HOW DO CREDIBILITY OF FOR-PROFIT AND NON-PROFIT SOURCE AND SHARER, EMOTION VALENCE, MESSAGE ELABORATION, AND ISSUE CONTROVERSIALITY INFLUENCE MESSAGE SHARING TO IMAGINED AUDIENCE ON FACEBOOK?

Chang "Nicky" Bi

A Dissertation

Submitted to the Graduate College of Bowling Green
State University in partial fulfillment of
the requirements for the degree of

DOCTOR OF PHILOSOPHY

August 2019

Committee:

Louisa Shu Ying Ha, Advisor

Sean Leatherbury
Graduate College Representative

Frederick Busselle

Yanqin Lu

ABSTRACT

Louisa Ha, Advisor

Sharing, a term that is associated with "going viral," is something all strategic communicators strive for in their communication campaigns. The current study explored sharing as message diffusion. The nature of information sharing is perceived as a form of word-of-mouth (WOM)—a voluntary act by the consumers to tell others their experience of a product or consumption of certain information. Sharing is an important social and economic phenomenon to study, because it maximizes the visibility of a company, a brand, a nonprofit, a policy, a product, and a service.

This study aimed to create a comprehensive model explaining the process of individuals' decisions in the sharing of messages to their imagined audience on social media through considering the primary and secondary sources of the messages, their perceived credibility, emotion valence, and elaboration of the messages, while controlling audience variables such as issue involvement, personalities, past sharing experience, and demographics.

The researcher conducted a two-wave experiment with a two by two factorial design. The study adopted Facebook as the subject of study. According to the results, when the original source is a for-profit organization, the post from the two-layered source is more likely to be shared than original source only. However, when the original source is a non-profit organization, the post from the direct source was more likely to be shared than a two-layered source. In addition, sharer credibility moderates the effects of the credibility of original sources on sharing Facebook posts. Message elaboration mediates the effects of both positive and negative emotion

arousal on sharing non-controversial issues, but not in controversial issues. Furthermore, positive emotions were directly and indirectly associated with sharing non-controversial issues through a mediator of message elaboration that is conditioned by sharer credibility.

This study advances and contributes ELM, the Two-Step Flow Theory, and demonstrates the merit of multi-stimuli experimental design. It also provides practical implications for strategic communicators on how messages can be diffused and spread to a wider audience based on their organization credibility and general source cue as for-profit or non-profit organizations.

To my parents, for their love and support.

To Kevin, my puppy, for being adorable, although he could not contribute a word.

ACKNOWLEDGMENTS

Writing a dissertation is a journey. It requires so many efforts mentally and physically, especially at the time when I was in the job market. This dissertation would not have been completed without the help and support of the following individuals.

I would like to thank my committee for their help and full support during the process. I'm grateful to my dissertation advisor, Dr. Louisa Ha, who dedicated a lot of time and effort on my dissertation. She taught me so much that can help me succeed in my future career. I have no idea where I would be if she hadn't given me the guidance on my research. I would like to thank Dr. Rick Busselle who has broadened the vision on my topic and provided invaluable comments. I also want to thank Dr. Yanqin Lu for his patience and knowledge that inspired me. I want to thank the School of Media and Communication, Bowling Green State University offered me research grant to collect data for my dissertation.

I would like to express my gratitude to Ruonan Zhang, Xiaoli Wen, and Kisun Kim. This period was filled with many ups and downs. Without their emotional support, I would not be able to survive the stress during this dissertation writing process. I want to especially thank Ruonan Zhang, who cooks wonderful dishes so that I do not need to eat junk food outside. I would like to thank Alyssa Fisher for proof-reading my dissertation. Thanks to my dog Kevin for being a wonderful pet in these four years. He was a lot noisier in the first and second year. Last but not least, I want to thank my parents, who support my decision to pursue a Ph.D. and give all their hearts for me.

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

CHAPTER I. INTRODUCTION

On April 6, 2018, 50 top food and lifestyle Instagrammers from Southern California went aboard on Princess Cruises. The company invited the top social media influencers to a private meal and a food-photography workshop at chef Curtis Stone's SHARE Restaurant (Deutsch, 2018, September 4). One of the Instagrammers Celine Linarte (celinelinarte, 2019) with 59,700 followers posted, "I've been a huge fan of Chef @curtisstone since I tried @mauderestaurant a few years… and I was so excited to try his new concept Share on @princesscruises…@curtisstone is changing the game of cruise cuisine" with a hashtag "TechMunch" that generated 60 million impressions on Instagram and Twitter, 270 Instagram stories, 1,700 Instagram photo posts, and 1,600 retweets. Those Instagrammers shared their dining experience on a grand-class cruise ship and helped Princess Cruises increase its publicity not only through their own posts but by their followers' sharing of the posts. This example illustrates the power of message "sharing" in the business world.

Facebook is the first company to uses the term "share" to persuade people to write on the "wall" of their members on the Facebook site. Sharing, as a notion, has existed since the emergence of languages (Williams, 1976). As an act of communication, sharing facilitates social interactions by expressing one's feelings and emotions to another person(s). Sharing is associated with "going viral" and is something every strategic communicator strives for. In the context of social media, the technology provides individuals space and an easy mechanism of expressing their minds. It should be noted that researchers need to distinguish two forms of "sharing." It not only refers to expressing your opinion and disclosure of your life to others who are in the same online community with you, but also refers to "reposting" of someone else's posting. In other words, the former defines "sharing" as an act of expression, whereas the latter refers to an act of

distribution (Nicholas, 2016). The definition of "*share*" in the dictionary is closer to the latter form that is the focus of this dissertation -"have a portion of something with another or others," and further expands the definition to "post or repost (something) on a social media website or application" under the new media content (Oxford Dictionary, 2018). Hence, the current study defines sharing as an act of message diffusion—a behavior of forwarding information to others in the context of the Internet.

In the book *The Age of Sharing*, Nicholas (2016) argued that sharing facilitates cooperation. The arguments can be found in many knowledge management studies that message sharing is a form of supportive communication that brings people more external information (Burleson & MacGeorge, 2002; Dachler & Wilpert, 1978; Roethlisberger & Dickson, 1946; Schermerhorn, 1977). Sharing could expand our knowledge base by bridging the information system of our inner-circle and from outside. Internet-based channels strengthen the linkage by allowing the users to exchange valuable information either in real-time or asynchronously with one another and maintain their interpersonal relationships in different geographical locations (Carr & Hayes, 2015). Funny videos are shared between close friends. Movie reviews were sent from one to another via the Internet. The sharing behavior is not only limited to people who know each other, but also between acquaintances or strangers. Examples can be found in online communities such as Lego fans of a virtual community sharing news about new building modulars. Social media provides online users with an opportunity to support each other and gain new knowledge.

Online message sharing as an economy has been valued by a variety of industries such as information technology, music, film, and more (Kennedy, 2016; Meikle, 2016; Nicholas, 2016). Specifically, Meikle (2016) argued that the practices of sharing bring new business models.

Examples can be easily found from social media sites such as Facebook and YouTube. The user-generated content and content co-production through sharing have been used to attract advertisers. The phenomenon of sharing also revealed that the audience is not a passive receiver of information but an active agent who decentralizes the creation and distribution of information by converting it from professional content into user-generated content.

The Significance of the Study

The nature of information sharing is perceived as a form of word-of-mouth (WOM)—a voluntary act by the consumers to tell others their experience of a product or consumption of certain information (Hennig-Thurau, Gwinner, Walsh, & Gremler, 2004). Individuals help promote ideas and products by endorsing certain information to others. Electronic word-of-mouth (eWOM), the sharing of online message, is not only the experience originated by customers, but can also be information referral of retailers or other consumers (Hu & Ha, 2015). Previous scholars mainly focused on eWOM creators who share their experience of using a product to help other consumers make the purchase decision (Hennig-Thurau, et al., 2004). However, very few people are original content creators in real life. A Pew Research report (Lenhart, Follows, & Horrigan, 2014) found that only 17% of online users have posted their own written material on Websites; 7% have contributed material to Websites run by organizations to which they belong such as professional groups; 5% have contributed audio files to Websites; 3% have contributed video files to Websites, and only 2% maintain Web diaries or Web blogs. In contrast, 41% of online users share media content to others; 20% share content that they think is interesting or an inside joke they have; 28% shared videos; 17% shared articles, and 7% shared blogs (Bentley, Peesapati, & Church, 2016). Overall, the percentage of online users who share

was much higher than people who create content. Hence, a large proportion of content we receive and send online is "shared," i.e., forwarded from other online users.

Individuals also find that forwarding messages costs them less effort than creating. Bloggers spend six hours on average in preparation of original content through searching and collecting information, but sharing or reposting other's information costs just a second (iResearch, 2017). The ease of endorsing any information by forwarding online increases its likelihood of being diffused and spread to a large number of people. A report from Pew Research Center found that people who got the news shared by their family and friends were more likely to inspire follow-up actions such as seeking more information, re-sharing it, and talking about it with others (Mitchell, Gottfried, Shearer, & Lu, 2017). It also suggests that the shared messages are more impactful on others. Hence, it is crucial to understand the sharing phenomenon, in addition to the eWOM traditions that people create organic content regarding a company, a product, or a service.

As for any message, the communicators are crucial for effective communications (Kumkale, Albarracín, & Seignourel, 2010). The Elaboration Likelihood Model (ELM) provides a framework to understand the effects of a source in persuasion—how high- and low-effort processes of information influence people's judgment (Petty & Cacioppo, 1981). As for message sources, both the source cues such as different layered-sources as a low-effort process and perceived source credibility as a high-effort process would influence the effects of a message. Social media make it a more complex scenario in that many online messages involve multiple sources since they have been re-shared multiple times. Appelman and Sundar (2015) suggested that the credibility of an original source might have limited effects on people, while the interaction of multiple sources affected people's attitudes and behavior. In other words, the

interaction of the cues and perceived credibility of the original and secondary sources may have greater impacts on the evaluation of the information. The persuasive messages could be more effective if sharer credibility could increase their overall source credibility. In addition, Mitchell, Gottfried, Shearer, and Lu (2017) found that shared messages enhance the likelihood of follow-up actions such as attitude changes or the behavior of re-sharing it. People are more likely to spread a message that has been shared by their family and friends because the shared content may imply the content has been socially approved (Ewoldsen, Rhodes, & Fazio, 2015; Geusens & Beullens, 2015). Hence, it is also important to study sharers and their effects as a secondary source. In addition, no available study of relevance examined how people process secondary sources heuristically and cognitively. The two processes may be at work concurrently in the processing of messages.

In the current online environment, people may not pay attention to the sources or think about the sources (Appelman & Sundar, 2015). Hence, source credibility itself may not be sufficient to explain the persuasiveness of an online message. A message itself can directly generate persuasive effects. Specifically, the emotional response to a message will produce effects on people's behavior. Similar to source effects, ELM also helps us to understand the role of emotions in the process (Petty & Briñol, 2014). Emotions may directly or indirectly link to individuals' follow-up behaviors such as sharing. It affects people's behavior by serving as simple, effective cues that produce judgments, or by serving as arguments which biases thought or validates them when elaboration is high (Petty & Briñol, 2014). In previous studies, researchers tend not to examine the association between emotions and sharing. As Bi, Zhang, and Ha (2018) revealed, people share when they want to show care or express negative feelings.

People may want to express their negative feelings by sharing a message that triggers negative emotions, whereas to share a message when they find it useful and generate positive emotions.

In addition, sharing messages on social media serves the function of maintaining a positive impression and presenting ideal self-images (e.g. Turner & Onorato, 1999; Kim, Ihm, & Park, 2017) to their imagined audience who would influence how individuals position themselves. However, there are very few available studies specifically exploring how people "imagine" the reaction of their anticipated audience influences their online sharing, especially when they decide the types of issues to share such as controversial or non-controversial issues and between for-profit and non-profit organization sources. This dissertation study fills this gap, investigating individuals' sharing behavior after they evaluated their perceived social benefits and risks.

Furthermore, King et al. (2014) stated that "decision journey is now a continuous loop in which consumers keep adding and deleting brands based on significant information from online c2c [consumer-to-consumer] sources, such as online reviews and interactions with family and friends via social media" (p. 117). It suggests that market information is exchanged and communicated frequently through different channels. In the social media era, people actively engage in information seeking, filtering, and forwarding. Sharers would be receivers in the first place. However, previous literature studied the receivers and communicators separately (King, et al., 2014). The current study conceptualizes the information dissemination process as reciprocal and concerns how people receive, process, and share messages with their friends or the general public.

