

**An Examination of Consumers' Selective Word-of-Mouth  
Communication Process and its Consequences**

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## **ABSTRACT**

This research proposes that consumers often selectively communicate their product knowledge with one another in order to achieve different interpersonal goals or to meet situational demands; as a consequence of this selective message construction process, the communicators' recollections of the product knowledge tend to be realigned with the contents of the communicated messages. To provide empirical support for this proposition, I employed a two-step, memory-based experiment procedure and used interpersonal relationship strength as the key investigating variable to examine communicators' selective message construction behavior and its evaluative consequences. Results showed that participants communicated more negative product information to a strong relation audience and more positive information to a weak relation audience; they were also more likely to negatively interpret ambiguous information to a strong relation audience. After the communication, participants in the strong relation condition showed significantly decreased product evaluations.

## **Dedication**

To my wife, Xiaomeng, my strongest supporter.  
Love.

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# **CHAPTER 1**

## **RESEARCH OVERVIEW**

This chapter provides an overview of this research and is organized in three major sections. A brief introduction of the research objectives is presented first, followed by a synopsis of the conceptual framework and hypothesis development. In the next section a summary account of the research methods and results is reported, with much of the emphasis placed on Study 3, the center piece of a series of four studies. This chapter ends with a discussion of the research directions that have emerged from this project and could guide future research endeavors.

### Research Objectives

Consumers' interpersonal, word-of-mouth (hereafter referred to as "WOM" for simplicity) communications of product information or consumption experiences have long been recognized as a powerful weapon to disseminate marketing information (Frenzen and Nakamoto 1993) and more importantly, to influence consumers' judgments and choices (e.g., Herr, Kardes and Kim 1991). Accordingly, considerable research attention has been paid to the influences of WOM communications on the message recipients. Studies have demonstrated that WOM is usually perceived as more credible (Murray 1991) and diagnostic

(Herr et al. 1991) and it has both short-term and long-term impact on consumers' product judgments and choices (Bone 1995).

However, for a dyadic social interaction like WOM, much of the research emphasis has been placed on the message recipients (i.e., the WOM audience); surprisingly very little is known about the influences of WOM communications on the speakers (i.e., the WOM communicators). Specifically, an unanswered question is whether, and how, WOM communications can influence the communicator's post-communication judgments of the message subject, be it a product, a brand or a consumption experience. In this research, I argue that in WOM communications, consumers often selectively communicate their product knowledge with others in order to achieve interaction goals or meet situational demands; as a consequence of this selective message construction process, consumers' recollections of the product knowledge tend to be realigned with the contents of the communicated messages.

To explicate this proposition, let's consider a hypothetical example. A traveler who had just returned from a long trip abroad would have a lot of occasions to talk about her multifaceted travel experiences when asked by others. When the audience is a close friend who is interested in making the same trip, the traveler might feel obliged to speak more about the terrible places she wished she had not been to; however, when the audience is a co-worker whom she bumped into near the office water cooler, the traveler might feel it more entertaining to elaborate only on the wonderful places she had been to during her trip. Further suppose that most of the conversations happened with her close friends and during which she repeated quite a few times her not-so-happy experiences. A few weeks later, her travel agent called to inquire

how she felt about the trip. How would the traveler respond? More importantly, would her answer be any different if she hadn't repeated those negative experiences to her friends? In a different scenario, if all the post-travel conversations were with casual acquaintances and during which the traveler retold her pleasant travel experiences many times and perhaps in many ways, how would she respond to the agent's question?

Though anecdotal and oversimplified, this example attempts to highlight two key issues that are overlooked by the WOM researchers. First, WOM communicators' message construction is not a literal relay of the stored knowledge; rather, it is an adaptive process, a process that is affected by many individual and situational factors. Second, this selective communication process itself might drive important cognitive changes in the minds of the communicators. Therefore, to enrich our understanding of consumer WOM behaviors, it is necessary to explore WOM communicators' message construction process and more importantly, to examine how WOM communicators' own judgments are shaped by the WOM communication process itself.

### Conceptual Framework

Outside of the realm of consumer behavior there are two streams of research that have investigated the message construction process in interpersonal communications and its cognitive consequences on the communicators. Originating from Higgins and Rholes' (1978)

seminal work in the study of the audience effect and the resultant cognitive-tuning of the communicators, a phenomenon referred to as *saying-is-believing* has been replicated by many researchers (for reviews, see Higgins 1992, 1999). Employing the traditional person perception paradigm, the consensus finding from this literature is that when communicating information about a target person, the audiences' characteristics, such as attitudes, can not only affect how the communicators describe the person, but also bias the communicators' own subsequent memory of the target. Expanding beyond the audience effect, other studies have investigated the roles of the communicator's own characteristics in shaping the construction of communication messages, such as the communicator's interactive goals (e.g., Sedikides 1990), or personality traits (e.g., Higgins and McCann 1984; McCann and Hancock 1983). Drawing from the vast empirical evidence, Higgins and his colleagues have reasoned that post-communication cognitive changes occur because the communication process itself contributes to the creation of a shared social reality of the target person between the communicator and the audience; thus, the contents of the communication message become an integral part of the descriptions of the target person, which consequently affects the communicator's subsequent recollections.

Expanding beyond the person perception paradigm, a more direct and inclusive examination of the constructive nature and consequences of interpersonal communications comes from the research of storytelling and autobiographic memory (see Pasupathi 2001 for a review). According to this literature, what people tell and how they tell about past experiences depends on the communication contexts. Two storytellings can be about the same past event, yet describe it very differently, under the influences of both parties' (i.e., the speaker and the

audience) characteristics and interactive goals. In addition, recountings of past events affect how events are later remembered. That is, the perspectives or goals taken during retelling affect the speaker's later ability to remember the original event. For example, Tversky and Marsh (2000) showed that the perspective (recommendation vs. complaint) used by the communicator in retelling events affects both the amount of original information recalled and the type of errors made in final recall and recognition by the communicator. Many researchers have reasoned that these memory differences after communications could be attributed to the fact that communicators selectively rehearsed certain aspects of the past events during communications and the rehearsals enhanced the subsequent retrievals of those details. In addition to the rehearsal mechanism, McGregor and Holmes (1999) proposed that, as a consequence of the communications, people developed a heuristic version or interpretation of the past events and this interpretation directly biased later judgments and rememberings of those events. This proposition bears particular resemblance to Higgins' shared reality theory, although it is originated from the research of personal experiences.

Integrating these two research streams and taking into account the social functions of consumption knowledge (Solomon 1983) and its multidimensionality (Alba and Hutchinson 1987), the main thesis of this research can be summarized as the following. I propose that in many consumer WOM communication situations, in order to communicate complex consumption knowledge to an audience in a sensible and appropriate manner that is often dictated by social norms and situational goals, consumers should engage in a selective message construction process: They selectively communicate certain aspects of their product knowledge to different audiences in different situations. As a consequence of this message

modification process, their post-communication recollections of the product knowledge might be realigned with the contents of the communicated messages, which could result in a communication-induced product attitude change. In other words, the communicators fail to factor in the causes of their message modifications and come to believe in the evaluative connotations of the communicated messages.

### Hypotheses Development

Although many individual and situational variables can affect the communicator's message modification behaviors, in the current research the key investigating variable used is the interpersonal relationship strength, (also referred to as tie strength; I use these terms interchangeably throughout this research) between the communicator and the recipient. Specifically, I examine how the different degrees of relationship strength between the communication partners influences the way that the communicators selectively construct the messages. Tie strength has long been discovered by marketing researchers as a crucial factor that influences consumers WOM behaviors. Many studies have evidenced the *quantitative* differences between the information transmitted to strong ties and to weak ties (e.g., Frenzen and Nakamoto 1993; Ryu and Feick 2007). Different from those studies, the focus of this research is whether there are *qualitative* differences among the messages given to different social ties. Specifically, using evaluatively complex product knowledge, this research investigates the following questions: When evaluatively positive, negative and ambiguous

product information co-exist in the memory, does the fact that the product information is being communicated to a best friend or to a stranger influence the proportions of pros and cons of the product information expressed in the messages? In addition, how is ambiguous information interpreted and communicated by the communicator to different audiences?

I analyze the influences of tie strength from both a motivational account and a social cognitive account. From a motivational perspective, I argue that in general, consumers are more willing to share product information with strong ties (e.g., Frenzen and Nakamoto 1993), and more importantly, because negative information is generally perceived as more diagnostic and useful than positive information (Mizerski 1982), they are more likely to share it with strong ties (i.e., communal relationship partners) than with a weak tie audience (i.e., exchange relationship partners). As to positive product information, since it is more likely to be used to project a cooperative and positive self-image (Folkes and Sears 1977), people would find more reasons to use it to communicate with weak ties than to strong ties. Taken together, these motivational forces, as theorized by the relationship norm theory (Clark and Mill 1979, 1993), will differentiate the interaction values of positive or negative product information in different social situations and consequently make the communicators selectively communicate different aspects of the knowledge to the audiences of various social relations. The same analysis of the interaction value differentiation can be extended to evaluatively ambiguous product knowledge. In this research I conceptualize ambiguity as the co-existence of both positive and negative attribute information about an individual product. When having ambiguous product knowledge, I argue, consumers should be more likely to share it with a strong tie than with a

weak tie; they should also be more likely to emphasize the potential negative implications of the ambiguous information to a strong tie than weak tie.

The hypotheses developed above can be also drawn from a social cognitive perspective. Based on the construal level theory (Trope and Liberman 2003), I argue that relationship strength may affect the communicator's perception of the needs of the audience by differentially influencing the salience of gain or loss considerations for the audience. The audience's potential gains become more salient as relationship strength decreases, while the audience's potential losses become more salient as relationship strength increases. Therefore, the communicator should be more likely to tailor the message in order to show weak ties how they could benefit from the target product, whereas the communicator should be more likely to adapt the message to show strong ties how they could avoid the potential losses from using target product. In other words, because of the different gain or loss concerns for different audiences, the communicator will selectively emphasize the different aspects of the product information in the message production process.

Combining these two accounts, I hypothesize that, other things being equal, when engaging in WOM communications of product information, the communicator should describe more negative features of the product to strong social ties than to weak social ties. Conversely, the communicator should describe more of the positive features of the product to strong ties than to weak ties. For ambiguous product information, the communicator should be more likely to mention it to a strong tie audience than to a weak tie audience and also be more likely to interpret its negative implications to a strong tie. As a consequence of this selective message

construction, the communicator's post-communication product evaluations would be affected by the evaluative implications of the communicated message. Specifically, I predict that, after communicating more negative product information to a strong tie audience, the communicator should have a negative product attitude change; whereas after communicating more positive product information to a weak tie audience, the communicator should have a positive product attitude change.

## Method

I tested the research hypotheses in a series of four studies. The first study is used to test the baseline proposition that when other things being equal, messages communicated to weak ties should contain more discussions of the positive aspects of the communication topic, while messages given to strong ties should contain more discussions of negative aspects of the topic. This study was adapted from Eyal et al. (2004) and obtained similar results. In the study undergraduate students were instructed to advise different communication partners (imagined best friend vs. casual acquaintance) on some suggested behaviors by listing their arguments in favor of or against it. Results showed that participants did give more pro arguments to casual acquaintances than to best friends, whereas more con arguments to best friends than to casual acquaintances.

In order to confirm the selective communication process in a controlled, memory-based consumer context, Study 2 was conducted in conjunction with Study 1. Participants first learned positive and negative product attribute information of a home security alarm system before they started Study 1. Later, as an embedded task in Study 1, students were asked to give advice on the stimulus product either to a best friend or a casual acquaintance. Results from this memory-based study showed that when both positive and negative product information were available in memory, participants mentioned more positive attributes to casual acquaintances than to best friends; conversely, they mentioned more negative attributes to best friends than to casual acquaintances.

In Study 3, the main study of this research, I employed a supraliminal relationship priming procedure (Fitzsimons and Bargh 2003) to buttress my argument that it is indeed the relationship norms activated by the audience that guide the communicators' selective message construction. Many studies have shown that goals or motivations, as cognitive mental representations, can be implicitly triggered by situational features and guide subsequent behaviors (e.g., Chartrand and Bargh 1996). Based on this logic, in the first part of Study 3, I primed research participants with different social relationship partners and then asked them, in an ostensibly unrelated task, to freely communicate product information they had just learned to a relation-ambiguous audience. Similar to the findings from Study 2, the same pattern of selective communications of positive or negative information was found. More importantly, by adding ambiguous information to the product information set, this study provided additional evidence of the communicators' asymmetrical information selection behaviors: Participants were more likely to negatively interpret ambiguous information to a strong tie

audience than to a weak tie audience. These results clearly demonstrated that the mere psychological presence of relationship partners can activate interpersonal goals and that these goals (communal vs. exchange, in this case) can then operate to guide people's behaviors, such as the selective interpersonal communications.

The other purpose of Study 3 is to test whether the selective communication of product knowledge would affect the communicator's post-communication evaluations of the product. Twenty-four hours after the participants completed the communication part of Study 3, they filled out an online survey, which was used to retest their product attitudes. Results showed that, after the communication, participants' product attitudes changed significantly and more importantly, those in the strong tie condition showed significantly decreased evaluations of the product, which could be attributed to the fact that these participants, in the communication stage, communicated significantly more negative product information to an unknown audience and this selective rehearsal affected their subsequent judgments of the product.

Study 4 attempts to disentangle two different theoretical explanations (selective reporting vs. selective retrieval) for the communicator's selective communications of positive or negative product information to different audiences, a phenomenon that has been demonstrated both in the Study 2 and 3. In this study participants completed the same learning and relationship priming procedures as in Study 3. Then they were instructed to imagine communicating the stimulus product information to an ambiguous audience. Next they completed an unexpected computer-based reaction time test to identify the correct product attributes they had seen in the product information booklet. Participants' response times to the positive, negative and

ambiguous attributes across two audience groups were compared and results did not reveal any significant effects. No findings of reaction time differences could render support to the selective reporting mechanism: The communicators first think through all the available information in the memory, thus making them equally ready to be retrieved. Then during the communication process, the communicator will evaluate all the accessible information for its applicability for communication. As the conversation goes on, the communication goals and situations might change and the communicator might have to give out more or new information. Thus it seems more functional and parsimonious for the communicator to keep all information accessible during the communication process.

#### Future Research

Results from this research demonstrated that consumer WOM communication of product information is not a literal transmission of stored knowledge from the communicator to the recipient. Rather, the content of the WOM message depends on the communication contexts; it is co-constructed by all the participants in the communication process and by the communication situations as well. Therefore, it should be a fruitful endeavor in the advance of WOM literature if researchers adopt a broader, social co-construction view of the WOM behaviors and set out to identify the antecedents and consequences of this complex process. For example, two possible directions for future research are eminent: (1) researchers can continue to identify new, domain-specific variables that could induce consumers' message

modification behaviors, such as brand relationship, or product involvement, etc; (2) as I will discuss in more detail in Study 3, results from that study seemed to suggest that the interpersonal relationship between the communicator and the audience can not only affect the content of the communication messages, it may also moderate the influence of communication on the communicators. In other word, relationship strength is not only a mediating force that regulates the communicator's message production; it also determines how much impact the communicated message can have on the communicator. If this speculation is tenable, what is the underlying mechanism that makes people discount or argument the audience effect? More research is needed to explore this intriguing idea.

