consumer participation (e.g., what do you think about our product? or what do you think about our store?). Marketers also provide valuable contents on their Facebook pages or Twitter pages to encourage brand conversations. Indeed, a consumer motivation to become a fan or a follower of certain brands is to receive updates on future products and know about the activities of companies (subscribers, fans, and followers, n.d).

It would be important for marketers to identify and use various strategies to get consumers to read their product information in social media. Findings of this research suggest that hiring the right people as WOM agents provides benefits to marketers when they conduct sponsored programs or campaigns. Interestingly, results suggest that celebrities may not be effective product information sources in social media. Even under organic product information, compared to web celebrities or consumers' friends, celebrities do not generate favorable brand attitude and high compliance intention. In social media, influential information sources are consumers' friends and web celebrities. This result indicates that the number of followers or fans

does not necessarily reflect the extent of the source's influence. Specifically, this study finds that when product information is organic, consumers' friends are influential information sources, but web celebrities are effective sources when product information is sponsored. These findings suggest that, given the same amount of money, it will be more effective for WOM marketers to hire large numbers of less expensive influencers (e.g., web celebrities or consumers' friends) than to hire small numbers of expensive people like celebrities (e.g., Kim Kardashian earns US$10,000 per tweet).

This research also suggests that in situations where WOM marketers conduct sponsored campaigns, promotional product information may be a more appropriate information type than experience-based product information. In this research, it appears that experience-based product information (study 1) is more influenced by information type and source types than is promotional product information (study 2).

Limitations and Future Research

Although findings of this research have important implications, several limitations lead to opportunities for future research. The first limitation lies in the issue of external validity. To control potential confounding effects on participants' responses that can occur when using real celebrities and web celebrities (e.g., different level of perceived popularities, familiarities, or likeability), this study created a fictitious celebrity and a web celebrity. However, when considering the definitions of celebrities (i.e., someone well known to the public for his or her accomplishments in areas such as sports and entertainment) and web celebrities (i.e., persons famous primarily for creating or appearing in Internet-based content, and highly recognizable to a web-based audience), elimination of perceived popularities, familiarities, or prior attitudes may

cause lack of statistical significance for source effects. Future studies should replicate this research using real celebrities and web celebrities.

Second, among various possible different causal attributions for providing product information, this research focused only on two causal attributions: information sharing attribution and monetary gain attribution. Although these two are most relevant to this research, previous studies on the motives for publishing eWOM have identified other possible causes such as desire for social benefits or interaction, potential to enhance one's own self-worth (Hennig-Thurau et al. 2004), product involvements and helping the company (Sundaram et al. 1998). Thus, it is valuable to employ other types of consumer attributions as an underlying mechanism of product information effectiveness in future research.

Third, this research did not measure and thus did not control the potential covariate, consumer deal proneness. This can be a plausible reason for insignificant interaction effects of source types and information sponsorship on information effectiveness in study 2 (promotional product information). According to previous studies, consumer deal proneness is highly correlated with the use of promotions (Bawa and Shoemaker 1987; Wirtz and Chew 2002). Therefore, it would be worthwhile to examine the role of deal proneness in promotional information effectiveness in future research.

Fourth, consumers often are exposed to multiple product information in social media. However, participants in this research were exposed to the stimulus Twitter page only once. Future research is necessary on the impact of multiple exposures to product information on consumer causal attributions and brand evaluations. Additionally, this research used only one product category: electric toothbrush, a utilitarian product. Sen and Lerman (2007) found that a

product type influences consumer processing of product information. Thus it is valuable to replicate this research with a hedonic or experiential product category.

One remaining issue relates to controversies in sponsored product information. Since sponsored product information occurs in the form of a friendly exchange of product-related information among consumers, like organic product information, consumers may not distinguish between organic and sponsored product information in social media, despite sponsored product information carrying disclosure terms of the sponsorship (e.g., #ad, AD, #spon, etc). This confusing form of sponsored product information may heighten doubts about the appropriateness of tactics (Wei et al. 2008). In this research, several participants were confused between organic product information and sponsored product information, although they had been informed of the method of distinguishing the two through trade journal article. In reality, it is possible that consumers may perceive sponsored product information as organic information if a WOM agent does not clarify that he or she is involved in WOM programs or campaigns. Future studies can address this issue.

APPENDIX

Appendix A

Article about Sponsored Product Information

Sponsored Tweets Can Be Around You

On Twitter, we often encounter other people's tweets about product experiences or product information. But do you know that some of those tweets are *sponsored*?

We heard rumblings that sponsored tweets were about to début last year.
Today, the platform launched, and it is what we all expected: a **pay-per-tweet service**.
The Twitter advertising platform, Sponsored tweet, connects advertisers with Twitter users.

Sponsored tweets give advertisers the ability to select, invite, and approve Twitter users of their choosing (i.e., *sponsors'* choosing) to participate in their campaigns.

On the flip side, Twitter users can set their pay rate, find opportunities to tweet on behalf of advertisers, and receive payment per tweet.

Disclosure is mandatory. All sponsored tweets carry disclosure terms such as spon, #spon, #ad, or AD.

REFERENCES

REFERENCES

Aggarwal, Pankaj (2004), "The Effects of Brand Relationship Norms on Consumer Attitudes and Behavior," *Journal of Consumer Research*, 31(1), 87-101.

Agrawal, Jagdish and Wagner A. Kamakura (1995), "The Economic Worth of Celebrity Endorsers: An Event Study Analysis," *Journal of Marketing*, 59(3), 56-63.