Purpose and Contributions of the Research

This study aimed to create a comprehensive model explaining the process of individuals' decisions in the sharing of messages to their imagined audience on social media through considering the primary and secondary sources of the messages, their perceived credibility, emotion valence, and elaboration of the messages, while controlling audience variables such as issue involvement, personalities, past sharing experience, and demographics.

The main focus of the research was to explore the effects of source cue and perceived source credibility on the likelihood of sharing. The study advanced persuasion theory by investigating how the cues and credibility of multiple communicators of persuasive messages influence individuals' behavior. Specifically, the study advanced the Elaboration Likelihood Model (ELM) by examining whether people use low-effort or high-effort processes when making their sharing decision and incorporating emotions in the ELM model. The study can reveal the relative importance of the secondary source versus the original source of the persuasive messages during the decision of sharing. It proposed that individuals' evaluations of sources would affect message processing and diffusion. In addition, this study contributed to the literature on emotions by examining how emotions could generate both cognitive thinking and heuristic message process when adopting ELM as a framework. It proposed that emotions might directly or indirectly predict sharing by differentiating the types of messages, namely controversial and non-controversial issues. The study linked the effects of sources and emotions to sharing considering individuals' imagined audience. It used self-presentation motivation to explain how people make the decision to manage their impression for the audience with different tie strength.

Moreover, this study can also advance the Two-Step Flow Theory and opinion leadership theory (Rogers, 2007) by showing the impact of ordinary users—who become sharers, may be as persuasive as the celebrity and highly popular opinion leaders on other online users.

The research also contributed to the methodology in studying the sharing of messages by developing more natural stimuli that allow subjects to choose whether to read the message in full or just the headline during the experiments. The study measured the actual act of sharing instead of the intention to share by a multi-stimuli design, which increases the authenticity, reliability, and validity of the experiments. It contributed to the multi-stimuli experiment methodology and provided a prototype process of data analysis. The researcher also adopted Stoycheff (2016)'s method to increase Amazon's Mechanical Turk (MTurk)'s recruitment rate in the two-wave experimental design by a post-pay strategy —the participants received one dollar only if they completed the second-wave questionnaire.

The dissertation has the practical implications to provide insights to public relations (PR) and marketing practitioners on how messages can be diffused and spread to a wider audience and provide greater impacts on people's attitudes and behavior. It provides guidelines to developing effective strategies for their social media campaigns by exploring the effects of communicators on people's diffusion actions. PR practitioners could utilize the findings of the study to market their organizations and engage online users to spread words for them by understanding how people share based on their individual needs such as self-presentation and social justice activism. In addition, a secondary source (a sharer) might help for-profit organizations overcome low perceived credibility and resistance when they send a persuasive message through social media. How to strategically take a stand on social issues may also strengthen their corporate social

responsibility (CSR) by delivering messages that benefit social and environmental development to their stakeholders.

In addition, the shared content will easily help organizations to overcome the social media algorithm—social media usually prioritize the messages from friends and family. Two-step flow suggests that opinion leaders are critical to the spreading of messages. In traditional PR, opinion leaders are often selected by marketers. It costs much PR effort to cooperate with those influencers such as celebrities. It is also hard to manage the reputation of those individuals, which could be a potential risk for an organization's image. However, it could be beneficial if PR practitioners can broaden the supporter base by identifying ordinary people as the influencers to increase the awareness of a product, a brand, or an organization since their interpersonal influence is more effective in changing people's attitudes and behavior.

Organization of the Dissertation

The dissertation first stated the significance and purpose of the research. In the next chapter, the researcher reviews the previous literature on sharing as a form of eWOM, ELM, source credibility, emotions, imagined audiences, and how they influence people's sharing behavior. Then, the researcher conceptualizes sharers' credibility and discusses the effects of other factors on sharing such as issue involvement and prior sharing experience. In Chapter III, the researcher develops a theoretical model of messaging sharing on social media and raises research questions and hypotheses based on the model. In Chapter IV, the researcher explains the methodology used to explore the research questions and test the hypotheses. Chapter V presents data analysis. Chapter VI presents the results of the dissertation. It answers the research questions and reveals whether hypotheses have been accepted or rejected. In the last chapter, the

researcher discusses the theoretical and practical implications as well as the limitations of the study and directions for future research.

CHAPTER II. LITERATURE REVIEW

Sharing as Opinion Leadership and Word-of-Mouth

As discussed in the first chapter of this dissertation, the current study sees sharing as diffusion. A shared message is an extension of ownership rather a transferal (Kennedy, 2016). In other words, the shared message may contain multiple sources with original sources and multiple sharers. As the two-step flow in the Diffusion of Innovation theory suggests, influencers could accelerate the diffusion process by their accessibility and connectivity (Rogers, 1995). In the social media era, influencers also include our family, friends, and other distant acquaintances who are ordinary online users. Sharing can also be seen as an act of message endorsement—a form of electronic word-of-mouth (eWOM).

The word-of-mouth (WOM) studies began in the 1960s. Arndt (1967) defined WOM as "oral, person-to-person communication between a receiver and a communicator whom the receiver perceives as non-commercial, regarding a brand, product or service" (p.3). Product innovators found that WOM provided the most effective information for product adoption and increased the sales of a new product (Dodson & Muller, 1978). Both scholars and marketers perceive WOM as a source to reduce the perceived risk of a product when customers make their purchase decision (Roselius, 1971; Woodside & Delozier, 1976). In the 1990s and the 2000s, the WOM studies shifted from traditional media to digital media, because customers began to seek electronic forms of WOM (eWOM) when comparing and choosing a product. Compared to traditional WOM, peer influence remains on the Internet, although the friendship was "no longer restricted to persons in the physical environment" (Crutzen et al., 2009, p. 657).

Hennig-Thurau, Gwinner, Walsh, and Gremler (2004) stated that eWOM is "any positive or negative statement made by potential, actual, and former customers about a product or a

company via the Internet" (p. 39). Litvin, Goldsmith, and Pan (2008) added an element of communication between individuals and described eWOM and defined it as an online communication "between consumers about a product, service, or a company in which the sources are considered independent of commercial influence" (p. 461). The scope of the eWOM content was commonly limited to consumers' experience, evaluation, and opinion about a product, a service, a brand, or a company. (Hennig-Thurau et al., 2004; Litvin, Goldsmith, & Pan, 2008; Kietzmann & Canhoto, 2013; Park, Lee, & Han, 2007; Thorson & Rodgers, 2006). The eWOM created by any online user should be "void from any commercial interest" (Rathore, 2015, p. 5). Recently, Hu and Ha (2015) expanded the definition of eWOM to "any information, including not only customer's own statements but also shared/forwarded posts from retailers or other published sources, which are exchanged among potential, actual, or former customers about a product or company available to a multitude of people and institutions via the Internet" (p. 17). They suggest that eWOM not only include the organic user-generated content, but also messages that have been endorsed through sharing.

From the previous literature, WOM communication has evolved from the organic inter-consumer influence model to a brand-related information exchange model, to the most current network co-production model—customer's WOM engagement is through "one-to-one seeding and communication programs" (Kozinets, De Valck, Wojnicki, & Wilner, 2010, p. 72). In the last model, the online audience is perceived as active co-creators of marketing content (Kozinets, et al., 2010). According to the network co-production model and the latest definition of eWOM, sharing marketing content could be considered as a form of eWOM, once the sharers spontaneously send messages to others without any monetary incentive, no matter if the content is sponsored or non-sponsored by a company or an organization. In other words, eWOM should

include both the original statement of product experience and the forwarded marketing content. Among the limited research on passing along eWOM, Yeh and Choi (2011) also conceptualized eWOM as brand information giving and passing, suggesting online sharing is an important dimension of eWOM.

However, sharing, as a special type of eWOM, should be examined differently. Sharers play two roles in marketing content engagement—they are receivers and disseminators. As receivers, they actively seek or passively obtain, process, and filter information. As disseminators, they pass along messages to others when they find them useful or entertaining. Hennig-Thurau et al. (2004) stated that eWOM creators tend to express their feelings and help other consumers by endorsing a product. Therefore, sharers should have the same motivations when forwarding information to others, which tend to influence people's attitudes and follow-up actions (Hennig-Thurau & Walsh, 2003).

Online users can be categorized into three different types, including content creators, receivers, and sharers. However, information transmission is a loop among different online users. Creators such as marketers and advertisers send persuasive messages through online channels. Receivers are also potential sharers who disseminate, forward, or repost the messages to others, which generate greater impacts on the people who are in their social networking circle. To understand the sharing phenomenon, both people's perception of sharers and people's follow-up behavior are important, because how people perceive sharers influences the persuasiveness of a message.

Source Credibility in the Elaboration Likelihood Model

In the first chapter, the researcher explained that this dissertation aimed to advance the Elaboration Likelihood Model (ELM) by examining two information processes in terms of

sharing. ELM is used as a guide for understanding attitude change and applied on contemporary work on behavioral change (Petty & Cacioppo, 1986; Petty, Barden, & Wheeler, 2009; Leong, Hew, Ooi, & Lin, 2017). It suggests two ways of information processing—high-effort central route and low-effort peripheral route (Petty & Cacioppo, 1986). The model proposed a framework structured by cognition theory (Greenwald, 1968) and heuristic mechanism (Petty, Wegener, & Fabrigar, 1997) that attitude and behavioral changes result in different processes depending on the degree of elaboration. In other words, high elaboration leads to attitude changes through individuals' cognitive responses, whereas low elaboration drives attitude changes by picking up simple peripheral cues.

Attitude and behavioral changes depend on individuals' information "output" such as comprehension and acceptance (Petty & Cacioppo, 1986). The "output" results from the "input" factors including source, message, message senders and receivers, and context variables (Petty & Cacioppo, 1986). The cognitive responses can be elicited by message factors such as sources (Petty & Cacioppo, 1986). As the high-effort central route depends on people's message-relevant thoughts (O'Keefe, 2012), people may carefully evaluate message-relevant factors when processing the messages. The credibility of the source is one of the factors that would influence persuasion.

Source credibility has been found to affect cognitive response. For example, a study shows that a highly credible source of a promotional physical exercises message elicits more elaboration among university students (Jones, Sinclair, & Courneya, 2003). Source credibility enhances the degree of information adoption through evaluating argument quality and usefulness of the messages (Hussain, Ahmed, Jafar, Rabnawaz, & Jianzhou, 2017). Source credibility would also directly change behavior. Health communication often examines the impacts of source

credibility on behavioral change. High source credibility would effectively increase the persuasiveness of a health intervention message (e.g. Schmidt, Ranney, Pepper, & Goldstein, 2016). eWOM scholars not only found that the creator credibility of user-generated content affects individuals' attitudes toward a persuasive message (e.g. Lee & Youn, 2009; Wu & Wang, 2011), but also reveals that it directly influences product adoptions (e.g. Ismagilova, Slade, Rana, & Dwivedi, 2019; Leong, Hew, Ooi, & Lin, 2017), linking the influence to individuals' behaviors. For example, the perceived credibility of eWOM creators predicts hotel booking (Leong, et al., 2017).

It is also possible that the low-effort peripheral route could produce attitude changes based on simple source cues that depend on heuristic rules rather than message-relevant thinking—it does not require much thinking at all (O'Keefe, 2012). The formation of judgments could be retrieved from memory through a heuristic mechanism. One typical peripheral cue is communicator's apparent credibility (Petty, Cacioppo, & Goldman, 1981). The cue of credibility has strong impacts on the persuasiveness of a message, whereas the message affects people less when the cue is less salient (Andreoli & Worchel, 1978).

Individuals also heuristically process information based on source cues such as expertise (e.g. DeBono & Harnish, 1988; Eastin, 2001; Homer & Kahle, 1990). Political communication scholars also used ELM to explore the effects of party source cues on public opinion of persuasive messages (e.g. Mondak, 1993; Ratneshwar & Chaiken, 1991). It suggests that source cues have a strong impact on people's attitudes and follow-up actions. One study found moderated mediation of elaboration on the effects of personal source cue (e.g. family, friends) on the willingness to engage in social media commenting and liking, which was conditionally affected by source credibility (Nekmat, Gower, Zhou, & Metzger, 2019). It reveals that source

credibility might elicit both high-effort and low-effort information processing at the same time, and influence people's behavior.