In the following chapters I begin my conceptual analysis with a cursory review of the WOM literature and its limitations, from which the research questions of this project are originated. I then proceed with a survey of evidence that underlies my propositions that (1) message modification is a common and necessary process in social interactions and (2) this selective process has a significant cognitive impact on the communicator. Next I provide a detailed description of a series of four studies and their respective results and greater efforts will be spent in the discussions of Study 3, the center piece of this project. At the end, the limitations and managerial implications of this research will be duly discussed.

## **CHAPTER 2**

### **RESEARCH QUESTION**

#### Literature Review

In this chapter I first provide a brief review of the WOM research and then discuss the research questions of the current project. This chapter is not meant to be a comprehensive literature review; instead, it is designed to highlight the conceptual and methodological limitations of the existing research in this diverse area, with the purpose of accentuating the theoretical importance and potential contributions of this project. For reviews, see Buttle (1998) or Carl (2006).

It can be tricky to define consumer word-of-mouth (WOM) behaviors. In the broadest sense, consumer WOM communications refer to the process of information transfer from one individual to another either in person or via some communication medium. Originally, WOM was defined by early research as the face-to-face communication between consumers (Arndt 1967); later it was expanded to group phenomenon: “an exchange of comments, thoughts, and ideas among two or more individuals” (Bone 1992, p. 579). The advance of information technology has elevated the prevalence of WOM to a new level. WOM is no longer an interpersonal phenomenon; it can be electronically mediated, such as internet chat rooms, e-mails, online reviews, blogs, etc. More importantly, since more and more companies offer incentives for consumers to spread WOM information, WOM seems to have deviated from its

original conceptualization as a communication between people who are perceived to having no connection to a marketing source. To serve the purpose of the current research, I employ the traditional definition of WOM, which refers to the interpersonal, face-to-face communications among consumers about a product, a service, a brand, or an organization and none of the communication parties represent a marketing source (Bone 1992).

Consumer WOM has long been recognized as an effective and powerful weapon to disseminate marketing information (e.g., Frenzen and Nakamoto 1993) and more importantly, to influence consumers' judgments and choices (e.g., Herr, Kardes and Kim 1991). Much of the WOM research in marketing and consumer behavior has been focused on the antecedents and consequences of the WOM communications. For example, studies investigating the antecedents of WOM typically focus on the effects of consumers' satisfaction and dissatisfaction with previous consumption experiences on the likelihood of WOM behaviors (Richins 1983; Swan and Oliver 1989). In other studies, researchers have also examined the influence of the WOM communicator's individual characteristics on WOM, such as opinion leadership (King and Summers 1970) or market mavenism (Feick and Price 1983). A large amount of research has also focused on the structure of social networks through which WOM is transferred (e.g., Brown and Reingen 1987; Frenzen and Nakamoto 1993).

The consequences of WOM communications on the WOM recipients have also been well established. WOM is usually perceived as more credible (Murray 1991) and diagnostic (Herr, Kardes and Kim 1991) and it has both short-term and long-term impact on consumers' product judgments and choices (Bone 1995). For example, in a field study to examine WOM's impact,

Burzynski and Bayer (1977) exposed moviegoers to either positive or negative WOM prior to viewing the movie through overheard conversations. Those exposed to positive WOM evaluated the movie more positively than those exposed to negative WOM. In a similar study, Herr, Kardes, and Kim (1991) found that face-to-face WOM information was more persuasive than identical, but printed information. According to Liu (2007, p.74), a McKinsey & Company study found that 67% of the sales of consumer goods are based on WOM (Taylor 2003).

Although we have known a great deal about the influences of WOM, almost all the research attention was centered on the WOM information recipients: Researchers have focused exclusively on why and how WOM can affect the WOM recipients' judgments and choices; for a dyadic social interaction like consumer WOM, surprisingly very little is known about the consequences of WOM on the message speakers (i.e., the WOM communicators). In addition, most of the WOM theories and methodologies in marketing are based on the information transmission or exchange paradigm adopted from economics and sociology; few studies have examined the WOM behaviors from a person-situation perspective. To elaborate on this proposition, in the next section, I discuss two important issues in WOM research that remain largely unnoticed.

## Uncharted Territories in WOM Research

The first issue is concerned with the contents of the WOM messages. Traditionally, the construct of WOM information is conceptualized as a piece of market information or a simple, evaluative summary of a product, a service or a consumption experience. For example, it could be a positive product experience (Brown, et al. 2005), or a service referral (Ryu and Feick 2007), or sales discount information (Frenzen and Nakamoto 1993). This conceptualization affords the researchers a simple and effective way to explore the WOM information flow in a social network and to experimentally investigate the WOM behaviors by employing a stimulus-based approach. For instance, Frenzen and Nakamoto (1993, Experiment 1 and 2) studied the flow of marketing information by asking their participants to report the likelihood that they would transmit sales discount information to different social relations. Ryu and Feick (2007) investigated the impact of monetary incentives on their participants' referral likelihood of a brand to other people. In general, these studies usually employ stimulus-based experiments to measure participants' self-reported likelihood of WOM behaviors.

Treating WOM information as a piece of a simple, evaluative summary is based on the assumption that, except for some factual knowledge like sale discounts, WOM information tends to be single-valenced: like or dislike, approve or disapprove, recommend or disparage. Although largely true, there are still arguably many situations in which consumers have mixed (i.e., positive and negative) experiences or ambiguous feelings or information about a product

or brand. In addition, consumers often do not have well-formed judgments of the products they have used until they are asked by others for their opinions. Furthermore, WOM behaviors usually happen after the communicators have acquired the product or service information. Thus, the construction of the communication messages is memory-based and depends on how WOM communicators search, retrieve, and present the information to the audience. Therefore, it is important to investigate how consumers manage to effectively communicate complex consumption experiences or product knowledge to different audiences or under different circumstances. For example, what factors would influence the way that communicators construct the communication messages? Will the communicators tailor their messages to suit different audiences?

These questions are crucial to the advance of the WOM research because the existing, simplified treatment of WOM information has limited viability in guiding future research. Most of the WOM research is either correlational studies or stimulus-based experiments, whose results can only address the quantitative variations in WOM behaviors, such as how likely and under what conditions consumers will engage in WOM communications. Given the malleable and adaptive nature of interpersonal communications, alone with the complexity of consumption experiences, it will be a fruitful endeavor for WOM researchers to go beyond the current single-valenced, transmission approach and start to explore the qualitative differences in consumers' constructions of WOM messages.

The other overlooked, yet more important, topic area in consumer WOM research is the consequences of the WOM communications on the communicators themselves. WOM

Researchers to date have focused almost exclusively on the impact of WOM information on the communication recipient's evaluative judgments and choices. Ample evidence has shown that WOM recipients tend to assign heavy evaluative weights to the WOM messages and, consequently, the recipients' judgments are skewed towards the evaluative tone of the messages. For example, Herr et al. (1991) elegantly demonstrated the power of vivid product communications on the WOM recipients' product evaluations by providing subjects with a brief, face-to-face, all-positive or all-negative product comments before they were asked to make a judgment of the product. Missing from this research stream, however, is whether WOM communications can have the same effect on the communicator. In other words, would it be possible that the WOM communicator's product judgment is also shaped by the WOM communication process itself?

### Research Question

In summary, this research attempts to answer the following questions in the study of consumer WOM communications. First, how consumers construct communication messages for different communication situations and audiences; second, how WOM communications influence the communicators' post-communication product judgments? To answer these questions, I need to first establish a key proposition that is almost completely overlooked by the WOM literature: WOM communicators tend to tailor their messages to suit different communication situations. In the next chapter I will first survey evidence that supports this

proposition. I will then elaborate on the potential cognitive consequences of this message modification process.

## **CHAPTER 3**

### **CONCEPTUAL FRAMEWORK**

#### Selective Message Construction Process

Knowledge is functional; it is structured not to satisfy an elegant logic, but to facilitate daily use (Schank and Abelson 1995, p2). Consumer knowledge serves a unique social function: Consumers often, voluntarily or involuntarily, communicate their consumption knowledge or experiences with other people (i.e., WOM behaviors) for various personal or situational purposes (Gatignon and Robertson 1986). For example, consumers may talk about their product experiences with others in an attempt to reduce post-purchase anxiety or dissonance. In addition, consumers may use symbolic product-related information to achieve impression management goals. Finally, WOM can be a means of expressing concern about others and helping them make better choices. Complex social interactions often force consumers to adapt their narratives of their knowledge or experiences to suit the demands of different audiences or communication contexts. For example, if an employee who is worrying about downsizing knows that her boss likes Mexican foods and a casual conversation brings them to this subject, she is likely to recount her experiences of Mexican foods or restaurants in a relatively favorable light. After all, from a human communication perspective, it is redundant and impolite to provide more information than the audience needs (Grice 1975).

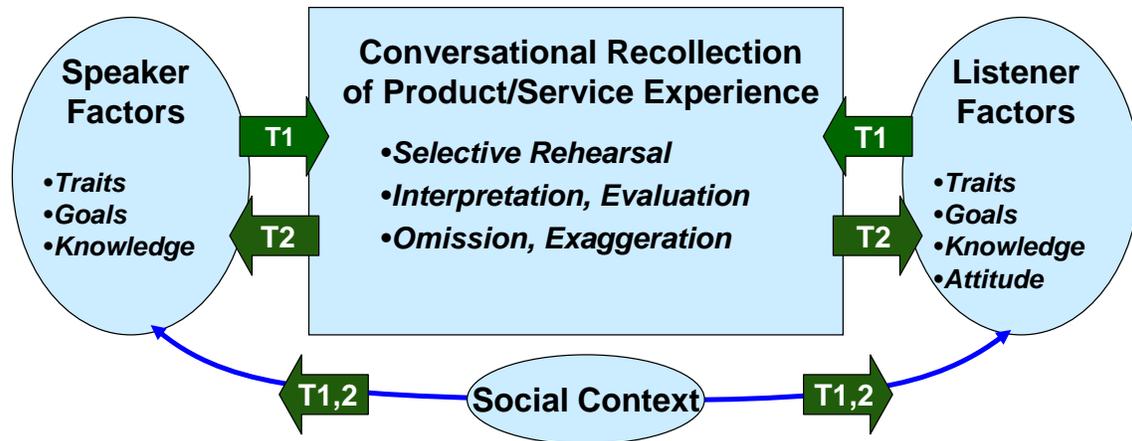
Evidence for the idea that communication is a joint product of the communicator and the audience is apparent in Higgins' (1981, 1992) communication game theory. This stream of research demonstrates that successful interpersonal communications require the communicators take into account the audiences' and their own characteristics. As a result, communicators tailor their messages of the communication target to suit their audience's knowledge of or attitudes towards the target; a phenomenon referred to as audience-tuning (Higgins 1992, 1999). For instance, in their seminal study of the audience effect in communication, Higgins and Rholes (1978) asked their participants to describe a target person to an audience on the basis of a short essay that contained evaluatively ambiguous (some positive traits and some negative traits) descriptions of the target. Before producing their messages, participants were informed that their audience either liked or disliked the person. Knowing the audience attitudes toward the target triggered the communicators' message modification: Participants produced more positive descriptions and details of the target in their messages for an audience with a positive (versus negative) target attitude.

Expanding beyond the audience effect, other studies have investigated the roles of the communicator's own characteristics in shaping the construction of communication messages, such as the communicator's communication goals (e.g., Echterhoff 2008), or personality traits (e.g., Higgins and McCann 1984; McCann and Hancock 1983). It has been shown that communicators' different communication goals influence the extent to which they modify their messages to suit the audience. For instance, in Higgins and McCann's (1984) study, participants with high or low authoritarian trait described a stimulus person for an audience of either equal status or higher status than the participants and who purportedly either liked or

disliked the stimulus person. Results showed that high authoritarians were more likely than low authoritarians to distort their person descriptions to suit their audience's attitude when the audience had higher status, whereas both high and low authoritarians tailored their descriptions to suit the audience when the audience had equal status.

A more direct examination of the constructive nature of interpersonal communications comes from the research in storytelling and autobiographic memory. According to this literature, what people tell and how they tell about past events depend on their interactive goals and the audience. Two storytellings can be about the same event, yet describe it very differently. For example, how much is told in storytelling depends on how much the audience needs to know. Speakers retell events in greater details to attentive listeners than to inattentive listeners (Pasupathi, Stallworth and Murdoch 1998). Moreover, not just the quantity but also the quality of a message is affected by the audience. Hyman (1994) found that participants' retellings to a peer contained more evaluations and more links to world knowledge than did retellings to an experimenter. Conversely, retellings to an experimenter included more factual details as well as more of the story structures. In her review of the storytelling literature, Pasupathi (2001) proposed the social coconstruction principle of people's retellings of the past: Any autobiographical recollection in conversation is the product of both the speaker and the context. Qualities of the speaker and listener influence the reconstruction of events in conversation, as does the larger context within which the reconstruction takes place (Pasupathi 2001, p652, Figure 1).

Figure 3.1: Social Co-construction of WOM and its Consequences



Integrating the ideas from the communication game theory and the social co-construction proposition posited by Pasupathi (2001), it is becoming clear that consumer WOM communications, the most ubiquitous form of consumer interpersonal communications, should not be immune to this adaptive message production process. In order to communicate consumption knowledge a sensible and appropriate manner dictated by social norms and situational goals, consumers inevitably has to engage in a selective message construction process. The communicator first needs to search and retrieve relevant information in the memory. Then, he or she needs to evaluate the appropriateness of each piece of information

before speaking it out to the audience. The appropriateness judgment is a function of many individual and situational factors, such as the communicator's goal and personality, the audience's attitudes, the relationship between the communicator and the audience, and etc. For example, when a product experience is mixed with positive and negative feelings, a communicator might choose to emphasize to a coworker the positive side of the experience (i.e., Positive WOM) in order to pose as a savvy consumer, but to stress the negative side of the experience (i.e., Negative WOM) when talking to a close friend in order to prevent him or her from making the same mistake. In addition, the extreme forms of selective information presentation can be often observed when consumers, knowing too well that the audience forms impressions of them based on the products they consume (Belk 1981), tend to misrepresent where they purchased the product, how much they paid for, how they felt about the quality of the product, and so forth. In this research direction, consumers' lying behaviors in interpersonal communications have just begun to attract researchers' attention and fueling this research is the theories of social comparison and interpersonal impression management (Argo, White, and Dahl 2006; Sengupta, Dahl, and Gorn 2002).

If my proposition is tenable that consumers selectively communicate certain aspects of their product knowledge to different audiences in different situations, then, the next question comes to whether such selective process would have cognitive impact on the communicators after the communications happen? For example, would the communicators' product judgments or attitudes be unwillingly changed simply because they purposefully communicated biased accounts of their product knowledge? To answer this question, we need to go no further than the previous two research streams that study the interpersonal communication process.