Ahuja, Roshan D., Tara Anne Michels, Mary Mazzei Walker, and Mike Weissbuch (2007), "Teen Perceptions of Disclosure in Buzz Marketing," *Journal of Consumer Marketing*, 24(3), 151-159.

Amos, Clinton, Gary Holmes, and David Strutton (2008), "Exploring the Relationship between Celebrity Endorser Effects and Advertising Effectiveness: A Quantitative Synthesis of Effect Size," *International Journal of Advertising*, 27(2), 209-234.

Anderson, Eric T. and Duncan I. Simester (1998), "The Role of Sale Signs," *Marketing Science*, 17(2), 139-155.

Arndt, Johan (1967), "Role of Product-Related Conversations in the Diffusion of a New Product," *Journal of Marketing Research,* 4(3), 291–295.

Atkin, Charles and Martin Block (1983), "Effectiveness of Celebrity Endorsers," *Journal of Advertising Research*, 23(1), 57-61.

Austin, Erica W., Rebecca Van de Vord, Bruce E. Pinkleton, and Evan Epstein (2008), "Celebrity Endorsements and Their Potential to Motivate Young Voters," *Mass Communication and Society*, 11(4), 420-436.

Bachmann, Gwen R., Deborah R. John, and Akashay R. Rao (1993), "Children's Susceptibility to Peer Group Purchase Influence: An Exploratory Investigation," in *Advances in Consumer Research*, Leigh McAlister and Michael L. Rothschild, eds., Vol. 20, Provo, UT: *Association for Consumer Research*, 463–468.

Bagozzi, Richard P. and Utpal M. Dholakia (2002), "Intentional Social Action in Virtual Communities," *Journal of Interactive Marketing*, 16(2), 2-21.

_____ and Kyu-Hyun Lee (2002), "Multiple Social Routes for Social Influence: The Role of Compliance, Internalization, and Social Identity," *Social Psychology Quarterly*, 65(3), 226-247.

Bansal, Harvir S. and Peter A. Voyer (2000), "Word-of-mouth Processes within a Services Purchase Decision Context," *Journal of Service Research*, 3(2), 166-177.

Barrows, Sydney (2010), "What's in It For Me?" available at http://www.entrepreneur.com/sales/customerservicecolumnistsydneybarrows/article206228.html

Basil, Michael D. (1996), "Identification as a Mediator of Celebrity Effects," *Journal of Broadcasting & Electronic Media*, 40(4), 478-495.

Bearden, William O., Donald R. Lichtenstein, and Jesse E. Teel (1984), "Comparison Price, Coupon, and Brand Effects on Consumer Reactions to Retail Newspaper Advertisements," *Journal of Retailing,* 60(2), 11-34.

_____, Richard G. Netemeyer, and Jesse E. Teel (1989), "Measurement of Consumer Susceptibility to Interpersonal Influence," *Journal of Consumer Research*, 15(4), 473-481.

_____ and Michael J. Etzel (1992), "Reference Group Influence on Product and Brand Purchase Decisions," *Journal of Consumer Research*, 9(2), 183-194.

Biswas, Dipayan, Abhijit Biswas, and Neel Das (2006), "The Differential Effects of Celebrity and Expert Endorsements on Consumer Risk Perceptions: The Role of Consumer Knowledge, Perceived Congruency, and Product Technology Orientation," *Journal of Advertising*, 35(2), 17-31.

Blattberg, Robert C. and Scott A. Neslin (1990), *Sales Promotion: Concepts, Methods, and Strategies.* Englewood Cliffs, NJ: Prentice Hall.

Bolton, Ruth N., P.K. Kannan, and Mathew D. Bramlett (2000), "Implication of Loyalty Program Membership and Service Experiences for Customer Retention and Value," *Journal of the Academy of Marketing Science*, 28(1), 95–108

Bone, Paula Fitzgerald (1995), "Word-of Mouth Effects on Short-term and Long-term Product Judgment," *Journal of Business Research*, 32(3), 213–223.

Boyd, Danah M. (2006), "Friends, Friendster, and MySpace Top 8: Writing Community Into on Social Network Sites," available at http://citeseerx.ist.psu.edu/viewdoc/summary?doi=10.1.1.79.5665

_____and Nicole B. Ellison (2007), "Social Network Sites: Definition, History, and Scholarship," *Journal of Computer-Mediated Communication*, 13(1), 210-230.

Brown, Jacqueline J. and Peter H. Reingen (1987), "Social Ties and Word-of-Mouth Referral Behavior," *Journal of Consumer Research*, 14 (3), 350-362.

Caldwell, Mayta A. and Letita A. Peplau (1982), "Sex Differences in Same-Sex Friendship," *Sex Roles*, 8(7), 721-732.

Campbell, Margaret C. (1995), "When Attention-Getting Advertising Tactics Elicit Consumer Inferences of Manipulative Intent: The Importance of Balancing Benefits and Investments," *Journal of Consumer Psychology*, 4(3), 225-254.

_____ and Amna Kirmani (2000), "Consumers' Use of Persuasion Knowledge: The Effects of Accessibility and Cognitive Capacity on Perceptions of an Influence Agent," *Journal of Consumer Research*, 27(1), 69-83.

Carl, Walter J. (2008), "The Role of Disclosure in Organized Word-of-Mouth Marketing Programs," *Journal of Marketing Communications*, 14(3), 225-241.

Chandon, Pierre, Brian Wansink, and Gilles Laurent (2000), "A Benefit Congruency Framework of Sales Promotion Effectiveness," *Journal of Marketing*, 64(4), 65-81.