Overall, persuasion can be achieved either through central or peripheral routes, but the consequences are not identical (O'Keefe, 2012). Studies found that attitude change obtained through central-route lasts longer than obtained from the peripheral route (Petty & Cacioppo, 1986; Petty, Haugtvedt, & Smith, 1995). The two routes may yield equal effects on persuasion, but the strength of attitude would be different. It suggests that communicators' credibility influence attitudes are more stable if people make the judgment through a thoughtful evaluation of the source, compared to picking up simple credibility cues.

Source Credibility and Dual Influence of Original and Secondary Sources

Effective communications largely depend on how the audience reacts to a communicator (Kumkale, Albarracín, & Seignourel, 2010). Appelman and Sunder (2015) discussed that the types of communication credibility such as source credibility and message credibility can influence persuasion effectiveness. For any type of message, its quality may not influence the persuasiveness such as the likelihood of being shared, even if a message that is perceived as "accurate, authentic, and believable" (Appelman & Sunder, 2015, p. 15). For example, the persuasion knowledge of the audience on a message sent by a for-profit organization may lead him/her to reject the tactic, decreasing the effectiveness of the communication (Ham, Nelson, & Das, 2015). Furthermore, the message may not be even received by the audience, unless it is carried by a credible source.

A communicator's credibility is crucial in influencing people's attitudes and behavior (Appelman & Sunder, 2015; Fernando, Suganthi, & Sivakumaran, 2014). Source credibility refers to “the extent to which a communicator is perceived to be a source of valid assertions—

his/her ‘expertness,’ and the degree of confidence in the communicator's intent to communicate the assertions he considers most valid—his ‘trustworthiness’” (Whitehead Jr, 1968, p. 59). A credible source is perceived as professional and authentic, which increases its persuasion power (Eagly and Chaiken, 1975; Kelman & Hovland, 1953). The audience feels the messages coming from a high credible source are more useful, which increase the likelihood of acceptance (Sussman & Siegal, 2003; Zhang, Su, Pu, & Zhu, 2014). Lafferty, Goldsmith, and Newell (2002) found that corporate credibility— “the reputation of a company for honesty and expertise,” affected people's attitudes toward advertisements, brands, and purchase intention (p. 43).

The effects of source credibility have been studied in different contexts. Jones, Sinclair, and Courneya (2003) found that source expertise increased college students' exercise intentions and behaviors when they were exposed to a promotional message about physical exercise. Recent studies also explored the effects of source credibility on people's behavior. Jin and Phua (2014) revealed that people would spread a persuasive message to others even when a celebrity source is perceived as less credible, because they felt the obligation to share it. Some studies also link source credibility to sharing because a credible source has a greater impact on the audience's cognition. The audience who shares the message is influenced by the message in the first place (Bi, Zhang, & Ha, 2019). In other words, individuals are more likely to process and be affected by the information from a highly credible source, increasing the likelihood of attitudinal and behavioral change.

In Lafferty et al.'s (2000) dual credibility model, they found that endorser credibility had greater effects on the attitudes toward advertisements, compared to company credibility. One study found that message sender trust rather than creator trust had a greater impact on eWOM effects such as the attention to the message and attitudes toward the message and the brand,

which suggests that viral advertising from a trusted sender can “overcome handicap a less trusted advertiser might have” (Cho, Huh, & Faber, 2014, p. 100).

Some studies also indicated the effects of sharers' source credibility on people's re-sharing behavior (Shan, Liu, & Xu, 2018; Wu, Ji, & Liu, 2013). Shan et al. (2018) found that the credibility of the sharers of haze information increases dissemination. It may be because the endorsers reduce the tension of evaluating the usefulness and increase the perceived value of the message. Audiences who receive the shared information from their friends are more likely to forward the information (Mitchell, Gottfried, Shearer, & Lu, 2017), suggesting that people feel safe to share the "second-hand" information because it has been vetted by others and increases the likelihood of getting social approval (Ewoldsen, Rhodes, & Fazio, 2015; Geusens & Beullens, 2015). The findings also suggest that the credibility of original and secondary sources has interaction effects on sharing.

Conceptualization and Measurement of Source Credibility and Online Individual Credibility

Source credibility refers to the believability of a source of information (Rubin, Palmgreen, & Sypher, 1994). As the researcher discussed earlier, *expertness* and *trustworthiness* are two dimensions of source credibility (Rubin, et al., 1994). *Expertness* refers to the qualification of a source that communicates on a topic, while *trustworthiness* refers to the intentions of the communicator (Hovland, Janis, & Kelley, 1953). Both of them are crucial for evaluating sharer credibility—online individuals who are our family and friends. For example, a close friend shares a post about a new Chinese restaurant. We may trust the friend and believe he or she has the goodwill of recommending it, but he or she may not have good taste in Chinese food—the expertise on it.

Berlo, Lemert, and Mertz (1970) developed a source credibility scale for interpersonal sources and organizational sources. In the scale, Berlo et al. (1970) used bipolar adjectives of 15 items to indicate three dimensions of source credibility, including *safety* (*kind-cruel, safe-dangerous, friendly-unfriendly, just-unjust, honest-dishonest*), *qualification* (*trained-untrained, experienced-inexperienced, qualified-unqualified, skilled-unskilled, informed-uninformed*), and *dynamism* (*aggressive-meek, emphatic-hesitant, bold-timid, active-passive, energetic-tired*). The safety factor is closer to "*trustworthiness*." *Qualification* is more likely to be "*expertise,*" as has been argued by Hovland, et al. (1953). Some scholars have questioned the validity and stabilization of the scale. For example, some items are cross-loaded on safety and qualification indicators (Rubin, et al., 1994).

Rubin et al. (1994) argued that Berlo et al.'s (1970) scale is for media credibility. For example, the item *trained-untrained, experienced-inexperienced, skilled-unskilled* describe journalists. *Kind-cruel* describes the tone of the news articles. In the context of sharing, it is hard to describe a friend as *dangerous* or *safe*. However, some items of the three dimensions provide some insights on the evaluation of a source's credibility. Whether our Facebook friends are *honest*, *friendly*, and *just* will influence our judgment on the content they share. Similarly, whether they are qualified or informed will influence their expertise on a topic. *Dynamism* is also used to describe a sharer—an online individuals' interactiveness.

McCroskey (1966) identified two dimensions of credibility: *authoritativeness* and *character,* and focused on individuals rather than an organization, which is closer to the context of the current research. *Authoritativeness* was measured by six bipolar items, including *reliable-unreliable, uninformed-informed, unqualified-qualified, intelligent-unintelligent, valuable-worthless, and inexpert-expert*. Its reliability ranges from .85 to .95 (Rubin, et al., 1994).

Character was measured by six items including *honest-dishonest, unfriendly-friendly, pleasant-unpleasant, selfish-unselfish, awful-nice, and virtuous-sinful*. The reliability of this credibility scale is high, ranging from .92 to .98 (Rubin, et al., 1994). Overall, the reliability is much higher than Berlo et al. (1970), because it separates individual credibility from source credibility in general. However, the scale focuses on the speaker's credibility, which means it lacks the criterion-related validity (Rubin, et al., 1994). For example, social status, the use of humor in the speech, and the speaker's gender influence how people perceive credibility (Rubin, et al., 1994). In the context of the current research, the shared messages will also interact with the items such as *virtuous-sinful and awful-nice*. In addition, people rarely describe a sharer as *sinful*, which could potentially decrease the consistency of those items.

McCroskey, Jenson, and Valencia (1973) developed another credibility scale that targeted peers and spouses: *sociability (good natured-irritable, cheerful-gloomy, unfriendly-friendly), character (dishonest-honest, unsympathetic-sympathetic, good-bad), competence (expert-inexpert, unintelligent-intelligent, intellectual-narrow), composure (poised-nervous, tense-relaxed, calm-anxious), and extroversion (timid-bold, verbal-quiet, talkative-silent)*. The 1973 credibility scale is good to identify "character" as a separate dimension of a person's credibility, but the items are inconclusive. Both *pleasant-unpleasant* and *selfish-unselfish* are missing on the new scale. McCroskey et al. (1973) included *extraversion* as a dimension that seems misleading—it is a personality trait and it is hard to conclude that all the extroverts are perceived with higher credibility than introverts. The internal consistency of the items is not as good as McCroskey's 1966 scale, even though it has the same validity. Some scholars argued that the 15-item semantic differential had not always been loaded into five dimensions (Rubin et al., 1994). For instance, *sociability* and *character* were loaded on the same dimension.

In 1999, McCroskey and Teven improved the scale by separating the communicator's *goodwill* from *trustworthiness* and considering *goodwill* as another credibility construct. They used three different individual sources, namely political figures, public figures, and interpersonal contacts. The new scale is useful in the context of social media since the intention to communicate is one of the indicators of online sharers' credibility. Three dimensions are identified by McCroskey and Teven (1999), including 1) *competence* (*intelligent-unintelligent, untrained-trained, inexpert-expert, informed-uninformed, incompetent-competent, bright-stupid), 2) goodwill (cares about me-doesn't care about me, has my interests at heart-doesn't have my interests at heart, self-centered-not self-centered, concerned with me-not concerned with me, insensitive-sensitive, not understanding-understanding), and 3) trustworthiness (honest-dishonest, untrustworthy-trustworthy, honorable-dishonorable, moral-immoral, unethical-ethical, phony-genuine)*. The scale (*competence* α = .85, *trustworthiness* α = .92, *goodwill* α = .92) has been successfully employed in the context of interpersonal relations and work environments (Rubin, Rubin, Graham, Perse, & Seibold, 2010). Since the sharers tend to be online individuals who we know personally, the scale could be valid to measure some dimensions of sharer credibility.

A New Dimension of Sharer Credibility

Because past measurement of credibility focuses on the original source, in the online environment where original message can be forwarded and shared by another person, there may be a need to modify the credibility measure for the sharer. Considering the characteristics of online individuals, a new dimension—*resourcefulness,* should be developed to identify individuals' social capital in their social networks. Social capital refers to “the networks of strong personal relationships that are developed over time and provide the basis for trust, cooperation,

and collective action in communities" (Huang, Lin, & Lin, 2008, p. 162). It reflects individuals' ability to access wider social resources. On one hand, those who have more social network ties are more likely to become sharers to pass-along information (Huang, et al., 2008). On another hand, their social capacity grants them authority and credibility (Blyler & Coff, 2003).

In addition, individuals' social participation could influence their perceived credibility. Based on the Diffusion of Innovation theory, opinion leaders tend to be more active, engage in more external communications, and have closer access to sources, while outliers who have contact with only family and close friends are the last to adopt an innovation (Rogers, 1995). Opinion leaders should be perceived as more credible than outliers due to their social and resource accessibility. Sharers tend to be opinion leaders (Kümpel, Karnowski, & Keyling, 2015). Hence, online sharers' connectedness, resourcefulness, activeness, interactiveness, and engagement influence their perceived credibility (Henderson, 2015; Jahng & Littau, 2015; Lorence & Abraham, 2008). Hence the factor of resourcefulness/perceived social capital would need to be included in studying the sharer's credibility.

Organization Credibility and Societal Issues

Audiences perceive not-for-profit (nonprofits) and for-profit organizations differently in terms of their credibility. Individuals often trust a non-profit organization since they usually do not question the intention of its communication and often assume it has a social cause and public good purpose. Nonprofits such as charities design messages to increase awareness of a social problem and to encourage the audience to take actions to make social changes (Anheier, 2012). In addition, Aaker, Vohs, and Mogilner (2010) revealed that the audience found nonprofits warmer and more caring than for-profits, suggesting nonprofit trust is higher than for-profit trust. For-profit organizations show a tendency to persuade their audience to purchase their products

and services. A Harris Poll report (2006) found that only about 15% of individuals said that a company's advertising and public relations activities were credible sources. They would rather trust personal experience with the company from other sources such as eWOM. Most recently, Harris Poll (2017) found an increasing engagement with nonprofits among U.S. consumers. People grant higher "brand equity" to nonprofits, suggesting that they have more engaged consideration of them and perceive the organizations as high quality.