## Cognitive Consequences of Selective Message Construction

In fact, both of the two aforementioned research streams of interpersonal communications have taken a step further to investigate the cognitive consequences of the selective message construction on the communicators. Specifically, the question is, does audience or context-induced message modification affect the memory or judgments of the communicator after the communication? Not surprisingly, both research streams come to the same, positive answer. The early evidence for memorial consequences of remembering can be seen in Bartlett's classic studies, in which unfamiliar elements of an Indian folktale changed into more familiar ones across subjects' recounting of the stories (Bartlett 1932). Since Bartlett's pioneering work, psychologists have recognized that memory is not a literal reproduction of the past but instead dynamic, fluid, and situation-bound constructions that are influenced by the context in which they are produced. The storytelling literature provides numerous demonstrations of this proposition: Retellings have consequences for how events are later remembered. That is, the perspective or goals taken during retelling affects later ability to remember the original event. For example, Tversky and Marsh (2000) showed that the perspective used in retelling events affects both the amount of original information recalled and the type of errors made in final recall and recognition. In their experiments, participants read a story about two hypothetical new roommates with descriptions of their social, neutral, and annoying activities. In the retelling phase, they were asked to write either a recommendation or complaint letter about one of the roommates. Results showed that participants' letters contained more story details and more elaborations relevant to the purpose of their retellings. In other words, people only

communicate relevant information to others. More importantly, the letter perspectives affected the amount of information later freely recalled: Participants who wrote a letter of complaint about one of two story characters later recalled more negative story details about the discussed character.

Many researchers have reasoned that these memory differences after communications could be attributed to the fact that communicators selectively rehearsed certain aspects of the past events during communications and the rehearsals enhanced the subsequent retrievals of those details, which results in the biased memory for the evidence in a direction consistent with the storytelling. In addition to the rehearsal mechanism, McGregor and Holmes (1999) proposed that, as a consequence of the communications, people developed a heuristic interpretation or a gist of the past events and this heuristic directly biased later recalls and judgments of those events. In their study (McGregor and Holmes 1999, Experiment 1) participants read a vignette about a relationship conflict between two partners that was constructed to present ambiguous evidence balanced to support equivalent blame for each partner. Participants were asked to generate a biased story from the perspective of either partner's lawyer. Two weeks later participants returned to the lab and gave their own impressions of which character was most to blame for the relationship conflict. A storytelling effect was found that participants' blame ratings were biased in the direction of the stories they had told. More importantly, a subset of participants from each lawyer condition was reexposed to unbiased evidence before they made their blame ratings. It turned out that the storytelling effect persisted despite reexposure to the unbiased evidence. McGregor and Holmes (1999) suggested that storytellings influence the

tellers' subsequent judgments by a direct, "gist" effect that does not depend on biased memory for the story details.

Another line of examination of the evaluative consequences of message modification is from the aforementioned communication game theory. In the aforementioned work of Higgins and Rholes (1978) and many similar studies (e.g., Echterhoff, Higgins and Groll 2005), a "saying-is-believing" phenomenon has been long established. As mentioned earlier, in these studies, participants were asked to describe a target person on the basis of evaluatively ambiguous behavior information. Results showed that communicators created evaluatively positive messages for an audience with a positive attitude and evaluatively negative messages for an audience with a negative attitude. More importantly, as a consequence of the message modification, the communicators' subsequent recollections of the original information about the target's behaviors were biased by the evaluative tone of their previous messages. Drawing from the vast empirical evidence, Higgins and his colleagues have reasoned in their articulations of the communication game theory that post-communication cognitive changes occur because the communication process itself contributes to the creation of a shared social reality of the target person between the communicator and the audience; thus, the contents of the communication message become an integral part of the descriptions of the target person, even when the message distorted the original target information, which consequently affects the communicator's subsequent recollections and judgments of the target person.

An important assumption and experimental condition in this line of research is that the target information being communicated has some evaluative ambiguity involved and therefore it is

not likely that the communicator has a strong, clear cut attitude toward the target topic, person, or object based on the original information they have learned. For example, in the Higgins and Rholes (1978) study, subjects were provided with equal number of evaluatively ambiguous, evaluatively positive, and evaluatively negative information of the target person. It is quite clear that even if the communicator had formed an overall evaluation of the target person before communication, his or her attitude certainty on this person would not be particularly high. As pointed out by Higgins and his colleagues, (e.g., Echterhoff et al. 2005), it is the uncertainty of the evaluation of the target that makes the communicator willing to tailor the message in order to reach a shared reality of the target person with the audience (Festinger 1950). Consequently, by virtue of being shared with another person, the message is experienced as reliable or valid, which results in the later biased recall and judgment. The same analysis can be extended to consumer WOM communication situations. A crucial assumption of this research is that the WOM communicators possess both positive and negative product information. In other words, the communicator does not have an extremely positive or negative overall attitude toward the target product and his pre-communication product attitude is somewhat neutral. Although it is still debatable as to why communicators end up believing and remembering what they said rather than what they originally learned about, it is reasonable to hypothesize that in consumer WOM communications, if the communicator selectively communicates certain aspects of product knowledge to the audience, his or her post-WOM product evaluations could be influenced by the communication message itself. In other words, the consumer comes to believe in the product judgment implicated in the message. I conducted a two-step, memory-based product communication experiment to

empirically test this proposition. In the next chapter I will discuss the logic behind the development of my specific research hypotheses and design.

## **CHAPTER 4**

### **HYPOTHESES DEVELOPMENT**

#### Overview

Although many individual or situational factors might affect the communicator's message modification behaviors, in this paper, I choose to focus on the influence of the interpersonal relationship between the communicator and the recipient. Specifically, I investigate how the different degree of relationship strength between the communication partners influences the way that the communicators compose the messages. WOM communication is a form of social interaction and its contents and process depends on the relations between the social interactants. One important relational factor is the strength of the relation. We often provide product information to people of different tie strength, such as family members, friends, colleagues, or even strangers. Tie strength has always been seen as a crucial factor that influences the nature of WOM process. Many WOM studies have evidenced that tie strength between the communicator and the recipient affects the likelihood of the consumer engaging in WOM activity (Frenzen and Nakamoto 1993; Ryu and Feick 2007). The focus of this research is whether there are content differences between messages given to different social partners. In particular, when mixed product knowledge exists in the memory, does the fact that the product information is being offered to a family member or a causal acquaintance influence the proportion of pros and cons of the product information that are brought to the

communicator's mind and offered to the recipient? In addition, how would they communicate evaluatively ambiguous information to different audiences?

In the next section, from both a motivational and social cognitive perspective, I will elaborate on the potential influences of tie strength on the WOM communicators' treatment of multi-valenced product information (i.e., the co-existence of positive, negative and ambiguous attributes). Integrating these two accounts, the following hypotheses are established: First, other things being equal, WOM communicators should describe more negative features of the product to strong social ties than to weak social ties. Conversely, they should describe more of the positive features of the product to weak ties than to strong ties. In addition, communicators should be more likely to mention ambiguous product information to a strong tie audience than to a weak tie audience and also be more likely to interpret ambiguous product information negatively to strong ties than to weak ties. Second, as a consequence of this selective message construction, the communicator's post-communication product evaluations would be affected by the evaluative implications of the communicated message.

### Effects of Relationship Strength

Relationship strength or tie strength is a fundamental property that defines the nature of interpersonal relationships. Tie strength is jointly determined by several factors, such as the frequency of social contact, emotional closeness, mutual trust, and support (Granovetter 1973).

The relationship between family members, close friends, or romantic partners usually displays strong tie strength, while weak tie strength is often observed between co-workers, casual acquaintance, or strangers. In this research I base my analysis of the effects of relationship strength on two different accounts. First, based on a traditional motivational account, relationship strength should affect people's interpersonal interactive behaviors, such as WOM communications, by activating socially or culturally ingrained behavioral norms or by heightening the interactants' personal or situational goals towards the social partners. Therefore, in a communication context, these heightened goals will induce the communicators' selections of what part of information to communicate with the audiences. Second, I argue that the influences of relationship strength can also be explored from a cognitive perspective. Based on the construal level theory (see review, Trope and Liberman 2003), relationship strength should affect people's cognitions of social information related to the relationship partners. That is, the different social distances associated with the relationship partners should change people's perceptions of the values of interactive information and consequently result in people's selective communications of difference information for different audiences.

### A Motivational Account

Communications are used strategically to accomplish goals that are often beyond simply describing something. Research has consistently shown that relationship strength greatly

influences the likelihood of information transmission. For example, consumers are more likely to refer a brand to a strong tie than to a weak tie (e.g., Brown and Reingen 1987; Ryu and Feick 2007). Consumers are also more likely to give out valuable market information to a strong tie than to a weak tie (Frenzen and Nakamoto 1993). From a motivational perspective, these findings can be explained by the relationship norms framework proposed by Clark and Mill (1979, 1993). According to the relationship norms theory, two types of behavior norms or rules should govern the giving and receiving of benefits (e.g., information) between different relationship partners: communal relationship norms and exchange relationship norms. With strong ties, people tend to have communal relationships in which they genuinely care about their partners' well-being. They try to satisfy partners' needs but do not expect reciprocal returns. Conversely, with weak ties, people tend to have exchange relationships in which benefits are given with the expectation of receiving a comparable benefit in return. In other words, communal relationships are other-centered and emphasize caring and giving, while exchange relationships are self-centered and emphasize reciprocity and balance. Therefore, because WOM messages usually contain some information that the recipients could potentially benefit from, in general, the communicators should be more likely to share them with strong social relations than weak relations. In fact, this is the consensus findings in the existing WOM research. For example, using moral hazard to represent the informational values of WOM information, Frenzen and Nakamoto (1993) has found that people are more likely to share the valuable market information with strong ties. In the current research the question is how we can use the relationship norms analysis to understand the influence of tie strength on how the WOM communicators perceive positive and negative product information and selectively compose the WOM messages.

## Value of Negative Product Information

I argue for two reasons that WOM communicators should perceive negative product information as more valuable than positive information. First, research has generally found that negative information carries more weight than positive information in many information processing situations. Empirical evidence abounds of this negativity effect. Take a few examples. The impression formation literature shows that an actor's negative attributes have an inordinate influence on observers' judgments of their personality characteristics (e.g., Fiske 1980; Skowronski and Carlston 1987). Persuasion research generally supports the idea that negatively-framed messages have more persuasive power than positively-framed messages (Shiv, Edell and Payne 2004). Consumers weight negative information more heavily in product judgment and choice than positive information (Folkes and Kamins 1999; Herr et al. 1991). Baumeister, et al. (2001) even concluded in their comprehensive review of this literature that bad is stronger than good and negatively valenced events have a greater impact on the individual than positively valenced events. Second, the superior value of negative product information also lies in the fact that it can potentially prevent the message recipients from losses or disappointment caused by product or service failure. Given human being's loss-averse nature (Kahneman and Tversky 1979), negative product information should be perceived as more important and valuable to the recipients than positive information. Hence, given the prevalence of negativity biases and the specific informational characteristics of negative production information, it is reasonable to assume that the WOM communicators will

perceive the negative product information that they possess as having greater informational value to the communicative audience than the positive information.

Therefore, consistent with the relationship norms theory, I expect that, when communicating with strong ties, the communicators should be more likely to disclose the negative information in the hope that the information will help the recipients avoid potential losses or dissatisfaction because they are concerned about the recipient's welfare; however, when communicating with weak ties, communicators are more concerned with balanced exchange and their willingness to share the valuable information should be decided by the likelihood of getting back something equivalent in value. Because people are generally not familiar with weak ties, it is not clear how and when the payback will happen. Thus, the communicators should be more likely to withhold the negative product information unless there is an eminent possibility of reciprocity. In addition, another important communicative motivation concern is the impression management related goals, which are more prominent among weak relationships. Many theorists have posited that impression management is guided by selfish and often illicit motives, such as the desire to augment one's own power, enhance one's image, and manipulate others into providing personally satisfying outcomes. People who engage in impression management are concerned with appearance over substance, lack authenticity in their behavior, and are focused on promoting their own interests at the expense of others (Buss and Briggs 1984; Jones and Pittman 1982). Therefore, generally speaking, people should be less motivated to share valuable information (i.e., negative information) with weak ties unless there is a high probability of personal gains from the disclosure of this valuable information.

Of course, exceptions should be noted. That is, when the communicators intend to advance the relationship with weak ties, their behavior will be very likely guided by the communal norms rather than exchange norms, which will make them more likely to disclose negative information. For example, social researchers have argued that intimacy is an essential aspect of the advancement of interpersonal relationships (e.g., Clark and Reis 1988) and intimacy develops primarily through self-disclosure (e.g., Perlman and Fehr 1987). People are more likely to disclose their private knowledge (i.e., factual self-disclosure) to distant others if their communicative goals are to establish or nurture a close relationship with them. In this case, there will be more disclosure of negative information with weak ties. When intimacy is not the goal, self-disclosure is expected to be guided by the aforementioned reciprocity principle.

### Value of Positive Product Information

While the communicators tend to withhold negative information from weak ties, they should be more likely to give out positive information to them. Unlike with strong ties, when people are communicating with weak ties, they should be more concerned with maintaining a positive self-image or “face”. To do so, they need to be polite (Brown and Levinson 1978) and cooperative (Grice 1975). Since positive information conveys a sense of agreement (i.e., politeness) and clarity (i.e., cooperation), they are more likely to be chosen as the responses to be given to weak ties (Folkes and Sears 1977). This kind of impression management concern is less likely to be perceived as important when people are interacting with strong ties simply

because the high familiarity between the two parties. Therefore, there is no reason for people communicating with strong ties to prioritize positive information. In addition, negative product experience could potentially be embarrassing to the communicator when interacting with weak ties due to consumers' own faulty purchase decisions or wrongful usage. Thus, withholding this kind of negative information and stressing the positive ones should happen more frequently among weak social relations.

The same analysis of the interaction value differentiation can be extended to evaluatively ambiguous product knowledge. In this research I define ambiguity as the co-existence of both positive and negative product information. When consumers have evaluatively-mixed product knowledge, I expect, consumers should be more likely to share them with a strong tie than to a weak tie because of the possibility that the information might turn out to be negative in actuality. By the same reason, consumers should be more likely to emphasize the potential negative implications of this ambiguous information to a strong tie than to a weak tie audience.

Integrating the above motivational analysis of the different interpersonal values of positive and negative information, I propose that relationship strength between the WOM communicator and recipient should influence the communicator's interaction goals and consequently makes the communicator selectively communicate different aspects of their product knowledge with their audiences. Moreover, because of the communications, the communicators' post-communication product evaluations would be affected by the overall evaluative tone of the communicated WOM messages. Specifically,

## Research Hypotheses

**H1(a):** When communicating product information to strong ties, the WOM communicators tend to mention more negative (versus positive) product information. In addition, they are more likely to mention evaluatively ambiguous product information and also more likely to interpret ambiguous information negatively rather than positively.

**H1(b):** When communicating product information to weak ties, the communicators are tend to mention more positive (versus negative) product information and less likely to mention evaluatively ambiguous product information.

**H2(a):** After communicating more negative product information to a strong tie audience, the communicator should have a negative product attitude change;

**H2(b):** After communicating more positive product information to a weak tie audience, the communicator should have a positive product attitude change.

## A Social Cognitive Account

The research hypotheses derived from the motivational analysis of interpersonal values of positive and negative information can also be reached by using a social cognitive perspective. Drawing on construal level theory (Trope and Liberman 2003), I argue that relationship strength may affect the communicator's perception of the needs of the audience by differentially influencing the salience of gain or loss considerations. That is, from the communicator's perspective, the audience's potential gains from the product become more salient as relationship strength decreases, whereas the audience's potential losses become more salient as relationship strength increases. In other words, the communicator should be more likely to tailor the message to show to the weak relations how they could benefit from the target product, whereas the communicator should be more likely to adapt the message to show to the strong relations how they could avoid the potential losses from the target product. Therefore, because of the different gain or loss concerns for different audiences, the communicator will selectively retrieve the different aspects of the product information from memory and communicate them to the audience.