Chatterjee, Patrali (2001), "Online Reviews - Do Consumers Use Them?" in *Advances in Consumer Research*, Mary C. Gilly and John Myers-Levy, eds., Vol. 28, Ann Arbor, MI: *Association for Consumer Research*, 129–33.

Cheema, Amar and Andrew M. Kaikati (2007), "The Effect of Uniqueness on Word-of-Mouth Agency: The Moderating Roles of Product Category and Availability," in *Advances in Consumer Research*, Gavan Fitzsimons and Vicki Morwitz, eds., Vol. 34, Duluth, MN: *Association for Consumer Research*, 519-521.

Chen, Shih-Fen, Kent B. Monroe, and Yung-Chien Lou (1998), "The Effects of Framing Price Promotion Messages on Consumers' Perceptions and Purchase Intentions," *Journal of Retailing*, 74(3), 353-372.

Cheung, Mee-Shew, M. Meral Anitsal, and Ismet Anitsal (2007), "Revisiting Word-of-Mouth Communications: A Cross-National Exploration," *The Journal of Marketing Theory and Practice*, 15(3), 235-249.

Chevalier, Judith A. and Dina Mayzlin (2006), "The Effect of Word of Mouth on Sales: Online Book Reviews," *Journal of Marketing Research,*43(3), 345-354.

Childers, Terry L. and Akahay R. Rao (1992), "The Influence of Familial and Peer-Based Reference Groups on Consumer Decisions," *Journal of Consumer Research*, 19(2), 198-211.

Chiou, Jyh-Shen and Cathy Cheng (2003), "Should A Company Have Message Boards on Its Web Sites?" *Journal of Interactive Marketing*, 17(3), 50–61.

Choi, Sejung Marina (2002), "Attributional Approach to Understanding Celebrity/Product Congruence Effects: Role of Perceived Expertise," Unpublished PhD Dissertation, Michigan State University, USA.

_____ and Nora J. Rifon (in press), "It's Match: The Impact of Congruence between Celebrity Image and Consumer Ideal Self on Endorsement Effectiveness," *Psychology & Marketing*.

Clark, Margaret S. (1979), "Interpersonal Attraction in Exchange and Communal Relationships," *Journal of Personality and Social Psychology*, 37(1), 12-24.

_____ and Judson Mils (1993), "The Difference Between Communal and Exchange Relationships: What It Is and Is Not," *Personality and Social Psychology Bulletin*, 19(6), 684-691.

Clifford, Stephanie (2009), "Notice Those Ads on Blog? Regulators Do, Too," in The New York Times.

Constant, David, Lee Sproull, and Sara Kiesler (1996), "The Kindness of Strangers: The Usefulness of Electronic Weak Ties for Technical Advice," *Organizational Science*, 7(2), 119-135.

Coppetti, Caspar, Daniel Wentzel, Torsten Tomczak, and Sven Henkel (2009), "Improving Incongruent Sponsorships through Articulation of the Sponsorship and Audience Participation, *Journal of Marketing Communications*, 15(1), 17-34.

Court, David C., Jonathan W. Gordon, and Jesko Perrey (2005), "Boosting Returns on Marketing Investment," *The McKinsey Quarterly*, 2, 1-7.

Cronley, Maria L., Frank R. Kardes, Perilou Goddard, and David C. Houghton (1991), "Endorsing Products for The Money: The Role of the Correspondence Bias in Celebrity Advertising," in *Advances in Consumer Research*, Eric J. Arnould and Linda M. Scott, eds., Vol. 26, Provo, UT: *Association for Consumer Research*, 627-631.

Darke, Peter R. and Cindy M. Y. Chung (2005), "Effects of Pricing and Promotion on Consumer Perceptions: It Depends on How You Frame It," *Journal of Retailing*, 81(1), 35-47.

Daugherty, Terry, Eastin**,** Matthew S**.** & Laura Bright (2008), "Exploring Consumer Motivations for Creating User-Generated Content," *Journal of Interactive Advertising, 8*(2), available at http://jiad.org/article101.

DeCarlo, Thomas E. (2005), "The Effects of Sales Message and Suspicion of Ulterior Motives on Salesperson Evaluation," *Journal of Consumer Psychology*, 15(3), 238-249.

_____, Russell N. Laczniak, Carol M. Motley, and Sridhar Ramaswami (2007), "Influence of Image and Familiarity on Consumer Response to Negative Word-of-Mouth Communication about Retail Entities," *Journal of Marketing Theory and Practice*, 15(1), 41-51.

Dellarocas, Chrysanthos (2003), "The Digitization of Word of Mouth: Promise and Challenges of Online Feedback Mechanisms," *Management Science,*49(10), 1407-1424

_____ and Ritu Narayan (2006), "A Statistical Measure of a Population's Propensity to Engage in Post-Purchase Online Word-of-Mouth," *Statistical Science*, 21(2), 277-285.

Dhar, Sanjay K. and Stephen J. Hoch (1996), "Price Discrimination Using In-Store Merchandising," *Journal of Marketing*, 60(1), 17-30.

Duhan, Dale F., Scott D. Johnson, James B. Wilcox, and Gilbert d. Harrell (1997), "Influences on Consumer Use of Word-of-Mouth Recommendation Sources," *Journal of the Academy of Marketing Science*, 25(4), 283-295.

Eagly, Alice H., Wendy Wood, and Shelly Chaiken (1978), "Causal Inferences about Communicators and Their Effect on Opinion Change," *Journal of Personality and Social Psychology*, 36(4), 424-435.