The audience's perception can be greatly impacted by whether companies make commitments towards bettering society, making for-profits center their marketing campaigns around social good (Harris Poll, 2016). A profit organization may choose not to directly advertise its product or services, but advocate a social movement, which aims to raise brand awareness through association with a popular social cause and enhance its reputation. For instance, GE's *Balance the Equation* campaign advocated females' right to employment on Twitter, which got public support by thousands of retweets and comments (Lee, 2018). SPP, a Sweden's pension company, promoted environmental protection in their *Welcome to Earth* 2045 campaign by contrasting two future scenarios and showing how SPP supports the green scenario (SPP, 2017). As Harris Poll (2018) revealed, the reputation of a company is determined by whether it is accountable for their actions, speaks out on societal issues, and behaves responsibly towards the people in their communities. In addition, about 50% of people are belief-driven buyers, so they expect companies to connect with them emotionally and personally and want them to address societal issues such as gender equality, climate change, LGBTQ rights, and poverty (Harris Poll, 2018; Porter Novelli, 2018). Furthermore, 67% of U.S. consumers bought a brand for the first time because of its position on a controversial issue and 65% will not buy because it stayed silent on an issue important to them (Porter Novelli, 2018). Hence, taking a

proper stand on a societal issue would eventually benefit companies' revenue, reputation, and development.

Emotions and Message Sharing

From the Elaboration Likelihood Model's perspective, people process information based on central and peripheral routes (Petty & Cacioppo, 1986). The model was also used to understand the effects of emotions on decisions (Petty & Briñol, 2014). Previously, the researcher discussed that people process persuasive messages based on the level of elaboration. They may either carefully evaluate the credibility of a source or simply pick up the cues. However, the source is not the only message factor elicited by the process. Another factor would be emotions generated by the messages that guide people's behavior (Myrick, 2015). The effects of emotions on people's behavior may serve as cues or enhancing the cognitive process (e.g. Martin, Laing, Martin, & Mitchell, 2005; Petty, Schumann, Richman, & Strathman, 1993).

The concept of *emotion* is one of the "broader umbrella concept" of *affection* that was conceptualized as "the embodiment of evaluative reactions" (Batson, Shaw, & Oleson, 1992; as reviewed in Myrick, 2015, p. 2). As moods last for hours, emotions can only last a few seconds to a few minutes (Myrick, 2015). The discussion of conceptualizing emotions can be categorized into two perspectives—dimensional and discrete. In the dimensional view of emotions, Green, Salovey, and Truax (1999) indicated that emotions differ in the dimension of valence—positive and negative; Russell and Barrett (1999) pointed out that emotion should be differentiated by its degree of arousal in addition to valence. This view later evolved to the three dimensions of arousal, valence, and dominance (Bradley & Lang, 1994). The discrete perspective expands the emotional experience by distinct emotion states of positive (e.g. happiness, hopeful) and negative (e.g. sadness, anger) emotions (Myrick, 2015). It argues that the dimensional perspective

oversimplified the emotions, whereas the discrete perspective was often used in media effects research (Myrick, 2015).

Emotions have been inquired by different disciplines such as psychology, media and communication, music, and marketing (Buijzen, Walma van der Molen, & Sondij, 2007; Guadagno, et al., 2013; Richins, 1997; Scherer, 2004). The emotional response to a message has been found to influence individuals' behaviors (Botha & Reyneke, 2013; Eckler & Bolls, 2011; Guadagno, Rempala, Murphy, & Okdie, 2013). Sharing information is one of the common behaviors elicited by emotions (Myrick, 2015). On one hand, emotional messages have been found to be more likely to go viral than non-emotional messages (Berger & Milkman, 2012; Myrick, 2015). On the other hand, people who elicit high-emotions generate more sharing behavior than low-emotions. Berger and Milkman (2012) found that strong emotional arousal promoted sharing of news content than low-arousal.

Overall, positive emotions generate more shares than negative emotions (Eckler & Bolls, 2011). For example, humor predicts sharing campaign messages with others, given that "the action tendency of happiness is to share" (Myrick, 2015, p. 94). In addition, compassion positively predicts the intentions to share public service announcement (PSA) videos (Myrick, 2015). Some scholars also found that the effects of emotions to sharing were influenced by cultural differences. Specifically, pride predicts sharing in an individualistic culture, while shame generates sharing in an honor culture (e.g. Mosquera, et al., 2000). Myrick (2015) argued that a mix of emotional states may elicit more sharing behaviors. It is possible that a mix of positive emotions or negative emotion states may be more effective in diffusing messages. Although a few negative emotions were found less effective in predicting sharing, a mix of states might increase the diffusion of a persuasive message to a wider audience.

Imagined Audience and Sharing

Apart from the source and message factors discussed above, the audience expectation will also play a factor in sharing because sharing is a communication activity. Individuals have a tendency to build a public persona to gain social approval and positive feedback and reduce social conflict (Brown, 2014). Hence, they tend to behave in ways that are socially expected. For example, people may not endorse a junk food commercial because it is harmful to our health according to the social norm. Social norms are "implicit and unwritten" rules that regulate behavior in groups and societies (Leary, 1995, p. 67). Even if people want to share the junk food advertisement, they would tailor the information to be consistent with the social norms.

Social norms also affect behavior when the "norm is made salient" (Ewoldsen, Rhodes, & Fazio, 2015, p. 316). Geusens and Beullens (2015) found that adolescents' alcohol-related online self-presentation was strongly related to what their friends were sharing. Fikkers, Piotrowski, Lugtig, and Valkenburg (2016) revealed that perceived peer aggression had impacts on the effects of media violence on adolescents' aggressive behavior. Other studies found that people pick up bandwagon cues to interpret social norms. For example, the number of views of a YouTube video about climate change influenced individuals' perceptions of the issue (Spartz, Su, Griffin, Brossard, & Dunwoody, 2017). It reveals that how individuals think and behave are based on the norms and perceptions of their imagined audience.

Strategies of Approaching Imagined Audience

The concept of "imagined audience" comes from Anderson's (2006) book *Imagined Communities*, which stated that communities are "imagined because the members of even the smallest nation will never know most of their fellow-members, meet them, or even hear of them" (p. 6). The concept is in line with the important aspect of "imagined" when we describe our

audience on social media, although the book is rooted in a nationalism's perspective. The imagined audience is not fictionalized. As Anderson (2006) argued that we cannot know every aspect of a nation, we cannot read others' minds correctly all the time. Like most online users, we often try to know what others think about us before posting or sharing messages. We tailor the information for different groups to maintain our public persona.

Having a comprehensive understanding of the imagined audience is crucial in understanding people's sharing behavior. However, the study on the imagined audience is still at an exploratory stage. Litt (2012) proposed a framework that aimed to study the phenomenon by aggregating theories of psychology, sociology, and communication. He conceptualized that "imagined audience is the mental conceptualization of the people with whom we are communicating, our audience" (p. 331). Given the nature of social media platforms that differ in audience size and composition, it is impossible to "determine the actual audience" (Litt, 2012, p. 332). Individuals rely on the imagined audience rather actual audience in computer-mediated communication. The framework of Litt (2012) explains how people share based on their perceived imagined audience, highlighting the motivation factors such as self-presentation to decide what they disclose and to whom. Sharing, a communicative action of self-disclosure and a self-presentation strategy, should be examined by considering the imagined audience.

When online users deal with multi-audience, two strategies of disclosure have been suggested (Litt, 2012). One is selective sharing, that is, choosing certain content for a certain audience. On Google+, 74.8% of users engaged in selective sharing, 33.9% engaged in public sharing. 67.6% of items were shared selectively, while only 33.8% of items were shared publicly (Kairam, Brzozowski, Huffaker, & Chi, 2012). Semaan, Faucett, Robertson, Maruyama, and Douglas (2015) found that imagined audience influenced how they chose and engaged in

political participation. The results showed that online users' engagement was related to how they perceive the needs or expectations of their imagined audiences.

Balance is another strategy that people used to meet the expectations of their audience. People observed the audience's needs and tailored the posts in a way that others would accept, and then altered their personas in different social media platforms to approach different audiences (Semaan, et al., 2015). Facebook is the most studied platform in terms of the "balance" strategy—its technology affordance allows people to filter audience and customized privacy settings (Bernstein, Bakshy, Burke, & Karrer, 2013; Thorson, 2014). Thorson (2014) explored how young people engaged in political interaction on Facebook. Those young people expressed their political opinion in a neutral way when they found ambiguity of their imagined audience. The results suggest that people tend to balance their opinions to approach different audiences to avoid looking bad. Another study found that people may post personal tweets to approach friends and informative tweets to professional contacts (Marwick & Boyd, 2011). As for sharing available content, people may use both strategies by adding comments and selective sharing to approach their imagined audiences.

Imagined Audience in Different Tie-strength

To understand how individuals approach different audiences, it is better to first categorize the imagined audience. Brzozowski et al., (2012) categorized four types of audience: 1) inner circle such as family and close friends, 2) structured groups such as the circles where the users shared common interests and belonged to the same organization, 3) interest groups such as circles where users shared some interests but without other links, and 4) catch-all which includes both closely related people and others who were unrelated or loosely-related (Kairam, Brzozowski, Huffaker, & Chi, 2012). They further divided the four types of circles into two ties

based on the tie strength (Kairam, et al., 2012). Strong ties contained circles and relationships such as friends, family, girlfriend, and husband. Weak ties are distant acquaintances, random, and unknown (Kairam, 2012). But the categories might be over simplified. Litt and Hargittai (2016) defined four types of sharer-audience relationships—personal-ties such as close friends, communal ties such as a person who shared the same hobby, professional ties such as coworkers, and phantasmal ties such as the person they had an illusionary relationship such as celebrities.

The tie strength shapes individuals' sharing behavior. Zolkepli and Kamarulzaman (2015) illustrated that peer influence was the reason people started to use social media platforms. Quan-Haase and Young (2010) found that the use of instant message applications and Facebook fulfilled individuals' needs of socializing and communication. According to previous studies, people may tend to seek social approval and maintain social relationships when sharing information with strong ties (Kim and Lee, 2016; Woodside & Delozier, 1976). Seeking self-status and gaining social influence may be the motivations of sharing to a weak-tie audience (Bobkowski, 2015; Lee & Ma, 2012).

Self-presentation Motivation When Approaching Imagined Audience

At the beginning of the chapter, the researcher conceptualized sharing as a special form of eWOM. Early in 1966, Dichter found that WOM creators had the need to relieve tension by providing others their experience with a product. Other motivations of sending eWOM include self-enhancement, helping the company, altruism, and more (e.g. Hennig-Thurau et al, 2004; Sundaram, Mitra, & Webster, 1998). According to Litt (2012), one of the key motivations of sharing is self-presentation, especially when people perceive the behavior that can bring social benefits or risks (Baumeister & Hutton, 1987).

As Waller (1937) said, “it is…highly important for us to realize that we do not as a matter of fact lead our lives, make our decisions, and reach our goals in everyday life either statistically or scientifically. We live by inference” (p. 730), we interact with others by interpreting what they expect from us. The information we deliver to others helps the latter define who we are, so a person tends to create an impression that can evoke “a specific response he is concerned to obtain” (Goffman, 1959, p. 3). It suggests that self-presentation reduces uncertainty, misunderstanding, and confusion during interactions (Goffman, 1959).

Computer-mediated communication does not rely on physical contacts, rather, it depends on online activities such as message sharing as the “inference” (Bullingham & Vasconcelos, 2013). It makes the motivation of self-presentation more salient in the process. Any message has embedded beliefs and attitudes that are important identity indicators. Sharing a message may threaten people's self-image when they disclose their identity and position, especially when others oppose the stands (Baumeister & Hutton, 1987; Kim, et al., 2017). People may also build positive self-image if the messages bring social approval and gain attention from their audience (Baumeister & Hutton, 1987). Considering the social risks and benefits of sharing messages, sharers may carefully select the content to approach their imagined audience.

Controversality of Message and Sharing

The controversality of the message topic has been suggested to affect sharing (Kim & Ihm, 2019). Tie strength has been found closely related to sharing when the online audience was exposed to non-controversial versus controversial issues. As the literature review suggested, people care about shared content because they are concerned about how they present themselves to different groups on their social media (e.g. Kim & Ihm, 2019). Sharing messages on social media serves the function of maintaining positive impression and presenting ideal self-images to

their imagined audience (e.g. Turner & Onorato, 1999; Kim, Ihm, & Park, 2017). Therefore, sharing controversial issues may play a critical role in the self-presentation motivation. A controversial issue refers to the one that causes or is likely to cause disagreement due to a difference of opinion and values (Cambridge Dictionary, 2019). Controversial issues may threaten the sharer's self-image when they disclose their identity and position, especially when others oppose the stands (Baumeister & Hutton, 1987; Kim et al., 2017). Sharing controversial issues may also bring social benefits to sharers since it may gain more attention from their audience (Baumeister & Hutton, 1987).