## Construal Level Theory

One basic principal in interpersonal communication is that the communicators should take the recipient's characteristics into account in order to convey a meaningful message (Grice 1975; Higgins 1981). Consistent research findings have confirmed that taking the audience's perspective means that communicators should tailor their messages to suit the recipient's characteristics, such as knowledge (Higgins, McCann and Fondacaro 1982) or attitude (Higgins and Rholes 1978). This process has been called as cognitive-tuning or audience-tuning. For example, in Higgins and Rholes (1978)'s study, although participants had the same information about a target person, they created evaluatively positive messages when they believed the audience liked the target person, whereas they created negative messages of the target person for an audience who they believed did not like the target person.

Then, in WOM communications, how will consumers tailor their WOM messages to different consumer audiences? It is difficult to answer this question because unlike in the audience-tuning literature, WOM communicators usually do not know the audience's prior product knowledge or attitude. This means that, in order to make the messages meaningful to the audience, the communicator have to infer, assume, or construe the audience's characteristics during the communication process. For example, what are the recipient's preferences for this kind of products? How would the recipient feel when he/she use the product? What might be the potential consequences, good or bad, if the recipient heeds the advice and make the purchase? All these questions alike cannot be directly experienced by the communicator, but have to be construed by the communicator. Recent advancements of construal level theory (CLT: Trope and Liberman 2003; Trope, Liberman and Wakslak 2007) provide an excellent conceptual framework to understand this role-taking construal process.

In general, CLT articulates how psychological distances influence individuals' mental representations of objects, events or behavior. It proposes that the greater the psychological distance, the more likely are the perceivers to form high-level rather than low-level construals of the objects and events. Specifically, people tend to mentally construe objects that are psychologically proximal in terms of low-level, detailed and contextualized features, whereas at a distance they tend to construe the same objects in terms of high-level, abstract, general and stable features (see Trope, et al. 2007 for review). CLT specifies four dimensions of psychological distance: spatial, temporal, social, and hypotheticality. An object, event or action is "more psychologically distant as it takes place farther into the future, as it occurs in more remote locations, as it is less likely to occur, and as it happens to people less and less like oneself" (Trope et al. 2007, p84). As for the social distance (i.e., relationship strength) dimension, CLT predicts that individuals tend to think of some people as being closer to themselves than others. For example, similar others are more socially proximal than dissimilar others. In-group members are socially closer than out-group members. Strong social ties are usually perceived as more socially proximal than weak ties.

Although much of the existing CLT research has focused on the temporal dimension, there are studies that have empirically tested the effects of social distance on construal levels. For instance, CLT predicted and found that behavior performed by dissimilar others was represented at a higher level of construal than behavior performed by similar others (Liviatan, Trope and Liberman 2006). Stephan (2006) showed that participants who explained a target person's behavior in terms of global, abstract dispositional qualities tended to perceive the

person as more socially distant than did participants who explained the same behavior in terms of concrete situational factors. In a study about interpersonal power relations, Smith and Trope (2006) reasoned that elevated power in social relations increases the psychological distance one feels from others. Hence, people with power should adopt a more distal perspective and this more distal perspective should lead them to process information in a more abstract fashion. A series of studies supported the proposition and found that power priming leads to more abstract thinking and greater breadth of categorization.

Hence, it is reasonable to predict that the social distance created by relationship strength should also make the WOM communicator use different construal levels to mentally represent and consider the recipient's concerns of the target product. For example, how would different construal levels affect the communicator's selection of positive or negative information from memory? A large amount of empirical CLT studies have demonstrated multiple manifestations of high level vs. low-level construals. Among them, the research by Eyal, et al. (2004) is of particular importance to this paper. From a temporal distance perspective, these researchers tested the assumption that arguments in favor of an action (pros) constitute a higher-level of construal of the action than the unfavorable arguments (cons) because cons are subordinate to pros in the sense that when an action is considered, the importance of pros does not depend upon the existence of cons, whereas cons are only important when pros exist. Therefore, if cons are subordinate to pros, then pros should become more salient as temporal distance from the action increases, whereas cons should become less salient as temporal distance from the action increases. Participants in their studies generated arguments in favor and against near future or distant future actions. As predicted, participants generated relatively more pro

arguments and fewer con arguments when the actions were to take place in the more distant future.

Following the logic in Eyal et al's (2004) research, I posit that, since pro arguments (i.e., positive implications) constitute a higher-level of construals than the con arguments (i.e., negative implications), the social distance between the communicator and the recipient should differentially influence the salience of the positive or negative implications of product information to the audience that come to the communicator's mind during the communication process. Furthermore, since positive product implications refer to how the recipients can benefit from using the product and negative product implications refer to how the recipients will lose or suffer if they don't use the product or the product fails to meet the expectations, we can predict that, when taking into account the audience, the WOM communicator should be more likely to consider the audience's potential gains from the product as the interpersonal relationship strength decreases, whereas the considerations of the audience's potential losses become more salient as relationship strength increases. That is to say, the salience of positive or negative product attributes should be different to the communicator, depending on the level of relationship strength with the audience. In other words, it should be easier to recall the positive product attributes for weak ties and negative product attributes for strong ties. This social cognitive analysis has been partially supported by a study conducted from a temporal distance perspective. Herzog, Hansen and Wänke (2007) found that it easier to generate pros if an action pertained to the distant rather than the near future. For cons the effect was reversed: participants found it more difficult to generate cons if the action pertained to the distant rather than the near future.

If the above analysis is tenable, the communicator should be more likely to tailor the message to show the weak relations how they could benefit from the target product, whereas the communicator should be more likely to adapt the message to show the strong relations how they should avoid the potential losses from the target product. Therefore, because of different gain or loss concerns when construing the communication audience, the communicator will selectively retrieve the different aspects of the product information from memory and communicate them to the audience. Thus, we can reach the same hypotheses as has been predicted from the motivation analysis and I will not repeat them here. I tested these hypotheses in a series of four studies and I will describe the experiment procedure and results of these studies in the following chapters.

## CHAPTER 5

### STUDY 1

#### Overview

The purpose of this study is to test the baseline hypothesis of this research: other things being equal, messages communicated to weak ties should contain more discussions of the positive aspects of the communication topic, while messages given to strong ties should contain more discussions of negative aspects of the topic. The overall design of this study is modeled after Eyal et al. (2004). As mentioned earlier, based on the temporal distance effect evidenced in the construal level theory research, they conducted a series of studies and demonstrated that people consider more pros in making decisions for the more distant future and more cons for the near future. For example, in one study (Eyal et al. 2004, Study 2) their participants generated more pro arguments and fewer con arguments regarding an exam procedure when the exam was expected in more distance future.

In the current study, I extend the construal level theory's proposition to the social distance dimension and test whether the communicator's (i.e., the advisor) relationship with the audience (i.e., the advisee) would affect the salience of advice in favor of and against some suggested behaviors. I predicted that the number of cons (versus pros) would be greater in the advice given to strong ties than to weak ties and the number of pros (versus cons) would be greater in the advice given to weak ties than to strong ties.

## Procedure

Forty eight undergraduate business students at Virginia Tech participated in a laboratory experiment for extra course credit, during which they filled out a questionnaire that contained the focal study materials. In the survey, they were instructed to give advice to a best friend or casual acquaintance on some suggested behavior in terms of their arguments in favor of and against the actions.

### Ties Strength Manipulation

There are two kinds of operationalizations of the construct of tie strength. In Clark and Mills' original research of communal and exchange relationship norms, to create motivations for communal relationships, undergraduate research participants were exposed to an attractive target person who was single, new at the university and anxious to meet new people; to create motivations for exchange relationships, participants were exposed to the same attractive target who was married and had been at the university for some years. In the marketing literature, some researchers have adopted a similar, but more subtle, scenario-based manipulation method (e.g., Aggarwal and Zhang 2006). Although this method has been shown to be able to successfully induce different relationship norms, I did not choose to use this method due to logistic concerns and more importantly, I particularly wanted to avoid the potential confounds of impression management concerns.

The other popular treatment of relationship strength comes from the traditional, social exchanged-based analysis of human exchange. According to Granovetter (1973), the relationship between family members or close friends usually displays strong tie strength, while weak tie strength is often observed between co-workers, casual acquaintance, or strangers. Therefore, to manipulate tie strength, researchers usually ask the participants imagine a best friend or a casual acquaintance, someone they interact with from time to time, but someone not close enough to count as a friend, (e.g. Ryu and Feick 2007). In this study, I adopt this method of tie strength manipulation. Participants were randomly assigned to one of two tie strength conditions: best friend, and casual acquaintance. They completed a paper-and-pencil questionnaire that asked them to take a moment to bring to mind either one casual acquaintance that they had met in class in the current semester or one of their best friends at Virginia Tech. They were also asked to provide the first name of the person they imagined, if they know. No manipulation check of tie strength was included in the questions. Consistent with previous studies' manipulation of this construct (e.g., Frenzen and Nakamoto 1993), the best friend condition was designed to represent the strong social relationship and the casual acquaintance condition to represent the weak social relationship.

### Communication Topics

Following the tie strength manipulation, participants were asked to imagine giving advice to a best friend or a casual acquaintance for each of the following four behaviors and their task was to generate arguments in favor of and against them. This method is similar to the one used by Eyal et al. (2004). The four behaviors were (1) travel to Europe in summer, (2) buy a new

laptop, (3) buy used inkjet printer from eBay, (4) stop using cellphone. For example, in the casual acquaintance (best friend) and laptop condition, the instructions on the questionnaire read like the following: “Now, suppose this casual acquaintance (best friend) asks you the following question: ‘Hey, I have been thinking of getting a new, top-of-the-line laptop. What do you think?’ Please list all your arguments in favor of or against this person’s suggested action.” Each behavior was presented on a separate page and the order of the behaviors was counterbalanced across participants. On each page participants were reminded of the identity of the advisee: i.e., best friend or casual acquaintance. A pretest revealed that these four behaviors vary in terms of desirability. Thirty seven students rated the desirability of these four activities on a 9-point scale with 1 as not at all desirable and 9 as extremely desirable. A repeated measures ANOVA on the desirability measure of the four behaviors yielded a main effect:  $F(3, 35) = 15.02, p < .01$ . The magnitudes of desirability were consistent with expectations: Traveling to Europe in summer ( $M = 7.87$ ) and buying a new laptop ( $M = 7.41$ ) are significantly more favorable than buying used inkjet printer from eBay ( $M = 3.12$ ) and stopping using cellphone ( $M = 1.97$ ). Students’ age and gender were analyzed as covariates and no significant effects were detected.

### Dependent Measure

The number of pro-arguments and counter-arguments in the open-ended responses for each behavior topic was counted. Responses showing the communicators’ supports, approvals or agreements were coded as pros and disagreements, disapprovals, or warnings were coded as cons.

## Results

A 2 X 2 X 4 mixed ANOVA with Argument (pro vs. con) and Topic (laptop, travel, printer, and cell phone) as within-subjects factors and Audience (best friend vs. stranger) as between-subjects factor was performed on the number of arguments. The results yielded a main effect of topic,  $F(3, 138) = 3.92, p < .05$ , partial  $\eta^2 = .08$ , indicating that participants wrote more reasons for some behaviors than for others, and a significant main effect of argument,  $F(1, 46) = 9.52, p < .01$ , partial  $\eta^2 = .17$ , indicating that participants wrote more cons ( $M = 1.54$ ) than pros ( $M = 1.25$ ). These main effects are not of interest to this study.

More relevant, there was a significant interaction between argument and audience,  $F(1, 46) = 21.68, p < .01$ , partial  $\eta^2 = .32$ . Simple effect analysis of audience showed that participants in the best friend condition mentioned marginally fewer pro arguments than the stranger group,  $M_{\text{best friend}} = 1.09$  and  $M_{\text{stranger}} = 1.41, F(1, 46) = 3.30, p < .10$ , partial  $\eta^2 = .07$ ; however, **the best friend participants mentioned significantly more con arguments than those in the stranger group** ( $M_{\text{best friend}} = 1.81$  and  $M_{\text{stranger}} = 1.26; F(1, 46) = 12.49, p < .01$ , partial  $\eta^2 = .21$ ). In other words, across four behavior topics, participants did give more pro arguments to casual acquaintances than to best friends, whereas more con arguments to best friends than to casual acquaintances. H1 (a,b) was supported.

Coupled with the findings from Eyal et al. (2004), this study confirmed my argument that when communicating with strong ties, people are more likely to consider the negative

consequences than positive consequences of the message topic; conversely, when with weak ties, people are more likely to consider positive consequence than negative consequence. This differential treatment of valenced information for different audiences should emerge when it comes to give out product information to others. I will test this argument in the next study.

However, the results from this study also revealed a significant interaction between topic and argument,  $F(3, 138) = 7.16, p < .01$ , partial  $\eta^2 = .14$ , indicating that for some topics, participants wrote more pros than cons, while for some other topics, they wrote more cons than pros. This pattern undermined the power of this experiment: when the participants have polarized attitudes towards the conversation topics, it would be difficult to find the pro/con difference in the messages since either pros or cons might overpower the other part of the arguments. Therefore, for future research, more homogenous, evaluatively ambiguous topics should be employed.