_____ and Shelly Chaiken (1993), *The Psychology of Attitudes*, Belmont, CA: Thomson Wadsworth.

Edwalt, David M. (2010), "The Web Celeb 25," in Forbes.

Eisend, Martin (2006), "Two-Sided Advertising: A Meta-Analysis," *International Journal of Research in Marketing,* 23(2), 187-198.

Ellen, Pam S., Deborah J. Webb, and Lois A. Mohr (2006), "Building Corporate Associations: Consumer Attributions for Corporate Socially Responsible Programs," *Journal of the Academy of Marketing Science*, 34 (2), 147-157.

Ellison, Glenn and Drew Fudenberg (1995), "Word-of-mouth Communication and Social Learning," *Quarterly Journal of Economics*, 110(1), 93-125.

Ellison, Nicole, B., Charles Steinfield, and Cliff Lampe (2007), "The Benefits of Facebook Friends: Social Capital and College Student's Use of Online Social Network Sites," *Journal of Computer-Mediated Communication,* 12(4), 1144-1168.

eMarketer (2008), "Online Buyers Seek Out User Reviews," available at http://totalaccess.emarketer.com/Articles.

Erdogan, B Zafer (1999), "Celebrity Endorsement: A Literature Review," *Journal of Marketing Management*, 15(4), 291-314.

Feick, Lawrence and Robin A. Higie (1992), "The Effects of Preference Heterogeneity and Source Characteristics on Ad Processing and Judgments about Endorsers," *Journal of Advertising*, 21(2), 9-24.

Fein, Steven (1996), "Effects of Suspicion on Attributional Thinking and the Correspondence Bias," *Journal of Personality and Social Psychology*, 70(6), 1164-1184.

_____ and S E. Taylor (1991), *Social Cognition*, New York: McGraw-Hill.

Folkes, Valerie S. (1988), "Recent Attribution Research in Consumer Behavior: A Review and New Directions," *Journal of Consumer Research*, 14(4), 548-565.

Forehand, Mark R. and Sonya Grier (2003), "When Is Honesty the Best Policy? The Effect of Stated Company Intent on Consumer Skepticism," *Journal of Consumer Psychology*, 13(3), 349-356.

Fox, Susannah, Kathryn Zickuhr, and Aaron Smith (2009), "Twitter and Status Updating," Pew Internet & American Life Project, available at http://www.pewinternet.org/Reports/2009/17-Twitter-and-Status-Updating-Fall-2009.aspx

Frenzen, Jonathan K. and Harry L. Davis (1990), "Purchasing Behavior in Embedded Markets," *Journal of Consumer Research*, 17(1), 1-12.

_____ and Kent Nakamoto (1993), "Structure, Cooperation, and The Flow of Market Information," *Journal of Consumer Research*, 20(3), 360-375.

Friedman, Hershey H., Salvatore Termini, and Robert Washington (1976), "The Effectiveness of Advertisements Utilizing Four Types of Endorsers," *Journal of Advertising*, 5(3), 22-24.

_____ and Linda Friedman (1979), "Endorser Effectiveness by Product Type," *Journal of Advertising Research*, 19(5), 63-71.

Friestad, Marian and Peter Wright (1994), "The Persuasion Knowledge Model: How People Cope with Persuasion Attempts," *Journal of consumer Research*, 21(1), 62-74.

Gilbert, Daniel T. and Patrick S. Malone (1995), "The Correspondence Bias," *Psychological Bulletin*, 117(1), 21-38.

Godes, David, Dina Mayzlin, Yubo Chen, Sanjiv Das, Chrysanthos Dellarocasm et al. (2006), "The Firm's Management of Social Interactions," *Marketing Lett*ers, 16(3-4), 415-428.

Goldsmith, Ronald E. and David Horowitz (2006), "Measuring Motivations for Online Opinion Seeking," *Journal of Interactive Advertising*, 6(2), available at http://www.jiad.org/article76

Goodrich, Kendall and Tamara F. Mangleburg (2009), "Adolescent Perceptions of Parent and Peer Influences on Teen Purchase: An Application of Social Power Theory," *Journal of Business Research*, 63(12), 1328-1335.

Granovetter, Mark S. (1973), "The Strength of Weak Ties," *American Journal of Sociology*, 78(6), 1360-1380.

Gregory, Sean (2009), "How to Make Money on Twitter: Do Commercials!" in Time.

Grewal, Dhruv, Kent B. Monroe, and R. Krishnan (1998), "The Effects of Price-Comparison Advertising on Buyers' Perceptions of Acquisition Value, Transaction Value, and Behavioral Intentions," *Journal of Marketing*, 62(2), 46-59.

Ha, Hong-Youl (2002), "Factors Influencing Consumer Perceptions of Brand Trust Online," *Journal of Product & Brand Management*, 13(5), 329-342.

Han, Sangman, Sunil Gupta, and Donald R. Lehmann (2001), "Consumer Price Sensitivity and Price Thresholds," *Journal of Retailing*, 77 (4), 417-418.

Hardesty, David M. and William O. Bearden (2003), "Consumer Evaluations of Different Promotion Types and Price Presentations: The Moderating Role of Promotional Benefit Level," *Journal of Retailing*, 79(1), 17-25.

Harkins, Stephen G. and Richard E. Petty (1987), "Information Utility and the Multiple Source Effect," *Journal of Personality and Social Psychology*, 52(2), 260-268.

Harrison-Walker, L. Jean (2001), "The Measurement of Word-of-Mouth Communication and an Investigation of Service Quality and Customer Commitment as Potential Antecedents," *Journal of Service Research*, 4(1), 60–75.