Considering the social risks and benefits of sharing such issues, sharers may carefully select the content to approach their imagined audience. A relative study suggested that people were more likely to share highly controversial news to an open and asymmetrical social media, while share more moderately controversial news to a more close, symmetrical social media (Kim & Ihm, 2019), suggesting that people may be more concerned about their impression when facing a more strong-tie audience and less likely to share controversial issues to them. Sharers may also be less likely to use the strategy to gain attention from their close friends and family. However, whether people are more likely to share non-controversial societal issues is unknown. On one hand, any presentational behavior has risks and it may not bring much attention from their audiences. On another hand, they may perceive social benefits by the contribution to social justice and community wellbeing.

The Effects of Individual Factors on Message Sharing

In addition to source credibility, emotions, and imagined audience, there are a few individual factors that would influence sharing, namely, trustingness, issues involvement, prior sharing experience, and personalities.

Trustingness

Trustingness refers to people's propensity to trust others in the network, which should be examined separately from trustworthiness, which refers to the perceived others' intention when communicating (Nen-Ner & Halldorsson, 2010; Roy, Huh, Pfeuffer, & Srivastava, 2017). Trustingness can also influence how the audience elaborates messages and take actions, because a high level of trustingness may increase the likelihood of being persuaded. In other words, individuals who have higher trustingness scores are more likely to take the risk that they may act in a way that does not benefit them (Filieri, Alguezaui, & McLeay, 2015). For example, they would be more likely to share the information with their audience.

Issue Involvement

According to the Situational Theory of Problem-Solving Theory (STOPS), people's cognitive and affective involvement influences their attitudes and actions (Kamboj & Rahman, 2017; Kim & Grunig, 2011; Leckie, Nyadzayo, & Johnson, 2016; McKeever, McKeever, Holton, & Li, 2016). STOPS proposed that people use communications to solve life's problems. The theory indicates that the level of issue involvement positively predicts the likelihood of active communications such as seeking information and sharing information about problems (Kim & Grunig, 2011). The literature on activism usually uses this theory to explore how people become activists of issues (e.g. McKeever, McKeever, Holton, & Li, 2016). The theory provides the current study an approach to understand how people use communicative actions when facing social issues. Message sharing serves as an active communication behavior where the sharer "proactively and voluntarily spreads" the perception of the issue and "suggested solutions" (Chen, Hung-Baesecke, & Kim, 2016, p. 129). Therefore, the personal involvement of the issue shared may influence their sharing decision.

Prior Sharing Experience

Scholars of Uses and Gratifications and Reasoned Action Theory indicate that social media engagement is a goal-driven process (Katz, Blumler, & Gurevitch, 1973; Sheppard, Hartwick, & Warshaw, 1988). However, some studies argued that online activities were sometimes triggered by environmental stimuli (Leung & Wei, 1998; Ma & Lee, 2012; Yzer, 2013). Past sharing experience could potentially enhance people's self-efficacy of the behavior (LaRose, 2009). Self-efficacy is defined as "people's judgment of their capabilities to perform a given task" (Mun, & Hwang, 2003, p. 434). Scholars found that computer self-efficacy (CSE) positively affected the use of a specific system or feature of the technology (Mun, & Hwang, 2003), suggesting that their past experience on sharing increases their proficiency of using the figure and increases their likelihood of sharing. In addition, prior sharing experience increases the familiarity with the platform, which enhances people's perceived credibility of the medium (Lim & Van Der Heide, 2015). As their own perceived credibility increases, people are more likely to execute the sharing practice (Hsu, Ju, Yen, & Chang, 2007). After the repeated sharing practices, people's sharing behavior tends to become a daily routine rather than a planned behavior (Ma & Lee, 2012).

Furthermore, the feedback that people receive from their past sharing will affect their sharing decision in the future. Bernstein, Bakshy, Burke, and Karrer (2013) found people usually overestimate the size of their audience by overestimating the probability that the audience will like and comment on their posts, and that people observe cues such as likes and comments to predict their friends' reactions to their online posting behaviors. In addition, sharing and receiving information on social media such as Facebook are associated with a strong belongingness motivation (Jansen, Sobel, & Cook, 2011; Vogt & Knapman, 2007). The need to

belong leads people to seek social approval after posting on social media. Previous studies found that individuals who received positive evaluations tended to disclosure themselves more (Cozby, 1973), which indicates that the past positive feedback encouraged people to post and share more on their social media walls. In addition, since people also verify themselves through others' feedbacks, they may share less if they receive negative or no feedback from their peers (Leary, 1995). Therefore, prior sharing experience will influence the likelihood of sharing messages on social media.

Big Five Personalities

Big Five personality traits are five basic dimensions of personality (John & Srivastava, 1999). The Theory of Five Big Traits stated five core personality traits: emotional stability or, conversely, neuroticism—proneness to stress and anxiety; extraversion—being outgoing and dominant; openness—creativity, insightfulness, and imagination; agreeableness—being cooperative and considerate; and conscientiousness—responsibility, orderliness, and planfulness (Caspi, Roberts, & Shiner, 2005).

Studies on opinion leadership provide a link between personality traits and sharing behavior. Opinion leaders often have greater exposure to mass media, greater social participation, and higher socioeconomic status than their audience (Rogers, 1995). They exhibit the strong tendency of seeking and forwarding information (Bobkowski, 2015; Munzel & Kunz, 2014; Turcotte, York, Irving, Scholl, & Pingree, 2015; Weeks, Ardèvol-Abreu, & de Zúñiga, 2015). For example, Munzel and Kunz (2014) found that sharers engaged in multiple online communicative actions—eWOM creating and forwarding. People who share news via social media tend to perceive themselves as opinion leaders (Kümpel et al., 2015). Gnambs and Batinic (2012) found an association between extroversion, opinion leadership, and sharing, because

being “active in social situations (as central characteristics of extroverts) can be seen as a prerequisite for disseminating information and influencing others” (reviewed in Winter & Neubaum, 2016, p. 9). In the context of the Internet, however, Winter and Neubaum (2016) found that extraversion was not an indicator of opinion leadership, because less talkative people (introverts) might benefit from the computer-mediated communication, suggesting that introverts might be more likely to share. In addition, opinion leaders are earlier adopters who are more open to new ideas (Robertson & Myers, 1969), suggesting openness positively predicts sharing. Bobkowski (2015) found conscientiousness was negatively associated, whereas extroversion was positively related to forwarding product information. However, other traits were not found linking to sharing from opinion leader scholarship.

Self-presentation theory provides an explanation of how personalities influence sharing since sharing is an act of self-presentation. Seidman (2013) examined the impacts of personalities on three aspects of self-presentation, including self-presentational behaviors (general self-disclosure and emotional disclosure), attention-seeking, and the extent to which social media were “used to express different self-aspects (actual, hidden, and ideal)” (p. 404). The study found that neuroticism and extraversion are positively associated with self-presentational behavior, while agreeableness and conscientiousness are negatively related to attention-seeking. Extraversion, agreeableness, and neuroticism are positively associated with actual self-presentation; neuroticism is positively related to hidden and ideal self-presentation; conscientiousness is negatively related to hidden and ideal self-presentation (Seidman, 2013). Seidman's (2013) study suggests that message sharing may serve as the function of social interaction for extroverts who are more likely to disclose themselves online; neurotic people may be more likely to share messages due to the sensitivity of social acceptance and needs of social

contacts. Agreeable and conscientious individuals may be less likely to share online information since they have fewer needs for attention-seeking and presenting their ideal self. Conscientious people maintain a high quality of interpersonal relationships, take on “fewer distinct personas,” and present themselves in ways that are in line with the group norms (Asendorpf & Wilpers, 1998; Leary & Allen, 2011, reviewed in Seidman, 2013, 404). Therefore, they may be less likely to share any message that is inconsistent with the social norm and incongruent with their personal beliefs. As self-presentation facilitates social interaction by creating a public persona (Brown, 2014), agreeable and conscientious people have less need to create a persona through sharing because they tend to have good interpersonal relationships. They do not need to seek social approval through sharing.

CHAPTER III. CONCEPTUAL FRAMEWORK OF THIS STUDY

This study is an expansion and application of the Elaboration Likelihood Model (ELM) to social media sharing. The contemporary work on changes in attitudes brings Elaboration Likelihood Model (ELM) as a guide to understand how high- and low-effort processing of information influence people's decisions (Petty, 2018; Petty & Briñol, 2014; Petty & Cacioppo, 1981). ELM posits two ways of information processing, including central and peripheral routes. It proposed that attitude changes result from different processes depending on the degree of elaboration (Petty & Cacioppo, 1986). ELM provided a framework that a message tends to affect judgments by low-effort processes when the amount of elaboration is low, and also by high-effort processes when the amount of elaboration is high (Petty & Briñol, 2014). It suggests that the degree of elaboration moderates the persuasive process.

ELM's high effort process is based on the cognitive response theory which explains that changes in attitudes are affected by cognitive responses elicited by message factors such as the source after the audience carefully evaluates its credibility; whereas its low effort process is based on the heuristic mechanism that attitude changes are driven by simple source cues or other peripheral cues such as color or music (Petty, Wegener, & Fabrigar, 1997). Some studies on message source suggested individuals heuristically process information based on source cues such as perceived expertise (e.g. DeBono & Harnish, 1988; Eastin, 2001; Homer & Kahle, 1990). Political communication scholars also used ELM to explore the effects of party source cues on public opinion of persuasive messages (e.g. Mondak, 1993; Ratneshwar & Chaiken, 1991). It suggests that source cues have a strong impact on people's attitudes and follow-up actions.

The current study explored how source factors perceived source credibility and source

cues by differentiating the influence of original source, secondary source, and organization type on the likelihood to share a persuasive social cause message on social media. To examine the complexity of sharing behavior, it also investigates the effects of message factors—issue controversiality and emotional response to the message in the act of sharing. In addition, it takes into account of the role of online users' imagined audience in the decision to share.

Sharing is a process of persuasion, since previous studies found that its motivations are to facilitate cooperation and gain cognitive benefits of mutual empathy (e.g. Krasnova, Spiekermann, Koroleya, & Hildebrand, 2010; Nicholas, 2016). The act is a form of supportive communication that helps others access wider information and influence their decision-making process (Burleson & MacGeorge, 2002). Additionally, Hennig-Thurau and Walsh (2003) found that the motivations of self-confirmation and the need to belong would encourage information transmission because sharing facilitates people's social interaction and identity building process.

In the social media era, a message often involves multiple sources. A message posted by people may be shared multiple times by third-party sources such as their friends in social networking sites. The interaction of the sources influenced people's follow-up behaviors. Specifically, people who receive shared information from their family and friends are more likely to forward the information again (Mitchell, Gottfried, Shearer, & Lu, 2017), suggesting that people feel safe to share the "second-hand" information because it has been vetted by others and increases the likelihood of getting social approval (Ewoldsen, Rhodes, & Fazio, 2015; Geusens & Beullens, 2015).

Hypotheses and Research Questions

Source Cues and Credibility on Persuasion

To simplify the complex condition of exposure to an online message with multiple

sources, the current study compared two-layered (secondary) sources versus one-layer (direct) sources in terms of sharing. The two-layered source serves as a heuristic cue and implicit endorsement to the audience. It should facilitate the sharing with minimized risk as the message has been shared by someone an individual knows. Based on the ELM low effort theory model that individuals process information through a peripheral mechanism, the researcher hypothesized,

> **H1.** Facebook posts with a two-layered source are more likely to be shared than Facebook posts with an original source.

In strategic communication, organizations who carry the messages also matter in terms of people's judgment on the information. Audiences perceive nonprofits as being warm and caring (Aaker, et al., 2010), which may generate more trust in non-profit organizations. Anheier (2012) found that nonprofits were perceived as more trustworthy than for-profit businesses. In addition, nonprofits were found to be crucial in building civil society and to social accountability (Anheier, 2012). Nonprofits often advocate for social justice and play a significant role in solving social problems and bridging the nexus between social capital and economic development (Anheier, 2012). Those perspectives increase the perceived credibility of nonprofits as a source for featuring the social issues on Facebook with genuine purpose of supporting the issue. On the contrary, such messages carried by a for-profit source may be considered advertisements because a company is perceived as having a stronger competence in producing high-quality products and services (Aaker, Vohs, & Mogilner, 2010) and simply uses social cause as a strategy for its social media campaigns (Gulati, 2018, February 22; Lee, 2018, March 5).