Figure 5.1: Interaction b/w Audience Type and Argument Valence

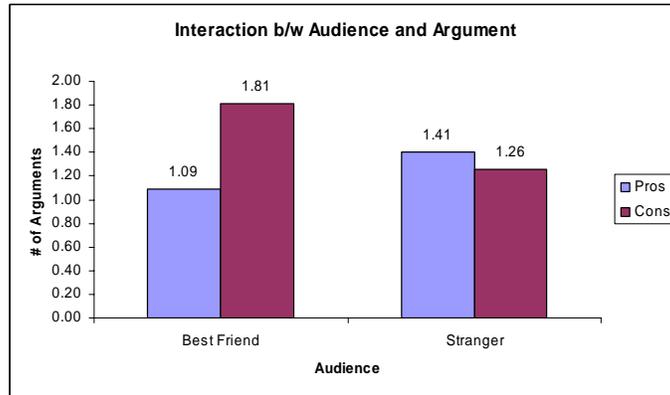


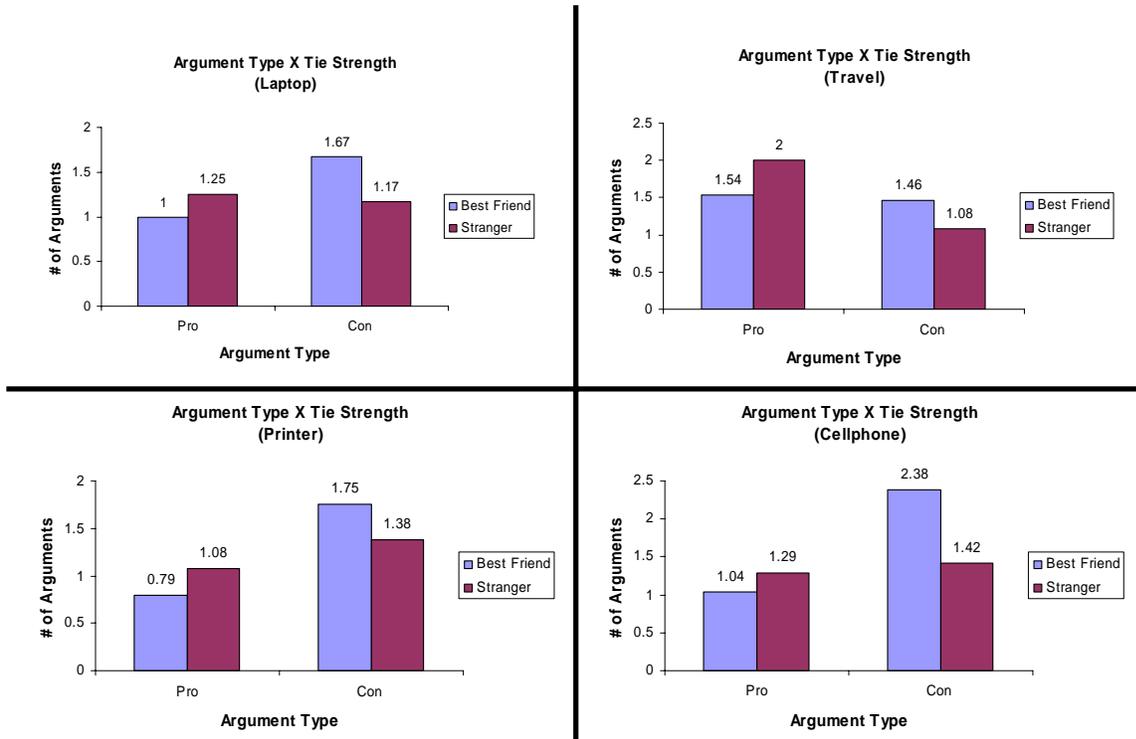
Table 5.1: Source Table for Mixed-Design ANOVA (Study 1)

	SS	df	MS	F	Sig.	partial $\eta^2$
<b>Between-Subjects</b>						
Audience Type	1.39	1	1.39	.78	.38	
Error	81.12	46	7.76			
<b>Within-Subjects</b>						
(1)Topic	6.80	3	2.27	3.92	.01	.08
Topic x Audience	2.10	3	.70	1.21	.31	
Error	79.13	138	.58			
(2)Argument	7.88	1	7.88	9.52	.003	.17
Argument x Audience	17.94	1	17.94	21.68	.000	.32
Error	38.06	46	.83			
(3)Topic x Argument	22.30	3	7.43	7.16	.000	.14
Topic x Argument x Audience	1.03	3	.34	.33	.80	
Error	143.3	138	1.04			

Table 5.2: Mean and Standard Deviation of Arguments in Topic Groups

Audience Type	Pro	Con	Total
Buy a new laptop			
Strong Tie			
M (SD)	1.00 (.93)	1.67 (0.96)	1.33
Weak Tie			
M(SD)	1.25 (.94)	1.17 (1.17)	1.21
Total	1.13 (.94)	1.42 (1.09)	
Travel to Europe in Summer			
Strong Tie			
M (SD)	1.54 (.78)	1.46 (.93)	1.50
Weak Tie			
M(SD)	2.00 (.93)	1.08 (.72)	1.54
Total	1.77 (.88)	1.27 (.84)	
Buy used printer from eBay			
Strong Tie			
M (SD)	0.79 (1.02)	1.75 (1.07)	1.27
Weak Tie			
M(SD)	1.08 (.50)	1.38 (.82)	1.23
Total	0.94 (.81)	1.56 (.97)	
Stop using cell phone			
Strong Tie			
M (SD)	1.04 (1.04)	2.38 (1.01)	1.71
Weak Tie			
M(SD)	1.29 (1.43)	1.42 (.83)	1.35
Total	1.17 (1.24)	1.90 (1.04)	

Figure 5.2: Interaction b/w Topic and Argument



## Limitations

As mentioned earlier, there was a significant interaction between topic and argument.

Therefore, the interaction effect of audience and argument type was separately analyzed on each individual topic. The results were mixed. The interaction was significant in Travel and Cellphone conditions, marginally significant in the laptop condition, and not significant in the Printer condition. Several reasons contributed to these mixed findings. First, the selection of communication topics is not optimal. Based on my reasoning, the hypothesized audience-tuning effect should be most eminent when the topic issue is somewhat ambiguous or neutral in terms of the communicator's evaluative judgment. However, the topics used in the study were in fact either fairly desirable or undesirable to participants. Since participants' prior attitudes were not measured, it was not possible to covary out the attitude effect and this may be the reason for the mixed results from individual topic analysis. Another potential covariate that this study did not address is participants' prior knowledge. It is likely that the communicator's knowledge level and his perception of the audience's knowledge level would influence the product of message. Therefore, in addition to the randomization process, it would be better to measure the communicator's prior knowledge and perceived audience knowledge and include them into a covariation analysis.

The tie strength manipulation is somewhat problematic. Content analysis revealed that in some cases, participants did not elaborate on the pros and cons as they were supposed to, but instead they jumped to make a decision for the imagined best friend. For example, in one case the participant wrote "You went to Europe last summer, why again?" The reason for this kind of

response is that participants perceived different familiarity with the imagined best friend. It might be that the more familiar with the audience, the more likely the communicator would make a decision for the audience rather than giving detailed advice. In this kind of situation, even covariate analysis will not work because participants are very likely to report uniformly high familiarity with their best friends. Although familiarity is an important property of strong ties, it seems that the current manipulation was too strong to some participants. Therefore, improved manipulation of tie strength is needed.

## CHAPTER 6

### STUDY 2

#### Overview

Study 1 confirmed that when communicating with strong ties, people are more likely to consider the negative consequences of the message topic than positive consequences; conversely, when communicating with weak ties, people are more likely to consider positive consequences of the message topic than negative consequence. This differential treatment of valenced information should make people more likely to mention negative product information to strong ties and more positive information to weak ties. The current study is designed to test the hypothesis and more importantly, to provide a stringent memory-based test of the asymmetric retrieval of the product information in a consumer WOM communication situation. Although Study 1 and Eyal et al.'s (2004) studies both demonstrated the differential treatment of valence information, they failed to control the individual differences of the experimental topics, such as prior knowledge or attitudes; a controlled, memory-based, two-step study is needed to rule out those variations.

The design and stimulus materials of this study were modeled after those used by Park and Hastak (1994). Participants first saw ten informational items about a home security alarm product and were asked to comprehend the information and to form an overall evaluation of the product after the last item was shown. Then, after a short delay, students were randomly

assigned to two tie strength conditions and were asked to give advice regarding the home alarm system to a best friend or a casual acquaintance.

### Stimulus Material

A home security alarm product was used and each product information item was concerned with a specific product feature. As reasoned by Park and Hastak(1994), this selection of this product category was that the intrinsic personal relevance of home security alarms for college students is low. Low involvement can minimize the possibility that students would have a strong prior attitude in this particular product category. It also reduces the possibility that participants would prioritize any individual or group of product attribute(s). The target product was described on 10 positive and negative informational items, some of which were adopted from Park and Hastak (1994, study 1). Half of the items described some positive features of the product and half of the items described some negative features of the product. The first item showed was a positive one and was followed by a negative item and so on.

Table 6.1: Attribute Information for the Home Alarm System

1. Its very unique style, disguised as an AM/FM radio, makes the system unobtrusive in any room. (POSITIVE ATTRIBUTE)
2. Installation can be quite time consuming and fairly complex. Improper installation could make the alarm system prone to malfunction. (NEGATIVE ATTRIBUTE)
3. The model has rechargeable back-up battery that is continually charged to full capacity and can keep the alarms working if the power fails or a burglar cuts the power lines. (POSITIVE ATTRIBUTE)
4. Its siren volume is fixed at over 80 decibels, which could scare children or guests, sometimes might be painful to the ears. (NEGATIVE ATTRIBUTE)
5. It has listening device that can be mounted near a smoke detector; when the detector's siren goes off, the security system hears it and trips the alarm. (POSITIVE ATTRIBUTE)
6. Its fixed entry delay (10 seconds) may not allow enough time for you turn the unit off after you enter the room. (NEGATIVE ATTRIBUTE)
7. The system allows you to set up temporary access codes for visitors or babysitters. This feature could be very useful for some households. (POSITIVE ATTRIBUTE)
8. False alarms can be easily set off by innocent things such as dogs or cats because the sensors are too sensitive. (NEGATIVE ATTRIBUTE)
9. It comes with an indoor siren that can be installed and hidden away from the central control, which prevents a burglar from finding and disabling the core of the security system. (POSITIVE ATTRIBUTE)
10. The system does not have an anti-freeze, low-temperature switch which protects the proper function in cold climates. (NEGATIVE ATTRIBUTE)

## Procedure

Forty eight students participated in this study. Upon arrival at the lab, students were told they would participate in two independent studies. The first part of the study used a PowerPoint presentation format. Participants were given a questionnaire to answer questions. On the first couple of slides, participants were told that the study was about how comprehension of product information would be influenced by the way in which the information was worded. They were further instructed that they would see some product review information about a home alarm system and their task was to read the information on the screen and answer the questions on the questionnaire. They then saw the product information projected on a screen. Each piece of information was shown for 20 seconds, during which participants were required to examine the information item and answer two questions on the questionnaire: (1) how easily they could visualize the information; (2) to what extent it is a good/bad review of the product. Participants heard a camera sound when the 20-second time was up and the next slide would be shown. After the ten product information items were shown, the participants were instructed to finish the remaining questions on the questionnaire and remain seated when they were done. The remaining questions consisted of a five-item (good/bad; like/dislike; approve/disapprove; desirable/undesirable; approve/disapprove), nine-point semantic scale which was used to measure participants' attitude toward the target product and there were also some demographic questions (age and gender). The attitude scale was reliable (Cronbach's  $\alpha = .96$ ) and was averaged to form a composite attitude measure.

After the first study, the experimenter collected the questionnaire and distributed another booklet for the second study. The second study was identical to the aforementioned first pilot study and was used as a tie strength manipulation. In short, participants were asked to give advice to a best friend or a casual acquaintance for five suggested behaviors and their task was to generate arguments in favor of and against the behaviors. Four behavior topics were the same as those used in pilot study 1 and they were used as a manipulation to put participants in a WOM mindset with different social partners. On the last page of the booklet, the participants were asked to give advice (i.e., to comment on) on the previous home alarm system to their best friend or a casual acquaintance. For example, in the casual acquaintance condition, the instructions read like the following: “In the first part of today’s study, you saw some product reviews of a wireless home alarm system. Suppose the person you met in class told you that he/she was considering buying a home alarm system and asked for your knowledge about that model you see today. How would you describe this product to that person?” Notice that when students got to the last page of the questionnaire, it would be actually at least ten minutes after they saw the last product information item in the first part of the study. Therefore, the dependent measure was in fact memory-based.

### Dependent Measure

Analysis of the open-ended product advice about the alarm system was conducted to reveal the number of positive and negative items recalled. Recalled items were scored as correct if they conveyed the same idea as the original item regardless of wording. Partial credit was given when subjects recalled just the attribute name without specifying its evaluative content.

## Results

A mixed ANOVA with Attribute Type (pro vs. con) as within-subjects factor and Social Distance (best friend vs. stranger) as a between-subjects factor was performed on the number of arguments. The results only showed a significant interaction between tie strength and attribute type,  $F(1, 46) = 4.26, p < .01, \text{partial } \eta^2 = .09$ , indicating that participants recalled more negative features than positive features in best friend condition ( $M_{\text{positive}} = 1.04$  and  $M_{\text{negative}} = 1.50$ ) and more positive features than negative features in casual acquaintance condition ( $M_{\text{positive}} = 1.46$  and  $M_{\text{negative}} = 1.08$ ).

A one-way ANOVA showed that there was no significant difference between the product attitudes between the best friend group and casual acquaintance group ( $M_{\text{best friend}} = 4.93$  and  $M_{\text{stranger}} = 5.14; F(1,46) = 0.20, \text{NS}$ ). Also, a covariate analysis did not reveal any effect of the communicator's prior product attitude. Therefore, this study demonstrated that when both positive and negative product attributes were available in memory, other things being equal, participants mentioned more positive attributes to casual acquaintances than to best friends. Conversely, participants mentioned more negative attributes to best friends than to casual acquaintances. Again, H1 (a, b) was supported that the communicators selectively communicate valenced product information to different audiences.

Table 6.2: Mean and Standard Deviation of Number of Argument

Dependent Measure	Best Friend	Stranger	Total
Attributes Recalled	1.45 (.97)	1.33 (.97)	
Positive Attributes	1.04 (1.15)	1.46 (1.28)	1.25 (1.22)
Negative Attributes	1.50 (1.10)	1.08 (0.92)	1.29 (1.03)

Figure 6.1: Interaction b/w Audience Type and Attribute Valence

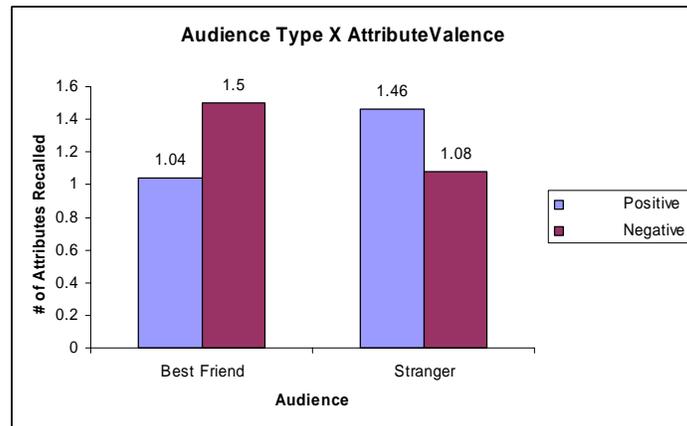


Table 6.3: Source Table for Mixed-Design ANOVA on Attributes Mentioned

	SS	df	MS	F	Sig.	partial $\eta^2$
Between-Subjects						
Audience Type	.00	1	.00	.00	1	
Error	70.71	46				
Within-Subjects						
Attribute Valence	.04	1	.04	.04	.84	
Audience X Valence	4.17	1	4.17	4.26	.045	.09
Error	45.04	46	.98			

## Limitations

The main claims on the cognitive effects of tie strength are built on the assumption that the communicator selectively retrieves different aspects of the product information based on relationship cues (strong vs. weak). That is to say, as I predict, when composing the message, both positive and negative attribute information will be available and the different relationship cues made the communicator selectively retrieve more of the positive or negative aspects of the product. However, another plausible explanation of the asymmetric message tuning is that all the positive and negative information are retrieved by the communicator and the relationship cues cause the communicator to selectively report more of the positive or negative aspects of the product. Both the selective retrieval and selective reporting explanation can lead to the observed findings from the second pilot study. Unfortunately, results from that study can not be used to detect which one is the right mechanism. Therefore, additional study is needed. In Study 4 I conducted a reaction time study to answer this question.

Up to now, I still have not tested the other major research hypothesis of this research: Due to the selective communications of product information, the communicators' post-communication product evaluations were affected by the valence of the WOM messages. In Study 3 I will test this hypothesis and replicate the previous findings by using a supraliminal relationship priming method.

## **CHAPTER 7**

### **STUDY 3**

#### Overview

This study is the center piece of this project. It is a comprehensive study that tested both of the two main hypotheses of this research. The purpose of this study is to investigate consumers' memory-based communications of complex product information and its evaluative consequences on the communicators. At the first stage of the study, in a behavioral lab, participants learned stimulus product information and formed overall impressions of the product. Then, after a short delay, they were randomly assigned to two relationship groups (best friend vs. stranger) by a supraliminal priming procedure embedded at the end of some filler tasks. Afterwards, participants were instructed to communicate their product knowledge to a relationship-ambiguous audience. Twenty-four hours after the completion of the lab study, participants' product attitudes were re-evaluated in a web survey.