Hass, Glen R. (1981), "Effects of Source Characteristics on Cognitive Responses and Persuasion," in *Cognitive Responses in Persuasion*, Richard E. Petty, Thomas M. Ostrom, and Timothy C. Brock, eds., NJ: Lawrence Erlbaum Associates, 141-172.

Heider, Fritz (1958), *The Psychology of Interpersonal Relations*, New York: Wiley.

Helm, Sabrina (2000), "Viral Marketing- Establishing Customer Relationships by 'Word of Mouse,'" *Electronic markets*, 10(3), 158-161.

Hennig-Thurau, Thorsten and Gianfranco Walsh (2004), "Electronic Word-of-Mouth: Motives for and Consequences of Reading Customer Articulations on the Internet," *International Journal of Electronic Commerce*, 8(2), 51-74.

_____, Kevin P. Gwinner, Gianfranco Walsh, and Dwayne D. Gremler (2004), "Electronic Word-of-Mouth Via consumer-Opinion Platforms: What motives Consumers to Articulate Themselves on the Internet?" *Journal of Interactive Marketing*, 18(1), 38-52.

Herr, Paul M., Frank R. Kardes and John Kim (1991), "Effects of Word-of Mouth and Product Attribute Information on Persuasion: An Accessibility-Diagnosticity Perspective," *Journal of Consumer Research*, 17(4), 454–462.

Hilton, James L., Steven Fein, and Dale T. Miller (1993), "Suspicion and Dispositional Inference," Personality and Social Psychology Bulletin, 19, 501-512.

Holiday, Sherry. J. and Kathleen Kerns (1999), "Do Age Difference Matter in Close and Casual Friendship? A Comparison of Age Discrepant and Age Peer Friendship," *Communication Report*, 12(2), 101-114.

Hovland, Carl, Irving L. Janis, and Harold Kelley (1953) *Communication and Persuasion,* New Haven: Yale University Press.

Huang, Jen-Hung and Yi-Fen Chen (2006), "Herding in Online Product Choice," *Psychology and Marketing*, 23(5), 413-428.

Inman, J. Jeffrey, Leigh McAlister, and Wayne D. Hoyer (1990), "Promotion Signal: Proxy for a Price Cut?" *Journal of Consumer Research*, 17(1), 74-81.

Jones, Edward E. and Keith Davis (1965), "From Acts to Dispositions: The Attribution Process in Person Perception," in *Advances in Experimental Social Psychology*, Vol 2, Leonard Berkowitz, ed., NY: Academic Press, 219-266.

Kahle, Lynn R. and Pamela M. Homer (1985), "Physical Attractiveness of the Celebrity Endorser: A Social Adaptation Perspective," *Journal of Consumer Research*, 11(4), 954-961.

Kaikati, Andrew M. and Jack G. Kaikati (2004), "Stealth Marketing: How to Reach Consumers Surreptitiously," *California Management Review*, 46(4), 6-22.

Kamins, Michael A. (1989), "Celebrity and Noncelebrity Advertising in a Two-Sided Context," *Journal of Advertising Research*, 29(3), 34-42.

_____ (1990), "An Investigation into the 'Match-Up' Hypothesis in Celebrity Advertising: When Beauty May be Only Skin Deep," *Journal of Advertising*, 19(1), 4-13.

_____, Meribeth J. Brand, Stuart A. Hoeke, and John C. Moe (1989), "Two-Sided versus One-Sided Celebrity Endorsements: The Impact on Advertising Effectiveness and Credibility," *Journal of Advertising*, 18(2), 4-10.

_____and Kamal Gupta (1994), "Congruence between Spokesperson and Product Type: A Matchup Hypothesis Perspective," *Psychology & Marketing*, 11(6), 569-586.

Kaplan, Andreas M. and Michael Haenlein (2010), "Users of the World, Unite! The Challenges and Opportunities of Social Media, *Business Horizons*, 53(1), 59-68.

Katz, Elihu and Paul F. Lazarsfeld (1955), *Personal Influence: The Part Played by People in the Flow of Mass Communications.* Glencoe, IL: Free Press.

Keller Fay Group (2008), "Keller Fay and OMD Study Finds Offline Word of Mouth More Positive and Credible than Online Buzz," available at http://kellerfay.com/?page_id=222

Kelley, Harold H. (1967), "Attribution Theory in Social Psychology," in *Nebraska Symposium on Motivation,* Vol. 15, D. Levine, ed., Lincoln: University of Nebraska Press, 192-238.

_____, (1972), "Causal Schemata and the Attribution Process," in *Attribution: Perceiving the Causes of Behavior*, Edward Jones et al., eds., Morristown, NJ: General Learning Press, 151-174).

_____, (1973), "The Process of Causal Attribution," *American Psychologist*, 28(2), 107-128.

Kelman, Herbert C. (1961), "Processes of Opnion Change," *Public Opinion Quarterly*, 25(1), 57-78.

Kennett, Jeanette and Steve Matthews (2008), "What's the Buzz? Undercover Marketing and the Corruption of Friendship," *Journal of Applied Philosophy*, 25(1), 2-18.

Kim, Mikyoung and Mira Lee (2010), "Consumer Responses to Ambiguity-Related Cues in Online Consumer Reviews," Paper presented at the 2010 annual convention of American Academy of Advertising, Minneapolis, MN.

Klaassen, Abbey (2009), "Paid Tweets Just as Healthy as Organic Word-of-Mouth?" in AdAge.