Such stereotypes influence people's judgment on the two different types of organizations,

because judgment was retrieved from memory through the peripheral mechanisms that are able to generate attitude and behavior change without the cognitive processing (Perry & Wegener, 1998). In the current study, the individuals would be exposed to the Facebook posts featuring social issues. Sharing may be more likely to occur when the exposure is to a non-profit source, because people may generate more positive feeling for the non-profits. However, the secondary source (social media friends) may help for-profits to overcome the negative stereotypes, which may increase the perception of warmth. In other words, source type may interact with the organization type in predicting people's follow-up actions. Therefore, the researcher hypothesized,

> **H2a.** Facebook posts from a *non-profit* source are more likely to be shared than from a *for-profit* source.
> **H2b.** Facebook posts from a two-layered source with a *for-profit organization* as the original source and a secondary source from a friend on Facebook are more likely to be shared than from a two-layered source with a *non-profit* organization and a secondary source from a friend on Facebook.

In addition, individuals process information through both their central and peripheral routes. After the exposure to a persuasive message, people's follow-up behavior was influenced by their cognitive process through message assessment after evaluating a source's credibility, and by the heuristic process if the source credibility becomes salient in their mind. As the literature review discussed, a communicator's credibility influences the effectiveness of persuasion (Appelman & Sunder, 2015). Whether a message is carried by a believable, authentic, and trustworthy source is critical in changing people's attitudes and behavior. For example, people feel the information that comes from high credibility source is more useful, which increase the likelihood of acceptance (Sussman & Siegal, 2003; Zhang, Su, Pu, & Zhu, 2014).

Individuals perceive a non-profit organization as more credible since they usually do not question the intention of its communication—the messages are to increase awareness of a social problem and foster social changes (Anheier, 2012). Customers often find nonprofits are more caring than for-profits and generate more trust (Aaker, et al., 2010). Most recently, Harris Poll (2017) found U.S. consumers grant non-profit organizations higher "brand equity," which increases people's engagement with those nonprofits. Hence, people would be more likely to spread the word for nonprofits, because the eWOM behavior is one type of audience engagement. To test this credibility effect of non-profit on sharing, the researcher hypothesizes,

H3a. Higher perceived credibility of a non-profit organization increases the intention to share the Facebook post.

In Lafferty et al.'s (2000) dual credibility model, it revealed that endorser credibility had greater impacts on individuals' attitudes toward a promotional message, compared to the original source's credibility. Another study revealed a similar result that message endorsers' trust rather than creator trust had a stronger influence on individuals' attention and attitudes toward a brand message, suggesting that a message from a trusted sender can "overcome handicap a less trusted advertiser might have" (e.g. Cho, Huh, & Faber, 2014, p. 100; Dean & Biswas, 2001). In addition, some studies further linked the dual influence model to sharing that the perceived credibility of a sharer influenced secondary sharing (Shan, Liu, & Xu, 2018; Wu, Ji, & Liu, 2013). For example, Shan et al. (2018) found that the credibility of sharers increases the dissemination of haze information. It suggests that the endorsers may reduce the tension of evaluating the usefulness and increase the perceived value of the information. As a result, a credible sharer increases the likelihood of a message being shared. Hence, the researcher hypothesized,

H3b. Higher perceived sharer credibility increases the intention to share the Facebook post.

As the researcher discussed previously, online users are often exposed to multiple sources. The credibility of multiple sources may interact with each other to influence people's attitudes and behavior.

Sharer credibility may help the for-profit organization to overcome disadvantages. Sharer credibility may interact with the organization's credibility on sharing the Facebook posts. It may increase the association between for-profit credibility and sharing. However, sharer credibility may or may not increase the association. On one hand, it fosters sharing the message carried by nonprofits since people might think it gains more social acceptance, whereas decreases the association between the credibility of nonprofit and sharing because of individuals' strong perception of their role in advocating the social cause. People may think a highly credible non-profit source already makes it a strong case in influencing people's sharing behavior. Hence, the researcher hypothesized and raised a research question,

H3c. Higher perceived sharer credibility increases the effects of the credibility of for-profit source on sharing the Facebook post.

RQ1: How does perceived sharer credibility moderate the effects of non-profit source credibility on sharing the Facebook post?

Sharing Controversial Social Issues to Imagined Audience

Individuals' imagined audience influenced how they chose and engaged with online messages (e.g. Litt, 2012; Semaan, et al., 2015; Thorson, 2014). Imagined audience was oriented from the social network scholarship. The links in the social network were categorized into two

types—strong tie that refers to stronger links such as friends and weak ties that refers to the weaker link such as acquaintances (Easley & Kleinberg, 2010). Furthermore, Kairam, et al. (2012) identified online imagined audience into two types based on the tie strength. Strong ties contained close relationships such as family and close friends, while weak ties include online users who were unrelated or loosely-related (Kairam, 2012).

The current study concerns how sharing facilitates social relationship building and maintenance by presenting positive impressions. Based on self-presentation literature (e.g. Brzozowski et al., 2012; Kairam, et al., 2012; Litt & Hargittai, 2016), individuals tend to build positive impression when sharing a message on social media. There is no need to manage impressions and consider any risk if people choose not to share any message on Facebook. People begin to consider their imagined audience when using sharing as an impression management strategy. When they choose to share a message on Facebook, they primarily have three choices, namely *public* (anyone on or off Facebook), *friends* (all their friends on Facebook), and *specific friends* (choose specific friends to share, Facebook, 2019). *Public* includes people they know and strangers; *friends* include both strong-tie and weak-tie audience such as family, friends, professional ties, users who share similar interests, and who are loosely-related; and *specific friends* includes primarily strong-tie audience like close friends and family that they care about the most. People perceived low, medium, and high average tie-strength when sharing to these three categories, respectively. They may less concern the audience types and send uniform message by mass broadcasting (share to *public*), feel more concern their audiences and share messages by semi-narrowcasting (share to *friends*), and concern the audience a lot and cautiously share messages to selective audience by narrowcasting—share to their strong-ties only (share to *specific friends*).

As the literature review on imagined audience suggested, people care about shared content because they want to maintain a positive impression to approach different audiences on their social media (e.g. Kim & Ihm, 2019; Turner & Onorato, 1999). The researcher has argued that issue controversality influences how individuals select content to share. People are less likely to share controversial issues to their close friends and family rather than the weak-tie audience (Kim & Ihm, 2019), since they are concerned more about their self-image when facing audiences with a stronger tie. Sharing such issue less will help them avoid any disagreement from their social circle. However, it is unknown whether they would share non-controversial issues in terms of their perceived social risks and benefits of sharing. For example, people may want to share an environmental protection issue because they perceive fewer social risks and want to position themselves as an environmentalist in public, whereas may not share the message to their close friends to avoid negative stereotypes that "tree-hugger" and "hippie" were attached to environmentalists (Whitelocks, 2013, September 26).

In addition, source credibility may foster sharing differently in terms of the issue controversiality. A credible for-profit source is associated with high-quality products and services (Aaker, et al., 2010). If a source is credible, people might want to spread the word to help the company out (Hennig-Thurau & Walsh, 2004). As the researcher discussed earlier, audiences might feel that sharing a controversial social issue brings potential risks on self-presentation—when they share it, they not only take a stand on the issue, but also show their support for the organization. However, either a credible source or a salient source cue could decrease perceived social risks on sharing, which increases the likelihood of narrowcasting. Source factors may generate a greater impact on sharing controversial issues, compared to non-controversial issues that people perceive less self-presentation risks. Hence, the researcher

hypothesized,

H4a. Higher perceived credibility of a non-profit organization increases the sharing of controversial issues to the strong-tie audience.

H4b. Higher perceived credibility of a for-profit organization increases the sharing of controversial issues to the strong-tie audience.

For the two-layered source, people might feel safe to share the "second-hand" social issue because it has been vetted by others and increases the likelihood of getting social approval (Ewoldsen, Rhodes, & Fazio, 2015; Geusens & Beullens, 2015). Therefore, the presence of an online friend might effectively predict sharing, because it decreases the social risks of sharing a controversial issue. Hence, the researcher hypothesized,

H4c. The presence of a secondary source (sharer) increases the sharing of controversial issues to the strong-tie audience.

Because of the lack of theory and prior research evidence on the association between source credibility and the likelihood of sharing non-controversial issues, the researcher raised RQ2,

RQ2. How do people share non-controversial issues on Facebook when considering their audience with different tie-strength?

Emotions, Message Elaboration and Sharing

People usually rely on emotions to make their decisions (Petty & Briñol, 2014). Emotions can produce the effects of changing people's attitudes in response to a persuasive message (Nabi, 2002). ELM also provides a framework to understand how emotions play a role in the process (Petty & Briñol, 2014). As the researcher discussed, people tend to use the central route (high

degree of elaboration) to process persuasive messages by evaluating source credibility and pick up source cues under peripheral route (no or low degree of elaboration). The emotional response to a message should depend on both low and high degrees of elaboration to influence people's follow-up behavior. In other words, emotions affect sharing directly or indirectly through message elaboration (Petty, Schumann, Richman, & Strathman, 1993). They affect people's behavior by serving as simple, affective cues that produce judgements, or by affecting perception of arguments which biases thought or validates them when elaboration is high (Petty & Briñol, 2014). Many studies have examined the direct influence of emotions on people's attitudes and behavior (e.g. Greifeneder, Bless, & Pham, 2011; Schwarz & Clore, 1983). For example, Petty, Schumann, Richman, and Strathman (1993) found that emotions had a direct influence on attitudes toward a pen after the exposure to an advertisement, indicating that people use emotions as heuristic cue to process the information. In addition, emotions were found to enhance the processing of persuasive messages and argument quality when individuals elaborate the content more (Martin, Laing, Martin, & Mitchell, 2005). The emotional response to a trigger message may influence sharing through a heuristic process and can also influence people's sharing decision when they think more about the content.

According to Petty and Briñol (2014), the valence of the emotion matters in terms of thinking conditions. Positive emotions such as happiness are more likely to be associated with low-level elaboration, while negative emotions such as fear work well under high-level elaboration because people tend to figure out the consequences of the situation (Petty & Briñol, 2014). In the appraisal theory of emotion, Ellsworth and Smith (1998) explained that positive emotions were associated with confidence and negative emotions were linked with doubt, suggesting that positive emotion states of individuals will make them feel that the environment is

safe enough not to cost any cognitive effort to process the information, whereas negative emotions indicate that the current situation is problematic, requiring more effort to process the information (Schwarz & Clore, 1983). Hence, elaboration may mediate the effects of negative emotions on sharing rather positive emotion states. The researcher hypothesized,

H5a. Higher *positive emotions* directly increases the sharing of *non-controversial* issues to the strong-tie audience.

H5b. Message elaboration mediates the effects of *negative emotions* on the sharing of *non-controversial* issues to the strong-tie audience.

Furthermore, emotions may influence sharing differently in terms of issue controversiality. The emotional response to a controversial issue may easily trigger sharing in a heuristic and irrational process because the issue generates more personal relevance, whereas emotional response to a non-controversial issue with less individual involvement may lead to more thinking, influencing their sharing decision. Additionally, using the imagined audience argument, sharing social issues served the function of presenting oneself, so sharers feel less pressure in sharing non-controversial issue with their strong-tie audience. As for the controversial issues, emotional response may overcome the perceived social risk of sharing such issues because it affects individuals heuristically.

Based on the above discussion on the effects of emotions on message elaboration in *controversial* issues, the researcher hypothesized,

H6a. *Higher positive emotions* directly increases the sharing of *controversial* issues to the strong-ties audience.

H6b. Higher *negative emotions* directly increases the sharing of *controversial* issues to

the strong-ties audience.

The Moderation Effect of Sharer Credibility on Sharing

In addition to the emotional response to the message, other factors also moderate the effects on information processing and sharing, such as source credibility. As the researcher discussed at the beginning of the chapter, the communicators' credibility has a strong impact on the information process. Heuristic processing that individuals perceive source credibility as a cue can influence systematic processing (Chaiken & Maheswaran, 1994). More recently, Smith, De Houwer, and Nosek (2013) found that source credibility only moderates the persuasiveness of a message when people elaborate on the message. According to the previous literature and the discussion on the effects of sharer credibility on sharing (e.g. Cho, et al., 2014; Lafferty, et al., 2000; Mitchell, et al., 2017), sharer credibility may produce a moderated mediation effect on sharing so that the sharer credibility moderates the effects of emotions produced by the message on sharing. Although people may not have a high-level of elaboration when they produce positive emotions, people's evaluation on the sharer credibility may trigger a cognitive process. Therefore, the effects of both positive and negative emotions on message elaboration in sharing decisions may be mediated by sharer credibility in non-controversial issues. The researcher hypothesized,

> **H7a.** Sharer credibility moderates the mediating effects of message elaboration on *positive emotions* and the sharing of *non-controversial* issue to the strong-tie audience.
>
> **H7b.** Sharer credibility moderates the mediating effects of message elaboration on *negative emotions* and the sharing of *non-controversial* issue to the strong-tie audience.