#### Procedure

The first stage of this study was conducted in a behavior lab's conference room. In exchange for extra course credit, seventy-five undergraduate students completed this first stage

individually under the instruction of a male experimenter. Upon arrival, they were told that in order to make full use of the 30-minute study session, two unrelated studies were planned: the first one was a product evaluation study and the other was a general survey about college students' self-assessments and social interactions. The experimenter then began the product evaluation study by asking the participants to carefully read a 3-page product information booklet describing a home alarm system and to form an overall impression of the product. When finished reading, participants completed a one-page questionnaire that was used to measure product attitudes and some potential covariates, such as prior product knowledge, gender and age. These variables were found to have no significant impact on this research and will not be discussed further.

After collecting the completed questionnaire, the experimenter said the following: "*The other part of this product evaluation study is about how people talk about this product to others. Later during this session, there will be another person coming in and I will ask you to describe this product to that person. While we are waiting for this person, I will get you started with today's second study.*" At this point, the experimenter handed the participants a survey booklet which was titled as "College Student General Survey" and allegedly concerned with how college students perceive themselves and how they interact with their peers. This task was designed to (1) remove participants' short-term memory by administering several self-assessment scales, which included a 20-item better-than-average measure (Alicke et al 1995), an 18-item self-monitoring scale (Snyder and Gangestad 1986), an 8-item scale measuring consumers' normative susceptibility to interpersonal influence (Bearden, Netemeyer and Teel 1989) and a 5-item market maven scale (Feick and Price 1987); (2) to embed the relationship

priming procedure and its manipulation check measures at the very end of the survey. Notice that all the filler tasks, including the priming questions are somewhat consistent with the alleged theme of the survey. Participants were randomly assigned to one of two priming conditions (best friend vs. stranger), which differed only in terms of which survey booklet they received; the booklet was randomly sorted and the experimenter was unaware of participants' treatment conditions and treated participants identically across conditions.

By the experimenter's rough estimation, participants, on average, spent about ten to fifteen minutes on the filler and priming tasks. Since these tasks require somewhat high cognitive efforts, this amount of delay should remove the impact of the short-term memory on later product recall.

Immediately after participants finished and returned the survey booklet, the experimenter casually took a look at his watch and said the following: "*Well, it looks like that person is late. I don't want to keep you waiting. How about I give you a piece of paper and you can write down whatever you want to tell this person about that home alarm system, anything on top of your mind about that product?*" No participant was opposed to this suggestion and the experimenter casually found a piece of paper and the participants proceeded to write down his/her responses. After writing the responses and before being thanked and dismissed, participants were informed that he/she would need to complete a short web survey about the home alarm system the next day.

About twenty-four hours after the lab experiment, the experimenter sent an email to the participants with a link to an online survey. In the survey, product evaluations were measured again, using the same scale as in the lab experiment. In addition, in an open-end question, participants were asked to recall any product attributes that they can still remember. At the end of the survey, participants were asked about his/her suspicion of the link between the product evaluation study and the college student general survey. Upon receipt of the online survey response, a debrief email was sent to the participants. Fifty-nine participants completed the online survey. Their responses were matched with those obtained from the lab experiment for the final data analysis.

#### Stimulus Product Information Booklet

The product used in this experiment is a fictitious home security alarm system. As reasoned by Park and Hastak (1994), the selection of home alarm system as the stimulus product was because the intrinsic personal relevance of this product category for college students is low. Low involvement can minimize the possibility that students would have strong prior preferences in this particular category or preferences towards any product attribute.

The product information booklet consisted of three pages all disguised as pages printed directly off a well-known online retailer's website, amazon.com. The first page had a product picture, product descriptions, and other generic Amazon website contents. The second and

third page contained product reviews from two customers. Taken together the contents from the three pages, the booklet described four positive product attributes, two negative product attributes, and four evaluatively ambiguous attributes. Specifically, two positive attributes were mentioned in the product description page. Each of the two customer reviews mentioned one positive and one negative distinct attributes, respectively. In addition, each review also contrasted with each other on four overlapping product attributes, thus creating four evaluatively ambiguous attributes. For example, one review complained about the high siren volume and the other praised this feature for its effectiveness. Adding together, each customer review listed three positive and three negative attributes of this product (four overlapping and two distinct). The position of these two reviews in the booklet was counterbalanced to remove the potential order effect.

Table 7.1: Stimulus Product Attributes

<b>Valence</b>	<b>Attribute Information</b>	<b>Position in the Booklet</b>
Positive	Low Monthly Fee	Product Description Page
Positive	Call up to four phone numbers	Product Description Page
Positive	Rechargeable battery	Customer Review Page
Positive	Connected to smoke detector	Customer Review Page
Negative	No indoor siren	Customer Review Page
Negative	No low-temperature switch	Customer Review Page
Ambiguous	Sensitivity	Customer Review Page
Ambiguous	Siren volume	Customer Review Page
Ambiguous	Installation	Customer Review Page
Ambiguous	Entry time	Customer Review Page

## Relationship Priming

### Priming Procedure

The relationship priming procedure followed immediately after a series of filler questions, all of which were disguised as a fictitious “College Student General Survey”. This priming task was similar to the one used by Fitzsimons and Bargh (2003) and was an improved version of the one used in the previous studies. It consisted of a set of questions designed to activate a mental representation either of a best friend or a casual acquaintance. The questionnaire instruction first asked participants to take a moment to bring to mind either a casual acquaintance that they had met in class in the current semester or one of their best friends on campus. They were asked to provide the first name of the person they imagined, if they knew, and to describe the latest conversation with this person. In order to strengthen the priming effect, in the best friend condition, the questionnaire asked two additional questions: (1) “Briefly describe two things that this best friend has done for you that make you think it is worthwhile to have a friend like him/her;” (2) “Describe one situation in more detail in which your best friend did something for you that made you think it is really worthwhile to have a friend like him/her?” In the casual acquaintance condition, the priming question simply asked the participants to describe two situations that they interacted with a stranger.

### Manipulation Checks

Immediately after the priming task, participants answered manipulation check questions, disguised as part of the survey questionnaire and were adopted from Clark et al (1987). This 9-point semantic scale (9 = Definitely Me; 1 = Definitely Not Me) has fourteen items that measure individual differences in communal orientation toward relationship partners. Mills and Clark (1982) suggested there are dispositional or situational differences in people's relationship orientation towards others. Communal orientations increase people's adherence to communal norms that often guide interactive behaviors towards friends, family members, and romantic partners, whereas exchange orientations are often exemplified by balanced, calculated exchanges between strangers or people who do business with one another. Clark et al (1987) developed and tested a scale to measure people's dispositional differences in communal orientation towards relationships. I expect that if the relationship priming procedure in this research is successful in activating participants' mental representation of a best friend, it could temporally heighten participants' self-reported communal orientation, relative to the stranger priming condition. Admittedly, the underlying assumption of using this scale as a manipulation check is that on average, participants in this research would have similar responses to this scale under normal conditions.

As an additional manipulation check measure, total number of words written in the participants' product advice page was also recorded. I hypothesize that higher communal orientation, whether due to situational factors or to a person's chronic disposition, should make the respondents spend more efforts in helping the audiences by giving more product advices to a strong tie than to a weak tie, which should manifest as a greater word counts in the strong tie condition.

Table 7.2: Communal Orientation Scale Items

1. It bothers me when other people neglect my needs.
2. When making a decision, I take other people's needs and feelings into account.
3. I'm not especially sensitive to other people's feelings.
4. I don't consider myself to be a particularly helpful person.
5. I believe people should go out of their way to be helpful.
6. I don't especially enjoy giving others aid.
7. I expect people I know to be responsive to my needs and feelings.
8. I often go out of my way to help another person.
9. I believe it's best not to get involved taking care of other people's personal needs.
10. I'm not the sort of person who often comes to the aid of others.
11. When I have a need, I turn to others I know for help.
12. When people get emotionally upset, I tend to avoid them.
13. People should keep their troubles to themselves.
14. When I have a need that others ignore, I'm hurt.

### Dependent Measures

#### Attribute Mentioned

Participants' open-ended product advice was analyzed and several dependent measures were generated: (1) total number of positive and negative attributes mentioned; (2) how many and which ambiguous attributes were mentioned and the expressed valence of the mentioned

ambiguous attributes. Note that when any of the four ambiguous attributes was mentioned ambiguously, (i.e., both as positive and negative), it would be counted as both positive and negative. For example, if a participant mentioned two ambiguous attributes in total, one positively and the other both positively and negatively, his responses would be recorded as (1) total 3 attributes mentioned; (2) 2 positive, 1 negative in total; (3) none common positive attributes (4) none common negative attributes; (5) 3 ambiguous attributes; (6) 2 positive and 1 negative ambiguous attributes.

### Product Attitudes

Pre/post-communication product attitudes were measured by a 3-item (like/dislike; desirable/undesirable; favorable/unfavorable), 9-point semantic scale. The attitude scale was reliable (Cronbach's alpha = .87 and .88, respectively) and was averaged to form a composite attitude measure.

## Results

### Manipulation Checks

(1) *Communal Orientation in Relationship*. Participants' responses on the communal orientation scale was averaged to form a composite measure (Cronbach's alpha = .78) and then

were subjected to a one-way ANOVA. A significant difference was found between the best friend and stranger conditions ( $M = 6.99$  vs.  $6.52$ ),  $F(1,73) = 6.06$ ,  $p < .05$ , partial  $\eta^2 = .08$ . Participants who were primed with a best friend representation reported a higher communal orientation in relationship than those primed with a stranger representation. Admittedly, the effect size of this difference was small, which could be attributed to that fact that this scale measure might be fairly susceptible to social desirability bias, which would inflate the responses.

Table 7.3: Communal Orientation Scale Result

Audience Type	Mean	s.d.
Stranger	6.52	.92
Best Friend	6.99	.72

Table 7.4: Source Table for One-Way ANOVA on Communal Orientation Scale

	SS	df	MS	F	Sig.	partial $\eta^2$
Between-Subjects						
Audience Type	4.16	1	4.16	6.06	.02	.08
Error	50.18	73	.69			

(2) *Word Count.* There was a directional quantity difference between the total words written for the ambiguous audience by the two groups of participants. Participants primed with a best friend representation wrote more words ( $M = 84$ ) than those primed with a stranger representation ( $M = 68$ ),  $F(1,73) = 3.16$ ,  $p = .08$ .

Table 7.5: Total Number of Words Written

Audience Type	Mean	s.d.
Stranger	68	36.22
Best Friend	84	42.87

Results from the communal orientation scale and the word count confirmed the success of audience relationship manipulation: Participants showed higher temporally communal orientation in relationship and indeed spent more efforts in communicating product information with an imagined best friend audience.

Dependent Measures: Product Attributes Mentioned

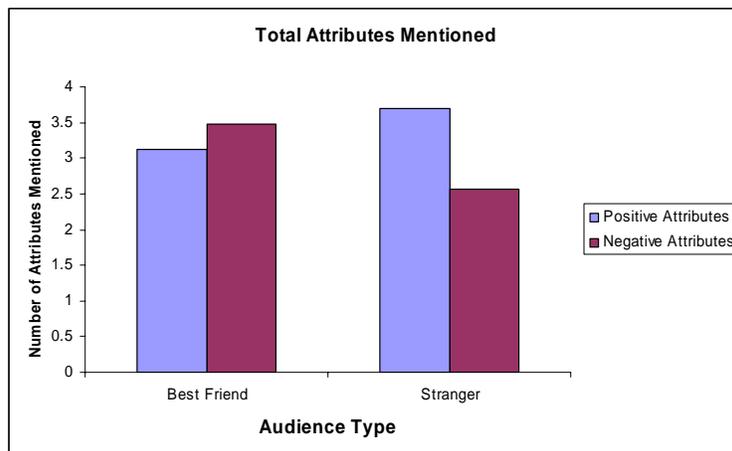
Several measures were generated to compare two audience groups' selectivity between positive and negative attributes and their usage of ambiguous information: (1) Number of positive and negative attributes mentioned; (2) Number and valence of ambiguous attributes mentioned.

(1) *Total Attributes Mentioned.* A 2 x 2 mixed ANOVA with attribute valence (positive vs. negative) as within-subjects factor and audience type (best friend vs. stranger) as between-subjects factor was performed on the total number of attributes mentioned. Cell and marginal means and standard deviations for the 4 cells are in the table below.

Table 7.6: Mean and Standard Deviation of Total Attribute Mentioned

Dependent Measure	Best Friend	Stranger	Total
Total Attributes	6.61 (2.15)	6.27 (2.46)	
Positive Attributes	3.13 (1.53)	3.70 (1.51)	3.41 (1.53)
Negative Attributes	3.47 (1.11)	2.57 (1.50)	3.03 (1.39)

Figure 7.1: Total Attributes Mentioned By Audience Type and Attribute Valence



The results showed a significant interaction between audience type and attribute valence,  $F(1, 73) = 14.87, p < .01$ , partial  $\eta^2 = .17$ . Since a significant interaction effect is present, simple effect analysis was in order. Post hoc simple effect analysis of audience type revealed that the best friend group only described directionally less positive attributes than the stranger group did; there was no statistically significant difference between these two groups on positive attributes mentioned ( $M_{\text{best friend}} = 3.13$  and  $M_{\text{stranger}} = 3.70$ ;  $F(1, 73) = 2.66$ , NS); however, **the best friend group participants mentioned significantly more negative attributes than those in the stranger group did** ( $M_{\text{best friend}} = 3.47$  and  $M_{\text{stranger}} = 2.57$ ;  $F(1, 73) = 8.88, p < .01$ , partial  $\eta^2 = .11$ ). Simple effect analysis of attribute valence showed that **participants in the stranger condition mentioned significantly more positive attributes than negative attributes** ( $M_{\text{positive}} = 3.70$  and  $M_{\text{negative}} = 2.57$ ;  $F(1, 73) = 17.33, p < .01$ ), whereas this difference was only directional in the best friend condition ( $M_{\text{positive}} = 3.13$  and  $M_{\text{negative}} = 3.47$ ;  $F(1, 73) = 1.62$ , NS).

The audience type main effect was not significant: two audience groups mentioned the same number of attributes in total ( $M_{\text{best friend}} = 6.61$  and  $M_{\text{stranger}} = 6.27$ ;  $F(1, 73) = .4$ , NS).

However, the main effect of attribute valence was significant, indicating participants mentioned more positive attributes than negative attributes ( $M_{\text{positive}} = 3.41$  and  $M_{\text{negative}} = 3.03$ ;  $F(1, 73) = 4.28, p < .05$ ). This result could be caused by the fact that there were more positive attributes than negative attributes in the stimulus information and main effects were not of interest in light of the significant interaction.

Taken together, total number of attributes mentioned by the participants confirmed my hypotheses that people would give more negative product information to strong ties and more positive information to weak ties. This trend was qualified by a significant interaction between audience type and attribute valence and is most prominent in the high selectivity of negative information by participants in the strong tie condition. One caveat for this analysis is that there are disproportionately more common positive attributes than negative attributes (4 vs. 2) and any quantitative advantages of positive attributes could be caused by factors other than the audience effect. Therefore, participants' treatment of ambiguous information might shed more light on this question.