Kozinets, Robert V., Kristine de Valck, Andrea C. Wojnicki, and Sarah J. S. Winer (2010), "Networked Narratives: Understanding Word-of-Mouth Marketing in Online Communities," *Journal of Marketing*, 74(2), 71-89.

Lachance, Marie J., Pierre Beaudoin, and Jean Robitaille (2003), "Adolescents' Brand Sensitivity in Apparel: Influence of Three Socialization Agents," *International Journal of Consumer Studies*, 27(1), 47-57.

Laczniak, Russell N., Thomas E. DeCarlo, and Sridhar N. Ramaswami (2001), "Consumers' Responses to Negative Word-of Mouth Communication: An Attribution Theory Perspective," *Journal of Consumer Psychology*, 11(1), 57–73.

Lazarsfeld, Paul F., Bernard Berelson, and Hazel Gaudet (1944), *The People's Choice*. NY: Duell, Sloan and Pearce.

Learmonth, Michael (2009), "FTC Cracks Down on Blogger Payola, Celebrity Tweets," in Adage.

Lee, Mira and Seounmi Youn (2009), "Electronic Word of Mouth (eWOM): How eWOM Platforms Influence Consumer Product Judgment," *International Journal of Advertising,* 28(3), 473-499.

_____, Shelly Rodgers, and Mikyoung Kim (2009), "Effects of Valence and Extremity of eWOM on Attitude toward the Brand and Web Site," *Journal of Current Issues and Research in Advertising,* 31(2), 1-11.

_____, Nelson, and Kim (2010), "Perceptual and Behavioral Third-Person Effects in Stealth Marketing: The Moderating Role of Perceived Appropriateness," Paper presented at the 2010 annual convention of American Academy of Advertising, Minneapolis, MN.

Leone, Robert P. and Srini S. Srinivasan (1996), "Coupon Face Value: Its Impact on Coupon Redemptions, Brand Sales, and Brand Profitability," *Journal of Retailing*, 72(3), 273-289.

Lichtenstein, Donald R. and William O. Bearden (1989), "Contextual Influences on Perceptions of Merchant-Supplied Reference Prices," *Journal of Consumer Research*, 16(1), 55-66.

Lionberger, Herbert F. (1951), "Sources and Use of Farm and Home Information by Low-Income Farmers in Missouri," *Columbia: Missouri Agricultural Experiment Station Research bulletin*, 471.

Mangleburg, Tamara F., Patricia M. Doney, and Terry Bristol (2004), "Shopping with Friends and Teens' Susceptibility to Peer Influence," *Journal of Retailing*, 80(2), 101-116.

Marsden, Peter V. and Karen E. Campbell (1984), "Measuring Tie Strength," *Social Forces*, 63(2), 482-501.

Mathur, Lynette K., Ike Mathur, and Nanda Rangan (1997), "The Wealth Effects Associated with a Celebrity Endorser: The Michael Jordan Phenomenon," *Journal of Advertising Research*, 37(3), 67-73.

Maxham, James G. and Richard G. Netemeyer (2002), "A Longitudinal Study of Complaining Customers' Evaluations of Multiple Service Failures and Recovery Efforts," *Journal of Marketing*, 66(4), 57-71.

McCracken, Grant (1983), "Who is the Celebrity Endorser? Cultural Foundations of the Endorsement Process," *Journal of Consumer Research*, 16(3), 310-321.

McGuire, William J. (1985), "Attitudes and Attitude Change," in *Handbook of Social Psychology*, Vol. 2, Gardner Lindzey and Elliot Aronson, eds., NY: Random House, 233-346.

Mizerski, Richard W. (1982), "An Attribution Explanation of the Disproportionate Influence of Unfavorable Information," *Journal of Consumer Research,* 9(3), 301–310.

_____, Linda L. Golden, and Jerome B. Kerman (1979), "The Attribution Process in Consumer Decision Making," *Journal of Consumer Research*, 6(2), 123-140.

Moore, David J., John C. Mowen, and Richard Readon (1994), "Multiple Sources in Advertising Appeals: When Product Endorses Are Paid by the Advertising Sponsor," *Journal of the Academy of Marketing Science*, 22(3), 234-243.

Morrissey, Brian (2009), "Get Ready for Pay Per Tweet: IZEA, Formally Called Pay Per Post, is Readying a Twitter Ad Platform Called Sponsored Tweets," in Adweek.

Mowen, John and Stephen Brown (1981), "On Explaining and Predicting the Effectiveness of Celebrity Endorsers," in *Advances in Consumer Research*, Kent B. Monroe, ed., Vol. 8, Ann Arbor: *Association for Consumer Research*, 437-441.

Murray, Keith B. (1991), "A Test of Services Marketing Theory: Consumer Information Acquisition Activates," *Journal of Marketing*, 55(1), 10-25.

Ohanian, Roobina (1990), "Construction and Validation of a Scale to Measure Celebrity Endorsers' Perceived Expertise, Trustworthiness, and Attractiveness," *Journal of Advertising*, 19(3), 39-42.

_____ (1991), "The Impact of Celebrity Spokespersons' Perceived Image on Consumers' Intention to Purchase," *Journal of Advertising Research*, 31(1), 46-54.

Paek, Hye-Jin, Thomas Hove, Mikyoung Kim, Hyun Jun Jeong (In press), "Peer or Expert? The Persuasive Impact of YouTube Public Service Announcement Producers," *International Journal of Advertising*.

Park, Do-Hyung, Jumin Lee, and Ingoo Han (2007), "The Effect of On-Line Consumer Reviews on Consumer Purchase Intention: The Moderating Role of Involvement," *International Journal of Electronic Commerce*, 11(4), 125-148.