In addition, people are concerned about how they present self-images when they decide

to share a controversial issue as it is more risky to them, but they may feel it is less risky to share "second-hand" controversial information because it has been vetted by others (Ewoldsen, et al., 2015), suggesting that the messages from a two-layered source may increase the likelihood of being shared, especially when they carefully evaluate the credibility of the sharer and their emotions are strong. Hence, the researcher hypothesized,

> **H8a.** Sharer credibility moderates the mediating effects of message elaboration in the relationship between *positive emotions* and the sharing of *controversial* issues to the strong-tie audience.
>
> **H8b.** Sharer credibility moderates the mediating effects of message elaboration on *negative emotions* and the sharing of *controversial* issues to the strong-tie audience.

CHAPTER IV. METHODOLOGY

Experiments

The nature of experimental design is to observe causal effects of one variable on another (Singleton & Straits, 2005). Experimental design is based on the counterfactual model that aims to estimate the causal relationships of observational data in a group-level (Morgan & Christopher, 2007). Three standards for causal inferences of experimental design should be followed (Singleton & Straits, 2005). First, it requires independent variables should be correlated with dependent variables. Second, independent variables should happen before the outcome variables. Third, there should be no spuriousness. This means that all the extraneous variables should be controlled in experimental settings.

As articulated in the previous chapters, the researcher proposed that one- and two-layer source credibility might influence individuals' Facebook post sharing behavior through the central and peripheral routes. Hence, experimental design is an appropriate method to test the hypotheses by manipulating message sources and controlling other factors that may affect the results.

Due to the nature of the experiment, the design is high in internal validity that refers to how confidently the independent variables cause dependent variables (Singleton & Straits, 2005). However, the external validity is relatively low compared to other scientific research methods such as survey and field experiments. In other words, the extent to which the results of a laboratory-designed experiment can be generalized to the research population is relatively low (Marsden & Wright. 2010). For example, the observed behavior of the subjects may not be the true behavior in their real life, so that the results cannot be generalized to the research population. To compare with lab design, field design of experiment has higher external validity

but lower external validity (Singleton & Straits, 2005). Field experiment refers to "studies that meet all the requirements of a 'true' experiment but are conducted in a natural setting" (Singleton & Straits, 2005, p. 178). The experiment will take place as subjects of the study are going about a common activity (Singleton & Straits, 2005). The design has a higher ability of generalization but lacks a controlled setting to eliminate all extraneous variables.

Several issues will decrease the internal validity of the experiment, including history, maturation, testing, instrumentation, regression toward the mean, selection, attrition, and ambiguous temporal precedence (Campbell, 1957; Singleton & Straits, 2005). The researcher discussed the following factors that may potentially influence the results of the current study.

History

External events that happen during the experiment, such as news related to the research topics, will affect the study (Campbell, 1957). It is much easier for subjects to access media content through social media today. According to the Pew Research Center, 69% of U.S. adults use at least one social media site and about two-thirds of Americans get news on social media (Bialik, & Matsa, 2017; Pew Research Center, 2017). The type of internal validity issue is more likely to happen due to the easy access. However, the issue can be controlled by having a control group (Campbell, 1957). If history affects subjects, it happens in both groups.

Testing

The initial test will influence the scores on the "subsequent exposure to the test" (Shadish, Cook, & Campbell, 2002, p. 55). The participants of the study may learn from the instrument. It usually happens in the pretest-posttest design (Singleton & Straits, 2005). The current study will use a pretest-posttest design, and the issue cannot be avoided. However, the

current study used a two-wave experiment design with a one-day gap to reduce the testing effects.

Selection

Selection bias in experimental groups and control groups will influence the results (Singleton & Straits, 2005). For example, all the subjects in the experimental groups use Facebook, while subjects in control groups do not use Facebook at all. To reduce the bias, the subjects will be randomly assigned to each group. During statistical testing, the confounding variables such as social media use will be controlled. In addition, a comparison between groups in the pre-test will also provide a check for the sampling differences (Campbell, 1957).

Attrition

Some subjects drop out of the experiment. The different dropout rate between the experiment and control group causes bias (Singleton & Straits, 2005). To respond to attrition, the current study eliminated the subjects who drop out from the experiment during the data analysis.

Ambiguous Temporal Precedence

This refers to the confusion of which variable is the cause and which is the effect (Shadish, et al., 2002). The current study examined the effects of source credibility on sharing. Hence, the credibility cue and elaboration on the source are the antecedents of message sharing.

In the current study, it is important to examine the causal relationships between the factors and the sharing behavior. Hence, it is better to use a laboratory-design that allows controlling extraneous variables to draw the causal inferences. The current study used an online-based two-wave experiment to examine the effects of one- and two-layer source credibility on sharing of Facebook posts and test the hypotheses. Qualtrics was the instrument used to inquiry people's perceptions and behavior.

Study Setting

The study was based on Facebook to examine the sharing phenomenon. Facebook is the most widely used social media site, compared to other platforms, and generates the most advertising revenue (Pew Research Center, 2018, February 5). It was a part of 74% Americans' daily routine and comprises diverse demographic groups in terms of gender, race, and age (Pew Research Center, 2018). A total of 93% (about 3 million) of marketers used Facebook advertising regularly, while the average posting frequency was 8 times per day. Thirty-nine percent of marketers want to increase their posting frequency, but the organic (non-advertised) reach of the content was only 2% on average (Osman, 2018). This is because social media algorithm usually prioritizes posts from friends and family over content publishers such as brands (Cohen, 2018, January 16). Hence, it is important to understand the sharing phenomenon so that organizations' messages can be diffused to a wider audience to increase the organic reach of the content. In addition, many other social media have similar technological affordances as Facebook, which allows people to share messages with their friends. Sharing is the main characteristic of social media and thus the insights learned from this study could also be applied to other social media. Both for-profit and non-profit organizations need to boost ordinary social media users' sharing to promote their organizations, products, and services.

Participants

Sampling Method and Procedures

The researcher used Amazon Mechanical Turk (MTurk) sampling pool to recruit subjects in the current study. MTurk is an online platform for recruiting subjects to perform tasks and widely considered a cost-effective and efficient tool for survey experiments (Berinsky, Huber, &

Lenz, 2012). The sample is more representative and diverse than other convenience samples, such as college students who share a similar age, location, and income (Berinsky, et al., 2012).

Scholars have concerns of MTurk as a sampling frame for several reasons. First, MTurk workers do not reflect the American population--for example, they tend to be highly-educated but have low-income (Berinsky, et al, 2012). However, since experiments aim to examine the causal relationship between two or more variables in a controlled setting, it is more important to observe subjects' cognitive processing after some certain stimuli than to maintain the sample's demographic representativeness (Berkowitz & Donnerstein, 1982).

Second, the online platform lacks laboratory control, which reduces the internal validity (Singleton & Straits, 2005). Some Turkers may be doing other things during experiments, which may decrease the quality of their answers. The internal validity will also reduce when the experienced Turkers may have done too many experiments so that their outcome behavior is more automated than spontaneous (Chandler, Mueller, & Paolacci, 2014). However, Marder's study (2015) still found MTurk data of higher quality in terms of survey scale reliability, compared to other sample pools. Most of the workers care about their works on MTurk while earning money from it (Mason & Suri, 2011). In addition, MTurk has a built-in reputation system for workers, which allows researchers to reject workers' submission that "goes on their records" (Mason & Suri, 2011, p. 6).

Third, some scholars are concerned about the dropout rate in MTurk (Berinsky, et al, 2012). Dropout will cause sampling bias in a pre- and post-test experiment setting (Singleton & Straits, 2005). The subjects who choose to participate in the second-wave study may possess certain characteristics that the people who drop out do not have. To ensure data quality and

minimize dropout rate, several tactics can be used in the experimental design. The tactics will be discussed in the *Experimental Design* section below.

Data Collection

The researcher received the university's Institutional Review Board (IRB) approval on September 22nd, 2018 and collected the first-wave (pretest) data from September 24 to September 30, 2018. The second-wave data was collected from September 25 to October 15 through email distribution, see Appendix 1. Email addresses were collected in the first-wave for the second-wave questionnaire distribution and dataset matching.

A total of 891 respondents participated in the first-wave (pretest). Seventy-eight of them never used Facebook before. Forty-one respondents did not disclose their email addresses. Eighteen respondents did not include a Facebook friend name in the survey, which made their ratings of sharer credibility unqualified. Three respondents completed the whole survey in less than 200 seconds, and therefore, was eliminated from the dataset to ensure data quality. All of the above individuals are excluded from further analyses. Hence, it left 751 qualified subjects whom the researcher invited to the second-wave questionnaire (posttest).

24 hours after the subjects completed the first-wave questionnaire (pretest), the researcher sent the first-round emails to invite subjects to participate in the second-wave questionnaire (posttest) with a post-pay method—the participants got paid after completing the survey. The researcher sent second- and third-round emails to the subjects who had not finished the second-wave questionnaire after 48 and 72 hours. The method was adopted from Stoycheff (2016) to increase the response rate, see Table 1. The researcher sent the final distribution emails on October 8, 2018, and closed the survey one week afterward. In addition to the notification emails, some tactics were used to enhance the response rate. The researcher included the money-

incentives in the email title by saying, "Complete follow-up survey for ONE-dollar bonus from Amazon MTurk." In the main body of the email, it clearly indicated the study name that respondents saw in the first-wave questionnaire (pretest) at MTurk, see Appendix 1. At the end of the second-wave questionnaire (posttest), the participants received an end-survey message that explained how they would receive the bonus.

Table 1

Response Rate

	After 24 hours	After 48 hours	After 72 hours	Final round
N (In total)	261	340	404	436
Response rate	35.70%	46.51%	55.27%	59.64%

In the pretest, 731 participants provided a valid email address. The report of the response rate upon each round of email distribution is as followed, see Table 1. Participants were randomly assigned to each of the four experimental conditions to avoid pre-conditions of subjects that bias the effects of treatment on outcome variables (Morgan & Christopher, 2007; Singleton & Straits, 2005).

Experimental Design and Procedure

Pretest Design

The current study used a pretest-posttest two-wave experimental design. A pre-test examined subjects' perceived sharer and organization credibility, previous sharing experience, trustingness, the familiarity of organizations, issue involvement, social media use, big-five personality, and demographics including gender, age, education, income, and race.

Sharer credibility and organization credibility are the major independent variables in the study. Based on the research model, individuals' perception of sharer's credibility and

organization credibility, and the interaction between the two sources affect their reactions and behaviors. The researcher included those variables in the pretest instead of the posttest to reduce halo effects on the people's rating of the credibility that could influence the results in the posttest (Shadish, Cook, & Campbell, 2002; Singleton & Straits, 2005). To improve the authenticity of the study, the researcher asked each participant to name one friend who was the most active on Facebook and then evaluate his or her credibility. This is because the listed friend would be manipulated as the sharer in the post-test. A non-profit (United Nations Foundation) and a for-profit (Frontier Airlines) organizations were selected as the target organization for the experiment. To reduce the halo effect of the target organizations on the posttest, the researcher asked participants to rate the credibility of three organizations (two targets and one non-target) instead of only the two target organizations. Hence, the participants evaluated their perceived credibility on one non-profit (United Nations Foundation) and two for-profit (Westin Hotel and Frontier Airlines) organizations.

Issue involvement, previous sharing behavior, and perceived social approval on the past sharing experience were used as the antecedents of sharing in the current study. According to the literature and research model, those are the factors that positively contribute to people's sharing intention and behavior. Familiarity and likability of the organizations serve as the antecedent of organization source credibility, while the general trustingness on others is the antecedent of sharer credibility. Social media use, personalities, and demographics were used as the control variables in the current study. The researcher also collected the participants' social media usage pattern to compare with the general population to see how much they resemble the general population.

Posttest Design

Between-subject Experimental Design. The researcher used an online survey-based experiment with a 2 (non-profit organization vs. for-profit organization) X 2 (original source vs. two-layer/secondary source) factorial design with four conditions: original message posted by a non-profit organization (O_1), by a for-profit organization (O_2), the message shared by a friend who shared from a non-profit organization (O_3), or from a for-profit organization (O_4).