Table 7.7: Source Table for Mixed-Design ANOVA on Attributes Mentioned

	SS	df	MS	F	Sig.	partial $\eta^2$
Between-Subjects						
Audience Type	1.05	1	1.05	.40	.531	
Error	194.19	73	2.66			
Within-Subjects						
Attribute Valence	5.89	1	5.89	4.28	.042	.055
Audience X Valence	20.45	1	20.45	14.87	.000	.169
Error	100.44	73	1.38			

Table 7.8: Source Table for Simple Effect Analysis on Attributes Mentioned

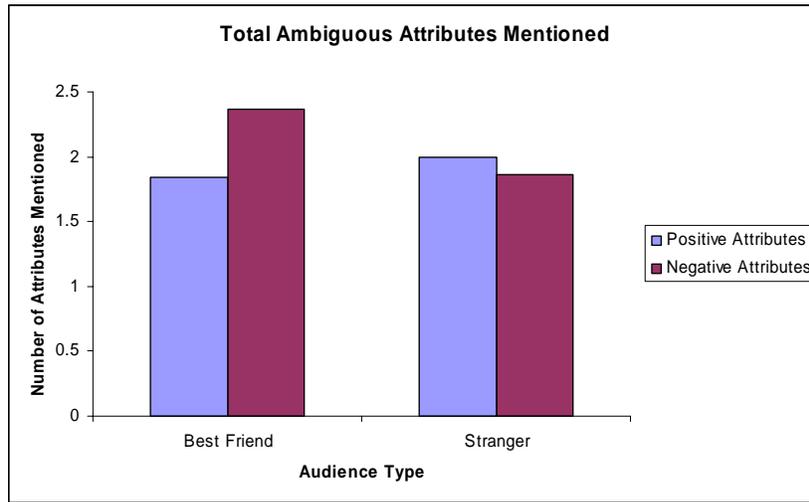
Simple Effect	SS	df	MS	F	Sig.	partial $\eta^2$
Audience Type						
Positive Attributes	6.11	1	6.11	2.66	.107	
Error	168.07	73	2.30			
Negative Attributes	15.39	1	15.39	8.88	.004	.108
Error	126.55	73	1.73			
Attribute Valence						
Best Friend	2.22	1	2.22	1.62	.208	
Stranger	23.84	1	23.84	17.33	.000	
Error	100.44	73	1.38			

(2) *Ambiguous Attributes Mentioned.* A similar 2 x 2 mixed ANOVA was performed on total ambiguous attributes mentioned. Cell and marginal means and standard deviations for the 4 cells are in the table below.

Table 7.9: Mean and Standard Deviation of Ambiguous Attribute Mentioned

Dependent Measure	Best Friend	Stranger	Total
Total Ambiguous Attributes	4.21 (1.56)	3.86 (1.60)	
As Positive Attributes	1.84 (1.13)	2.00 (1.00)	1.92 (1.06)
As Negative Attributes	2.37 (0.97)	1.86 (1.06)	2.12 (1.04)

Figure 7.2: Interaction Between Audience Type and Attribute Valence



Again, a significant interaction between audience type and attribute valence was found,  $F(1, 73) = 4.47, p < .05, \text{partial } \eta^2 = .06$ . Simple effect analysis of audience type revealed the same pattern as appeared in the analysis of the total number of attributes mentioned. That is, the best friend group and the stranger group interpreted equal amount of ambiguous attributes as positive attributes; the best friend group only mentioned directionally fewer positive attributes than the stranger group did in the ambiguous attribute category ( $M_{\text{best friend}} = 1.84$  and  $M_{\text{stranger}} = 2.00; F(1, 73) = .41, \text{NS}$ ); however, **the best friend group was significantly more likely to interpret ambiguous attribute information as negative than the stranger group** ( $M_{\text{best friend}} = 2.37$  and  $M_{\text{stranger}} = 1.87; F(1, 73) = 4.62, p < .05, \text{partial } \eta^2 = .06$ ).

Simple effect analysis of attribute valence showed that participants in the stranger group had equal chances of interpreting ambiguous product information as positive or negative ( $M_{\text{positive}} = 2.0$  and  $M_{\text{negative}} = 1.87; F(1, 73) = .37, \text{NS}$ ), whereas **in the best friend condition**

**participants were significantly more likely to interpret ambiguous product information as negative than positive** ( $M_{\text{positive}} = 1.84$  and  $M_{\text{negative}} = 2.37$ ;  $F(1, 73) = 5.74, p < .05$ ).

Taken together, the differential interpretations of ambiguous product information by the participants in the strong tie condition demonstrated that when communicating with a strong tie audience, people are more willing to emphasize the potential negative implications of ambiguous information, which provided additional support to the main research hypothesis and echoed with the findings on the total number of attributes mentioned.

No main effect was significant: two audience groups mentioned the same number of ambiguous attributes in total ( $M_{\text{best friend}} = 4.21$  and  $M_{\text{stranger}} = 3.86$ ;  $F(1, 73) = .9, \text{NS}$ ); The main effect of attribute valence was also not significant, indicating that ambiguous information was equally likely to be interpreted as positive or negative ( $M_{\text{positive}} = 1.92$  and  $M_{\text{negative}} = 2.12$ ;  $F(1, 73) = 1.57, \text{NS}$ ). Therefore, the fact that best friend group participants showed a higher tendency to go negative on ambiguous information further strengthened the main research hypothesis. H1(a, b) was supported again.

Table 7.10: Mixed-Design ANOVA on Total ambiguous Attributes Mentioned

	SS	df	MS	F	Sig.	partial $\eta^2$
Between-Subjects						
Audience Type	1.12	1	1.12	0.90	.347	
Error	91.32	73	1.12			
Within-Subjects						
Attribute Valence	1.43	1	1.43	1.57	.215	
Audience X Valence	4.10	1	4.10	4.47	.038	.058
Error	66.90	73	.92			

Table 7.11: Simple Effect Analysis on Total ambiguous Attributes Mentioned

Simple Effect	SS	df	MS	F	Sig.	partial $\eta^2$
Audience Type						
Positive Attributes	.47	1	.47	.41	.524	
Error	83.05	73	1.14			
Negative Attributes	4.75	1	4.75	4.62	.035	.059
Error	75.17	73	1.03			
Attribute Valence						
Best Friend	5.26	1	5.26	5.74	.019	
Stranger	.34	1	.34	.37	.546	
Error	66.90	73	.92			

## Post-Communication Attitude Change

### Sample Representativeness

Among the seventy-five students who participated in the lab experiment, fifty-nine of them completed the follow-up web survey; thirty-two from the strong tie group and twenty seven from the weak tie group. In order to test whether these participants ( $n = 59$ ) represented the entire sample ( $n = 75$ ) who took part in the lab experiment, I used the same dependent measures to compare the messages produced by these two groups; similar message construction behaviors should ease the concern for non-response bias in the analysis of post-communication attitude changes.

#### (1) Selective Message Construction

*(a) Total Attributes Mentioned* A 2 x 2 mixed ANOVA with attribute valence (positive vs. negative) as within-subjects factor and respond type (responded vs. non-response) as between-subjects factor was performed on the total number of attributes mentioned. The only significant effect was the attribute valence, the exact same result from previous analysis: participants mentioned more positive attributes than negative attributes ( $M_{\text{positive}} = 3.41$  and  $M_{\text{negative}} = 3.03$ ;  $F(1, 73) = 4.28, p < .05$ ). No respond type main effect and interaction effect were found. Participants who completed the post-communication survey did not differ from those who did not respond to the survey in terms of selecting positive or negative product

attribute information to communicate with others. See the ANOVA source table below for details.

Table 7.12: Mean and Standard Deviation of Total Attribute Mentioned

Dependent Measure	Responded	Non-Response	Total
Positive Attributes	3.34 (1.62)	3.69 (1.20)	3.41 (1.53)
Negative Attributes	3.05 (1.48)	2.94 (1.06)	3.03 (1.39)

Table 7.13: Source Table for Mixed-Design ANOVA on Attributes Mentioned

	SS	df	MS	F	Sig.	partial $\eta^2$
Between-Subjects						
Response Type	.35	1	.35	.13	.719	
Error	194.89	73	2.67			
Within-Subjects						
Attribute Valence	6.78	1	6.78	4.14	.045	.054
Audience X Valence	1.34	1	1.34	.82	.368	
Error	119.55	73	1.64			

*(b) Ambiguous Attributes Mentioned.* A 2 x 2 mixed ANOVA with attribute valence (positive vs. negative) as within-subjects factor and respond type (responded vs. non-respond) as between-subjects factor was performed on the total number of ambiguous attributes mentioned. No significant effect was found. Participants who completed the survey did not differ from those who did not respond to the survey in terms of interpreting ambiguous attribute information and selectively communicate the information to others. See the ANOVA source table below for details.

Table 7.14: Mean and Standard Deviation of Ambiguous Attribute Mentioned

Dependent Measure	Responded	Non-Response	Total
Positive Attributes	1.86 (1.09)	2.13 (.96)	1.92 (1.06)
Negative Attributes	2.15 (1.06)	2 (.97)	2.12 (1.04)

Table 7.15: Source Table for Mixed-Design ANOVA on Ambiguous Attributes Mentioned

	SS	df	MS	F	Sig.
Between-Subjects					
Response Type	.07	1	.07	.06	.81
Error	92.37	73	1.27		
Within-Subjects					
Attribute Valence	.17	1	.17	.17	.677
Audience X Valence	1.07	1	1.07	1.12	.293
Error	69.93	73	.96		

Taken together these two measures of message construction, it is evident that there was no significant message production difference between the responded group and the non-response group. Therefore, we can confirm the sample representativeness of these fifty-nine participants who took part in the post-communication product survey. In addition, note that the pre-communication product attitudes of the fifty-nine respondents in the web survey also did not significantly differ from that of the entire sample ( $M_{59} = 6.38$  vs.  $M_{75} = 6.23$ ;  $t = .94$ ;  $p = .35$ ).

Table 7.16: Source Table for One-Sample t-Test

	t	df	Sig.
Test Value = 6.23	.938	58	.352

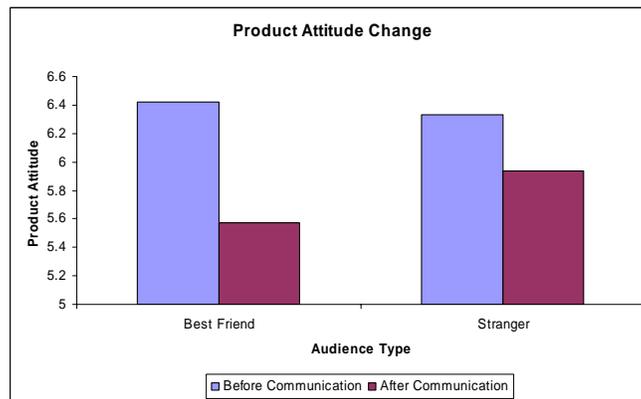
## Measure of Attitude Change

For these participants, their pre and post-communication product attitudes were analyzed by a 2 x 2 mixed ANOVA with attitude type (prior vs. post) as within-subjects factor and audience type as between-subjects factor. As mentioned earlier, product attitudes were measured by a 3-item (like/dislike; desirable/undesirable; favorable/unfavorable), 9-point semantic scale. This scale was reliable (Cronbach's alpha = .87 and .88, respectively) and was averaged to form a composite attitude measure. Cell and marginal means and standard deviations for the 4 cells are in the table below.

Table 7.17: Mean and Standard Deviation of Pre/Post-communication Product Attitudes

Product Attitudes	Best Friend	Stranger	Total
Before Communication	6.42 (1.23)	6.33 (1.22)	6.38 (1.22)
After Communication	5.57 (1.14)	5.94 (1.51)	5.74 (1.32)

Figure 7.3: Product Attitudes Before and After Communication



The attitude type main effect was statistically significant, indicating that across the two audience groups, participants' product attitudes significantly decreased after the lab experiment ( $M_{\text{prior}} = 6.38$  and  $M_{\text{post}} = 5.74$ ;  $F(1, 57) = 18.96$ ,  $p < .01$ , partial  $\eta^2 = .25$ ). The audience main effect was not significant and had no practical meaning to this research.

A marginally significant interaction effect between audience and attitude type was found,  $F(1, 57) = 2.49$ ,  $p = .12$ , partial  $\eta^2 = .04$ . Simple effect analysis of attitude type in two audience groups showed that the **negative attitude change in the best friend group was statistically significant**,  $M_{\text{prior}} = 6.47$  and  $M_{\text{post}} = 5.57$ ;  $F(1, 57) = 19.22$ ,  $p < .01$ ); H2(a) was supported. However, the negative attitude changes in the stranger group was not significant, although directionally consistent with the best friend group, ( $M_{\text{prior}} = 6.33$  and  $M_{\text{post}} = 5.94$ ;  $F(1, 57) = 3.56$ , NS); H2(b) was not supported.

The audience type simple effect was not significant at both stages of attitudes, indicating that these two groups of participants had similar attitudes towards the product before and after the communication experiment. This result indicated that participants' product attitudes were significantly lowered in the best friend condition, which can be only attributed to the fact that these participants mentioned more negative attributes during the communication process, which also at least partially confirmed the second main research hypothesis that communicators' post-communication product attitudes are affected by the messages communicated.

Table 7.18: Source Table for Mixed-Design ANOVA on Product Attitudes

	SS	df	MS	F	Sig.	partial $\eta^2$
Between-Subjects						
Audience Type	.58	1	.58	.22	.642	
Error	151.61	57	2.66			
Within-Subjects						
Attitude Type	11.24	1	11.24	18.96	.000	.25
Audience x Attitude	1.47	1	1.47	2.49	.12	.04
Error	33.78	57				

Table 7.19: Source Table for Simple Effect Analysis on Product Attitudes

Simple Effect	SS	df	MS	F	Sig.
Audience Type					
Pre-Comm. Attitude	.10	1	.10	.07	.796
Error	85.78	57	1.50		
Post-Comm. Attitude	1.95	1	1.95	1.12	.295
Error	99.62	57	1.75		
Attitude Type					
Best Friend	11.39	1	11.39	19.22	.000
Stranger	2.11	1	2.11	3.56	.064
Error	33.78	57	.59		

It is not clear why a significant downward shift in product attitudes also happened to the stranger group, since this group mentioned more positive attributes in their communication messages. To answer this question, I did a content analysis of participants' attribute recall in the web survey. All of the participants mentioned something negative about this product.

(Negative information is clearly more memorable, even some of these were originally ambiguous information.) This finding might explain the overall decrease in product attitudes. It also raised an intriguing question: it seems like even though the participants in the weak tie condition did say more positive things about the product, they might not in fact believe it or take it seriously; they seemed to be able to factor in the weak-tie audience effect in the communication stage. However, for participants in the strong tie audience condition, they seemed not be able to factor out the strong-tie audience effect; they believed in what they said to the audience. If this speculation is indeed tenable, what is the underlying mechanism that makes people discount or augment the audience effect? In other words more research is needed to explore the boundary conditions of the audience effect in cognitive tuning.