Pechmann, Cornelia (1992), "Predicting When Two-Sided Ads Will Be More Effective Than One-Sided Ads: The Role of Correlational and Correspondent Inferences," *Journal of Marketing Research*, 29(4), 441-453.

Perse, Elizabeth, Amy I. Nathanson, and Douglas McLeod (1996), "Effects of Spokesperson Sex, Public Service Announcement Appeal, and Involvement on Evaluations of Safe-Sex PSAs," *Health Communication*, 8(2), 171-189.

Petty, Richard E., John T. Cacioppo, and David Schumann (1983), "Central and Peripheral Routes to Advertising Effectiveness: The Moderating Role of Involvement," *Journal of Consumer Research*, 10(2), 135-146.

Petty, Ross D and J. Craig Andrews (2008), "Covert Marketing Unmasked: A Legal and Regulatory Guide for Practices That Mask Marketing Messages," *Journal of Public Policy & Marketing*, 27(1), 7-18.

Pew Internet & American Life Project (2009), "Social Networking Site Users Younger than Overall Internet Population," available at http://www.pewinternet.org/Infographics/Generational-Differences-in-SNS.aspx

Phelps, Joseph E., Regina Lewis, Lynn Mobilio, David Perry, and Niranjan Raman (2004), "Viral Marketing or Electronic W-O-M Advertising: Examining Consumer Responses to Pass Along Email," *Journal of Advertising Research*, 44(4), 333-348.

PQ Media (2009), "Exclusive PQ Media Research: Despite Work Recession in Decades, Brand Increased Spending on Word-of-Mouth Marketing 14.2% to %1.54 Billion in 2008," available at http://www.pqmedia.com.about-press-20090729-wommf.html

Preacher, Kristopher J., Derek D. Rucker, and Andrew F. Hayes (2007), "Addressing Moderated Mediation Hypotheses: Theory, Methods, and Prescriptions," *Multivariate Behavioral Research*, 42(1), 185-227.

Reinhard, Marc-Andre, Matthias Messner, and Siegfried Ludwig Sporer (2006), "Explicit Persuasive Intent and Its Impact on Success at Persuasion—The Determining Roles of Attractiveness and Likeableness," *Journal of Consumer Psychology*, 16(3), 249-259.

Riegner, Cate (2007), "Word of Mouth on the Web: The Impact of Web 2.0 on Consumer Purchase Decisions," *Journal of Advertising Research*, 47(4), 436-447.

Rifon, Nora J., Sejung Marina Choi, Carrie S. Trimble, and Hairong Li (2004), "Congruence Effects in Sponsorship: The Mediating Role of Sponsor Credibility and Consumer Attributions of Sponsor Motive," *Journal of Advertising*, 33(1), 29-42.

Rosch, Eleanor (1975), "Cognitive Reference Points," *Cognitive Psychology*, 7(4), 532-547.

Ross, Michael and Garth J. O. Fletcher (1985), "Attribution and Social Perception," in *Handbook of Social Psychology,* Vol 2, Gardner Lindzey and Elliot Aronson eds., NY: Random House, 73-122.

Ryu, Gangseog and Lawrence Feick (2007), "A Penny for Your Thoughts: Referral Reward Programs and Referral Likelihood," *Journal of Marketing*, 71(1), 84-94.

_____ and Jin K. Han (2009), "Word-of-Mouth Transmission in Settings with Multiple Opinions: The Impact of Other Opinions on WOM Likelihood and Valence," *Journal of Consumer Psychology*, 19(3), 403-415.

Salmon, C. T., and Charles Atkin (2003) , "Using media campaigns for health promotion," in *Handbook of Health Communication*, Teresa L. Thompson, Alicia M. Dorsey, Roxanne Parrott and Katherine I. Miller, eds., Mahwah, NJ: Lawrence Erlbaum Associates, 449-472.

Schiffman, Leon G. and Leslie L. Kanuk (2007), *Consumer Behavior*, Upper Saddle River, NJ: Prentice Hall.

Schindler, Robert M. and Barbara Bickart (2005), "Published Word of Mouth: Referable, Consumer-Generated Information on the Internet," in *Online Consumer Psychology: Understanding and Influencing Consumer Behavior in the Virtual World*, Curtis P. Haugtvedt and Karen A. Machleit eds., Mahwah, NJ: Lawrence Erlbaum Associates, 35-61.

Sen, Shahana and Dawn Lerman (2007), "Why Are You Telling Me This? An Examining Into Negative Consumer Reviews on the Web," *Journal of Interactive Marketing,* 21(4), 76-94.

Senecal, Sylvain and Jacques Nantel (2004), "The Influence of Online Product Recommendations on Consumers' Online Choices," *Journal of Retailing*, 80(2), 159-169.

Sernovitz, Andy (2009), *Word of Mouth Marketing*, NY: Kaplan.

Shavitt, Sharon (1990), "The Role of Attitude Objects in Attitude Functions," *Journal of Experimental Social Psychology*, 26(2), 124-148.

Shin, Ann (2006), "FTC moves to unmask Word-of-Mouth Marketing," in Washington Post.

Shrum, L. J. and Valerie D. Bischak (2001), "Mainstreaming, Resonance, and Impersonal Impact: Testing Moderators of the Cultivation Effect for Estimates of Crime Risk," *Human Communication Research*, 27(2), 187–215.

Silvera, David H. and Benedikte Austad (2004), "Factors Predicting the Effectiveness of Celebrity Endorsement Advertisements," *European Journal of Marketing*, 38(11/12), 1509-1526.

_____ and Daniel Laufer (2005), "Recent Development in Attribution Research and Their Implications for Consumer Judgments and Behavior," in *Applying Social Cognition to Consumer-Focused Strategy*, Frank Kardes, Paul Herr, and Jacques Nantel eds., New Jersey: Lawrence Erlbaum Associates, 53-77.

Smith, Donnavieve, Satya Menon, and K. Sivakumar (2005), "Online Peer and Editorial Recommendations, Trust, and Choice in Virtual Markets," *Journal of Interactive Marketing*, 19 (3), 15-37.

Sparkman, Richard and William B. Locander (1980), "Attribution Theory and Advertising Effectiveness," *Journal of Consumer Research*, 7(3), 219-224.

_____ (1982), "The Discounting Principle in the Perception of Advertising," in *Advances in Consumer Research*, Andrew Mitchell, ed., Vol. 9, Ann Arbor, MI: *Association for Consumer Research*, 277-280.

Stefanone, Michael A. and Chyng-Yang Jang (2008), "Writing for Friends and Family: The Interpersonal Nature of Blogs," *Journal of Computer Mediated Communication*, 13(1), 123-140.

Sternthal, Brian, Ruby Dholakia, and Clark Leavitt (1978), "The Persuasive Effect of Source Credibility: Tests of Cognitive Response," *Journal of Consumer Research*, 4(4), 252-260.

Subscribers, Fans, and Followers (n.d.), "Facebook X-Factors" available at http://www.exacttarget.com/sff/index.html

_____ (n.d.), "Twitter X-Factors," available at http://www.exacttarget.com/sff/index.html

Sun, Tao, Seounmi Youn, Guohua Wu, and Mana Kuntaraporn (2006), "Online Word-of-Mouth (or Mouse): An Exploration of Its Antecedents and Consequences," *Journal of Computer-Mediated Communication*, 11(4), available at http://jcmc.indiana.edu/vol11/issue4/sun.html

Sundaram, D. S., Kaushik Mitra, and Cynthia Webster (1998), "Word-of-mouth communications: A motivational analysis," in *Advances in Consumer Research*, Joseph W. Alba and J. Wesley Hutchinson, ed., Vol. 25, Provo, UT: *Association for Consumer Research*, 527-31.

Taylor, Shirley (1994), "Waiting for Service: The Relationship between Delays and Evolutions of Service," *Journal of Marketing*, 58(2), 56-69.

Thaler, Richard (1985), "Mental Accounting and Consumer Choice," *Marketing Science*, 4(3), 199-214.

Till, Brian D. and Michael Busler (1998), "Matching Products with Endorsers: Attractiveness versus Expertise," *Journal of Consumer Marketing*, 15(6), 576-586.

_____ and _____ (2000), "The Match-Up Hypothesis: Physical Attractiveness, Expertise, and the Role of Fit on Brand Attitude, Purchase Intent and Brand Beliefs," *Journal of Advertising*, 29(3), 1-13.

Tripp, Carolyn, Thomas D. Jensen, and Les Carlson (1994), "The Effects of Multiple Product Endorsements by Celebrities on Consumers' Attitudes and Intentions," *Journal of Consumer Research*, 20(4), 535-547.

Tuk, Mirgam A., Peeter W. J. Berlegh, Ale Smidts, and Daniel H.J. Wigboldus (2009), "Sales and Sincerity: The Role of Relational Framing in Word-of-Mouth Marketing," *Journal of Consumer Psychology*, 19, 38-47.

Van Grove (2009), "Sponsored Tweets Launches: The End of Twitter as We Know It?" available at http://mashable.com/2009/08/03/izea-sponsored-tweets/

Verna, Paul (2007), "User-Generated Content: Will Web 2.0 Pay Its Way?" *eMarketer*, June 2007, 1-31, available at http://www.emarketer.com/Report.aspx?code=emarketer_2000421

Walsh, Gianfranco, Kevin P. Gwinner, and Scott R. Swanson (2004), "What Makes Maven Tick? Exploring the Motives of Market Maven's Initiation of Information Diffusion," *Journal of Consumer Marketing*, 21(2), 109-122.

Wang, Alex (2005), "The Effects of Expert and Consumer Endorsements on Audience Response," *Journal of Advertising Research*, 45(4), 402-412.

Wei, Mei-Ling, Eileen Fischer, and Kelley J. Main (2008), "An Examination of the Effects of Activating Persuasion Knowledge on Consumer Reponse to Brands Engaging in Covert Marketing," *Journal of Public Policy & Marketing*, 27(1), 34-44.

Wiener, Joshua and John C. Mowen (1986), "Source Credibility: On the Independent Effects of Trust and Expertise," in *Advances in Consumer Research*, Richard J. Lutz, ed., Vol. 13, Provo: UT: *Association for Consumer Research*, 306-310.

Wirtz, Jochen and Patricia Chew (2002), "The effects of incentives, deal proneness, satisfaction and tie strength on word-of-mouth behaviour," *International Journal of Service Industry Management*, 13(2), 141-162.

Xia, Lan and Nasr Bechwati (2008), "Word of Mouse: The Role of Cognitive Personalization in Online Consumer Reviews," *Journal of Interactive Advertising*, 9(1), http://www.jiad.org/article105.

Xue, Fei and Joseph E. Phelps (2004), "Internet-Facilitated Consumer-to-Consumer Communication: the Moderating Role of Receiver Characteristics," *International Journal of Internet Marketing and Advertising,* 1(2), 121–136.