In summary, Study 3 provides evidence of communicators' selective message modification and the cognitive tuning effect after the communication. In a two-step experiment I recorded the following key findings. First, when communicating with an audience of best friends, the communicators were more likely to mention negative (versus positive) product attributes and they were more likely to interpret ambiguous attribute information as negative; Conversely, when with casual acquaintances, the communicators were more likely to mention positive (versus negative) product attributes than negative attributes. In addition, communicators' post-communication product evaluations were affected by on the valence of the WOM messages. Specifically, participants in the strong tie audience condition displayed a significant negative attitude change after the communication.

## **CHAPTER 8**

### **STUDY 4**

#### Overview

The purpose of this follow-up study is to disentangle two different theoretical explanations for the communicator's asymmetric retrieval of positive or negative product information for different audiences, a phenomenon that has been demonstrated in the main study. In this study participants completed the same learning and relationship priming procedures as in the main study. Then they were instructed to imagine communicating product information to an ambiguous audience. Afterwards they completed a computer-based reaction time test to identify the correct product attributes they had seen in the product information booklet. The differences in participants' response time to the positive and negative attribute information across two audience groups were analyzed.

#### (1) The Selective Reporting Explanation.

As mentioned in chapter four, because of the motivational forces generated by the situational norms or interactive goals, as predicted by the relationship norm theory (Clark and Mill 1979, 1993), communicators will differentiate the interaction values of positive or negative product information in different social situations and consequently make the communicators selectively communicate different aspects of the knowledge to audiences with various social

relations. That is, the communicators might first scan all the available information in the memory and then evaluate each piece of information for their appropriateness for the specific communicative goals. After that, the communicators selectively report the *appropriate* parts of the information to the audiences. This selective reporting explanation is a more conscious and effortful process and is somewhat related to the systematic approach in the information processing literature.

## (2) The Selective Retrieval Explanation

In chapter four, I also argue that, from a cognitive perspective, the construal level theory provides another explanation of why communicators differentially communicate positive or negative product information to different audience. Based on this theory, the communicator's perception of the needs of the audience could differentially influence the salience of gain or loss considerations of the communicator. For example, the audience's potential gains become more salient as relationship strength decreases, while the audience's potential losses become more salient as relationship strength increases. Therefore, it is possible that the audience or the situational characteristics, such as relationship strength, would automatically make certain aspects of the product knowledge more salient in the minds of the communicator and during the message construction process, the communicator may simply select or retrieve the most salient information to communicate to the audience. This selective retrieval explanation is related to the heuristic approach in information processing literature.

Since the conceptual analysis used in the hypothesis development stage can not differentiate these two explanations, it is theoretically important to tease it out the real underlying process of the manifested selective message construction phenomena. After the participants learned the product information and after the relationship priming task, they were presented with the learned product attributes and asked to make speedy judgments of those attributes as old or new attribute information. Their response time to each learned attribute information was recorded. The underlying assumption is that: if there are significant response time differences between positive and negative attribute information between the audience groups, it will imply that the relative automatic, selective retrieval process is the correct explanation of the message modification, while if no difference was found in the reaction time to the positive or negative information, then it is safe to reject the selective retrieval explanation and accept the alternative, selective reporting explanation: communicators purposefully search and evaluate all the available information in the memory and then selectively report the *appropriate* parts of the information to the audiences.

### Procedure

The first part of this study was identical to the one in the main study. In the same behavior lab room, twenty undergraduate students from the same subject pool completed the entire study individually under the instruction of a male experimenter. Upon arrival, they were told that two unrelated studies were planned: the first one was a product evaluation study and the other

was a general survey about college students' self-assessments and social interactions. The experimenter then began the product evaluation study by asking the participants to carefully read the home alarm system product information booklet and form an overall impression. When finished reading, participants completed a one-page questionnaire that was used to measure product attitudes and some potential covariates.

After collecting the completed questionnaire, the experimenter said the following: "The other part of this product evaluation study is about how people talk about this product to others. Later during this session, there will be another person coming in and I will ask you to describe this product to that person. While we are waiting for this person, I will get you started with today's second study." At this point, the experimenter handed the participants a survey booklet which was titled as "College Student General Survey" and allegedly concerned with how college students perceive themselves and how they interact with their peers. This task was designed to (1) remove participants' short-term memory by administering several self-assessment scales; (2) to embed the relationship priming procedure and its manipulation check measures at the very end of the survey. Participants were randomly assigned to one of two priming conditions (best friend vs. stranger).

After the priming questions, this study started to differ from the main study. Immediately after participants finished and returned the survey booklet, the experimenter casually took a look at his watch and said the following: "Well, it looks like that person is late. I don't want to keep you waiting. Let's do a related study which is also about this home alarm system. Now, I want you take a moment to imagine if someone asks for your advice about this product, what

product information you would like to give to this person, based on what you have learned from the product booklet. Please use thirty seconds to think about it then I will have some questions for you.” After roughly thirty seconds, the experimenter directed the participants’ attention to a laptop on the desk and asked the participants to complete a task allegedly related to the home alarm system. On the screen it says “Welcome to the Product Information Study! On the following screens, you will see several product attributes commonly used to describe home alarm systems. Based on your memory, please indicate whether or not these attributes have been mentioned in the product booklet you have just seen. Press the spacebar to continue.” On the next screen, it says “If you think the feature has been mentioned in the booklet, then hit the Z key. And you think it’s not mentioned, then use the / key. Now, put your index fingers above the Z and / keys, then press any key to begin.”

On the next screens, participants first finished several trials: four new features that were not in the booklet. Then, ten critical attribute names were individually shown in the center of the screen and response times were recorded. These attributes were exactly the one described in the booklet: four common positive, two common negative, and four ambiguous. The sequences of the ten attributes were randomized and this reaction time study took less than two minutes to finish and after that, the participants were thanked and dismissed. One day later, a debrief email were sent to the participants.

## Results

Participants' reaction times were averaged to produce three composite measures for the positive, negative and ambiguous attributes. A 2 x 3 mixed ANOVA with attribute valence (positive vs. negative vs. ambiguous) as within-subjects factor and audience type (best friend vs. stranger) as a between-subjects factor was performed on the log transformed reaction time. Results showed no significant effects at all.

Table 8.1: Log-Transformed Mean and Standard Deviation of Response Time (Mille-second)

Product Attitudes	Best Friend	Stranger	Total
Positive	3.072 (.114)	3.14 (.121)	3.113 (.12)
Negative	3.024 (.135)	3.15 (.102)	3.099(.13)
Ambiguous	3.106 (.179)	3.046 (.095)	3.07 (.134)

Table 8.2: Source Table for Mixed-Design ANOVA on Response Time

	SS	df	MS	F	Sig.
<b>Between-Subjects</b>					
Audience Type	.03	1	.03	1.50	.237
Error	.35	18	.02		
<b>Within-Subjects</b>					
Attribute Valence	.01	2	.00	.34	.713
Valence X Audience	.09	2	.04	3.34	.47
Error	.47	36	.01		

In addition, a one-way ANOVA was performed on the number of incorrect responses for the two audience groups (for those attributes that participants thought not described in the booklet) and still no significant differences were found,  $M_{\text{best friend}} = 3.25$  and  $M_{\text{stranger}} = 3.5$ ;  $F(1, 18) = .15$ , NS).

Table 8.3: Mean and Standard Deviation of Incorrect Response

	Best Friend	Stranger	Total
Incorrect Response	3.25 (1.39)	3.5 (1.44)	3.40 (1.39)

Table 8.4: Source Table for One-way ANOVA on Incorrect Response

	SS	df	MS	F	Sig.
Between-Subjects					
Audience Type	.3	1	.3	.148	.705
Error	36.5	18	2.02		

These results did not provide evidence to support the selective retrieval mechanism, since no single group of attributes was found to be more accessible than others across different audience conditions. Therefore, it might be the selective reporting mechanism that is at work. That is, the communicators first think through all the available information in the memory and thus making them ready to be retrieved. During the communication process, the communicator will evaluate the accessible information in conjunction with the communicative needs for its appropriateness for any specific and evolving situational goals. After that, the communicators selectively report the appropriate parts of the information to the audiences. As the

conversation goes on, the goal might change and then the communicator might have to give out more or new information. This seems to be a more functional and parsimonious approach in social communications than the selective retrieval mechanism. However, due to the small sample size of this research and the non-significant results, any conclusion at this stage is still premature. In addition, the insignificant results did not show enough statistical power (.45), comparing to the conventional standard (.80). Therefore, more studies are needed to confirm the validity of the tentative selective reporting explanations of communication message modification.

## **CHAPTER 9**

### **CONCLUSION AND DISCUSSION**

#### Summary

In this research I propose that in consumers' WOM communications of product knowledge or consumption experiences, the communicators' message construction process is a selective process. That is, communicators selectively communicate certain aspects of their product knowledge to suit different audiences or situations. Consequently, their post-communication recollections of the product knowledge are realigned with the contents of the communicated messages. In other words, the communicators fail to factor in the causes of their message modifications and become to believe in the evaluative connotations of the communicated messages.

In a series of four studies, I tested and found support for the following hypotheses. First, when other things being equal, WOM communicators tend to describe more negative features of the product to strong social ties than to weak social ties. Conversely, they tend to describe more of the positive features of the product to strong ties than to weak ties. As for ambiguous product information, communicators are more likely to interpret its negative implications to a strong tie. Second, as a consequence of this selective message construction, the communicator's post-communication product evaluations would be affected by the evaluative implications of the

communicated message. Specifically, this research has shown that after communicating more negative product information to a strong tie audience, the communicator had a significant negative product attitude change toward the target product.

### Future Research

This research demonstrates that consumer WOM communication of product information is not a literal transmission of stored knowledge from the communicator to the recipient. Rather, the content of the WOM message depends on the communication contexts; as proposed by Pasupathi (2001), it is co-constructed by all the participants in the communication process and by the communication situations as well. Therefore, it should be a fruitful endeavor in the advance of WOM literature if researchers adopt a broader, social co-construction view of the WOM behaviors and set out to identify the antecedents and consequences of this complex process. For example, one research direction is imminent: Researchers can continue to identify new, domain-specific variables that could induce consumers' message modification behaviors, such as brand relationship, or product involvement, etc. For example, researchers have long evinced that consumers form personal relationship with the products they use (Fournier 1998). From a social distance perspective, I suspect that because consumers see some products closer to themselves while some other products distant, they might be less likely to share with others information about closely-related products, while more likely to communicate distant product information to others. In other words, we can extend this current research by looking into the

interplay between brand relationship and interpersonal relationship and its joint effect on WOM communications.

In addition, results from Study 3 seemed to suggest that interpersonal relationship between the communicator and the audience can not only change the communication messages, it could also moderate the influences of communication on the communicators. In other word, relationship strength is not only a mediating force that regulates the communicator's message production; it also determines how much impact the communicated message can have on the communicator. If this speculation is tenable, what is the underlying mechanism that makes people discount or argument the audience effect? More research is needed to explore the boundary conditions in the communication process.

### Contributions

The intended contribution of this research to the WOM literature is twofold. First, by priming a common relationship variable to demonstrate the variability and consequences of consumers' communication of complex product information, this paper attempts to raise researchers' attention to the social co-construction nature of consumer WOM behaviors. It should be a fruitful endeavor in the advance of WOM research if we adopt a broader, social co-construction view of the WOM behaviors and start to identify the antecedents and consequences of this complex process. Second, as an addition to the WOM research

methodology, this research introduces a new memory-based experimental paradigm that could be used to systematically investigate the process of WOM communications and its cognitive consequences.

From a managerial perspective, this research accentuates the importance of positive consumers' WOM behaviors. It clearly shows that encouraging consumers WOM can not only help companies attract new customers, it also has the added benefits of enhancing brand loyalty and satisfactions among the existing customers. In addition, the audience-induced selective message construction identified in this research could also shed light on why some products are more likely to be the WOM target and become popular in no time. It might have something to do with the relationships between the target users. Positive words should spread faster among weak ties. Thus, if a product is a suitable conversation topic for weak ties, it should enjoy the most advantage of WOM communications.

### Limitations

This research has two major theoretical limitations: First, notice that a key assumption of this research is that WOM communicators have both positive and negative product knowledge. In other words, the communicator does not have an extremely positive or negative attitude toward the target product and his pre-communication product attitude is somewhat neutral or ambiguous. This is a critical assumption to this research in that, if the communicator has only

good or bad words to say about the product, then the hypothesized audience-tuning behavior and the suggested post-message judgment distortion are either unlikely to happen or the effects would be difficult to detect. Admittedly, consumers may tell lies to others (Argo, White, and Dahl 2006; Sengupta, Dahl, and Gorn 2002), but consumers' information misrepresentation is not the focus of the current research. Second, the stimulus information used in the experiment and the way it was learned by the participants hardly resemble the real life experience. Therefore the validity of the current research is in great need of improvement. Perhaps future research could develop better stimulus materials and more valid treatment process.

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**APPENDIX**

**Study 3 Product Information Booklet**

(Mock-up Amazon website graphics appears here)

## **Xanten-500 Wireless Home Security Alarm System**

### **Product Details**

(General Product Information Appeared here to mimic the web content of a common Amazon product page)

(A mock-up product picture appears here.)

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### **Product Description**

This comprehensive alarm system is packed full of features and is functional in any home or business setting. The best part about this system is that there are no monthly monitoring fees. When this alarm is triggered it activates a blaring siren, flashes lights, and calls up to 4 phone numbers that you have programmed into the console. These phone numbers can be your own cell or work number, friends, family or neighbors. All the state-of-the-art sensors included with this system operate wirelessly and are supervised by the console to provide professional reliability. This complete security package is the most comprehensive of its kind and provides everything you need

## Customer Reviews

(Mock-up customer review summary appears here.)

### Pros:

- \* It has listening device that can be mounted near a smoke detector; when the detector's siren goes off, the security system hears it and trips the alarm.
- \* The system sensors are ultra sensitive. You can be rest assured that it will definitely set off the alarm when it detects even the slightest unusual movement.
- \* Installation is very easy. Manual instructions are straightforward. It only took me about 30 minutes to set the whole system up and it's been running pretty good ever since.

### Cons:

- \* To me, the fact that the system does NOT have an anti-freeze, low-temperature switch which protects the proper function in cold days is a BIG worry. Would it malfunction in the extremely cold days?
- \* Its siren volume is fixed and way too high, which I suspect it could scare children or guests, or even might be painful to the ears.
- \* Its entry delay is short, about 10 seconds. Many times it doesn't allow me enough time to turn the unit off after I enter the room, especially when my hands are full of grocery bags.

(Mock-up customer review summary appears here.)

(Mock-up customer review summary appears here.)

**Things I don't like:**

- \* The installation is quite time consuming and fairly complex. My first installation failed and the whole alarm went off like crazy. It took some figuring-out to make it really work.
- \* A lot of times false alarms are set off by innocent things such as dogs or cats. The sensors are very sensitive, could be annoying to someone.
- \* One thing I don't like this one is that, unlike other models, this one does NOT come with an indoor siren. Indoor siren is definitely needed because it can be installed and hidden away from the central control, which can prevent a burglar from finding and disabling the core of the security system. I hope they will make improvements in the later model.

**Things I do like:**

- \* This model has rechargeable back-up battery that is continually charged to full capacity and so it can keep the alarms working if the power fails or a burglar cuts the power lines.
- \* It has a loud siren, which I like because my closest my neighbor lives 100 yards from my house and I want to make sure he can hear it if I am not at home.
- \* The system gives enough but short entry delay which is good because it sort of forces you to keep it at work at all times.

(Mock-up customer review summary appears here.)