A factorial design includes more than one independent variable, which could test the interaction effects of independent variables on the dependent variables. The interaction effects represent a joint effect on dependent variables (Campbell, 1957). The factorial design was used because the main focus of the study is the interaction effects of the sharer and original source on people's message elaboration and sharing behavior.

Based on the pilot testing (see details below), a non-profit organization--United Nation Foundation and a for-profit organization--Frontier Airlines was selected, See Figure 1 for the between-subject design.

One- or two-layer Source	Organizational Type: United Nations Foundation (Non-profit organization)	Organizational Type: Frontier Airlines (For-profit organization)
Original source only	O_1	O_2
Original source plus a sharer	O_3	O_4

Figure 1. *Factorial Design*

Within-subject Experimental Design. The researcher also used within-subjects design in the posttest. The within-subject factor was a message topic about social issues, which tends to replicate the results through separate tests (Slater & Rouner, 1996). The design would also increase the external validity of the experiment, because people tend to be exposed to messages in clusters in social media settings. In addition, the study did not aim to examine a particular issue. The design could make sure that the source effects on sharing can be replicable in different issue settings.

Each participant was exposed to six stimuli messages featuring different issues that were sent by a source or the two-layer source. By reviewing recently successful social media marketing campaigns (Gulati, 2018, February 22; Lee, 2018, March 5), Facebook's review of 2017 (Gleit, 2017, December 5), and Google Trends (Google, 2018), six critical issues that people usually discussed were selected, including *environmental protection*, *feminism*, *animal*

welfare, *children's welfare*, *LGBTQ rights (lesbian, gay, bisexual, transgender, and queer)*, and *psychological well-being*. Also, the issues were chosen because they are global issues that are not limited to a specific nation or a region. *Environmental protection*, *animal welfare*, *children's welfare*, and *psychological well-being* were identified as non-controversial issues, while *feminism* and *LGBTQ rights* were identified as controversial issues. Although LGBTQ rights has made stunning progress these years, a report from World Economic Forum revealed that many non-LGBTQ Americans still felt less comfortable with their LGBTQ neighbors (Rosenberg, 2018). As for feminism, the issue itself is not controversial. However, people usually misunderstand it as its movement raises the problem of gender inequality. "Feminism" was often misinterpreted as the opposite of "masculism" and that feminists want to take power away from men, which makes it controversial (British Libarary, 2013).

In each of the four conditions, the six issues were randomly and evenly presented to the subjects to avoid the order effects. For example, people may be more likely to share the post featuring *children's welfare* if it is always the first one to be presented to them. The random order assignment can rule out the order effect of the post.

After exposure to each message, the researcher asked the subjects whether they want to read the full article in the post. They could choose "yes" to access the full article. All the articles were 120-190 words long. Regardless of their willingness of reading the full article, all subjects were subsequently asked to choose whether they would like to share the post or not. In terms of the sharing decision, they have the choice to share with different audience groups, including *the public*, *Facebook friends*, and *specific friends*. In addition, the subjects were also asked to rate their emotions immediately after reading the posts to measure the impact of emotions to the message on sharing.

Pilot Testing

The pilot testing was used to determine the organization choice and test the pretest and posttest questionnaires. The researcher conducted the pilot study after receiving the Institutional Review Board (IRB) approval.

Organization Source Selection. To decide the organization sources, the researcher used a separate questionnaire by providing a list of for-profit and non-profit organizations and asking the participants to rate the familiarity of each. The researcher chose the organizations that participants were moderately familiar with to decrease the effects of strong pre-existing attitudes toward the organizations on the credibility and their follow-up behavior after exposure to the sources. These MTurkers were recruited separately from the main study but similar in profile to the participants of the main study.

All non-profit and for-profit organizations on the list were based in the United States. The questionnaire includes 31 foundations and 32 profit organizations. The researcher chose to use non-profit foundations because their nature is to make grants for a variety of purposes, namely, educational, scientific, cultural, religious, or other charitable purposes (Grantspace, 2018), which makes it appropriate to carry Facebook posts featuring different social issues. For example, non-profit organizations such as Animal Welfare Approved and EARTH University specifically advocate for animal and environmental protection. On another list, the researcher chose for-profit organizations under three industries--hotel or hotel chains such as Marriott, Hilton, and Hampton, insurance companies such as State Farm, Allstate, and Liberty Mutual, and airlines such as Delta, Alaska Airlines, and Frontier Airlines, as well as top brands such as Apple and IBM used for comparison. Several considerations were used in the industry selection.

Airline companies are usually involved in crises in terms of the nature of the industry. They face safety and customer service issues, let alone the reputation crises that can be found. United Airlines suffered from a crises when the videos of law enforcement officers dragging a passenger off its plane and baggage handlers breaking Dave Carroll's Taylor guitar went viral (Czarnecki, 2017; Huffington, 2009). In addition, the competition on price and destinations increase the needs of public relations practices. For example, Frontier Airlines has 97 U.S. domestic destinations, while Alaska Airlines has more than 115 destinations across the US, Canada, Mexico, and Costa Rica (Frontier, 2018; Alaska Airlines, 2018). Compared to larger companies such as Delta, they are more competitive on price but less competitive on the national reputation and numbers of destinations. The latter offers service to 304 destinations in 52 countries for 180 million customers each year (Delta, 2018). Hence, it is important for public relations practitioners to brand the image of those airline companies and to handle crisis situations.

The hotel industry in the United States is even more competitive than the airline industry. The U.S. has the world's most famous city destinations. In 2013, more than 53,090 new hotel rooms opened in the United States and it has been forecasted that 145,030 new hotel rooms would open by the end of 2018 (Statista, 2018a). In addition, the rise of rental platforms such as Airbnb increases the needs of hotel branding on social media era. Similarly, the companies in the insurance industry compete with different types of insurance for life, health, property and casualty insurance, and homeowner. However, the advertising investments are too large for smaller insurance companies to afford. For example, State Farm spent 521 million U.S. dollars, while Liberty Mutual invested 270 million U.S. dollars on their advertising in the year 2017 (Statista, 2018b). Hence, social media open a new door for insurance companies to market their

products with relatively lower costs. According to Statista (2018b), 76.6% young insurance agents used Facebook, 83.3% used LinkedIn, and 30.8% used Twitter to brand their products in 2018. Hence, the researcher selected brands from the above three industries in the pilot testing.

In the pilot testing, 101 participants were asked to rate the familiarity of the total of 63 organizations from a 0-100 scale. "0" indicates that the subjects did not know the organization at all, while "100" indicates that the subjects were very familiar with the organization. The questionnaire was available for the people whose 1) location was in the United States, 2) number of approved tasks on MTurk was less than or equal to 50, and 3) task approval rate was greater than or equal to 95%. Demographic information including gender, age, income, and education was collected, which is similar to the requirement for the main study.

The results of a frequency test suggested that the organizations' familiarity mean scores ranged from 40-60 (medium familiarity) include United Nations Foundation (M=59.85), The Heritage Foundation (M=48.63), Rotary Foundation (M=40.73), W. K. Kellogg Foundation (M=43.28), Frontier Airlines (M=56.85), AIG (M=54.40), Travelers Insurance (M=59.51), Alaska Airlines (M=55.54), American Family (M=49.93), Allegiant Air (M=48.38), Westin Hotel (M=54.4), compared with Apple (M=92.7) that was far more familiar by United States respondents. A series of t-test analyses suggested that the United Nations Foundation and Frontier Airlines was the most appropriate pair among others, see Table 2. A pair-sample t-test showed that there were no significant differences between the familiarity scores of the two. People's familiarity with the two organizations has no significant difference across age, income, education, and social media use preference. However, males (M=67.61, SD=34.83) are more familiar with Frontier Airlines than female (M=48.20, SD=39.68). The researcher shall control

gender when examining the effects of source credibility on subjects' following-up reactions and behavior.

Table 2

Familiarity of United Nations Foundation and Frontier Airlines

	N	***Mean***	***SD***	***Min***	***Max***
Frontier Airlines	74	56.85	38.58	0	100
United Nations Foundation	73	59.85	31.61	3	100

Finally, the researcher chose a non-profit organization--United Nation Foundation and a for-profit organization--Frontier Airlines to carry six Facebook posts featuring environmental protection, feminism, children's welfare, animal welfare, LGBTQ rights, and psychological well-being.

Testing Pretest and Posttest Questionnaires. The researcher conducted a pre-test of the research instrument using the selected organization source in the pretest (1st wave) and embedded them into the Facebook posts to test the posttest questionnaire (2nd wave). In the first-wave questionnaire, a total of 90 subjects were recruited from MTurk with three filtering metrics: 1) number of finished surveys approved is less than or equal to 50, 2) finished survey approval rate is greater than or equal to 95%, 3) location is the United States. Three days after, invitation emails with one-dollar bonus were sent to the participants who completed the first-wave questionnaire through MTurk. Through the link provided in the emails, a total of 34 subjects completed the second-wave questionnaire. The response rate was 37.78%. The researcher included an open-ended question at the end of the two surveys and asked whether

there was any question or wording in the questionnaires that the participants did not understand or felt confused. Several issues were identified from the pre-test.

The researcher used frequency analysis to screen all the variables and used Cronbach alpha to analyze the reliability of the measures of sharer credibility, organization credibility, trustingness, perceived social approval on past sharing behavior, and issue involvement. The researcher found that the reversed items led to low alpha scores of issue involvement, trustingness, and one dimension of organization credibility, and thus, changed items into the same direction to avoid participants' carelessness in taking the survey. Given the changes made in those three variables and to maintain the consistency, the researcher also changed all other items within one construct to the same direction to improve the reliability of each measure.

Based on the open response box in the first-wave (pretest), a few respondents reported that they had difficulties rating the organization's credibility if they did not know the organization in the first place. Hence, in the final study, the researcher let the subjects rate the familiarity of the organizations. If they rate as 0 indicating that they did not know anything about the organization, they shall not rate its credibility.

The major issue of the second-wave questionnaire (posttest) was the emotion measurement. In the pilot-testing, the researcher adopted the dimensional emotion scale (AdSam Scales) to evaluate respondents' affections after exposure to the Facebook posts. AdSAM® is a self-assessment Manikins used to rate respondents' affective dimensions of valence, arousal, and dominance (Bradley & Lang, 1994). However, a few of participants indicated that they felt it was hard to understand the scale. For example, one participant said, "I don't quite understand what you mean by ‘dominate' do you mean in control of the situation in the article or in control when you see said post." Another reported, "Manikins were hard to determine what they meant. I

assumed the first was happy/sad and the third was small/big but wasn't sure on the middle. I guessed angry/calm but wasn't sure." The researcher used the discrete emotion scale instead. First, it is easier for subjects to understand the questions. Second, it is more widely used in the literature of media effects, which is also the focus of this current study (Myrick, 2015). Third, several dimensions of affection directly associated with individuals' sharing behavior, which has been discussed in the literature review (Myrick, 2015).

Another issue of the second-wave (posttest) was the low response rate. Only 37.78% subjects participated in the post-test, which led to the attribution bias. To improve the response rate, the researcher used a different distribution method by sending multiple emails and post-pay in the final data collection as suggested by Stoycheff (2016). Furthermore, the researcher found that the time frame (3 days) between the two waves might be too long for the subjects who might lose the interest in the study. In the final study, the time frame was shortened to 24 hours. The researcher then distributed the revised pretest and posttest questionnaires through MTurk and emails in the final study, respectively.

Stimuli

The subjects were exposed to a set of six posts carried by one of the four conditional sources. The manipulation simulated the real experience of viewing a Facebook post. The researcher kept Facebook's design, including brand logos, fonts, font colors, and the posts' metric buttons including "like," "comment," and "share." For the sharer-organization combined-source treatment (O_3 and O_4), the researcher created a scenario in the stimuli by saying, "Below is a Facebook post from the United Nations Foundation, shared by your Facebook friend_____." The researcher used the "Carry Forward Choices" function of Qualtrics by showing the name of the Facebook friend that subjects had listed in the pretest and identified

again at the beginning the posttest questionnaire, see Appendix 2. Then, six stimuli posts were presented to each subject in a random order. The sample stimuli for the six issues can be found in Appendix 3.

Attention Check and Manipulation Check

It is necessary to have a procedure to test the effectiveness of independent variables on dependent variables and to avoid "skim instructions, missing key elements of the task or manipulation" (Oppenheimer, Meyvis, & Davidenko, 2009, p. 867). For the attention check of the current study, the researcher used the following tactics.

First, the researcher checked the time duration that each subject spends on finishing the experiment. Considering the skip logic and the pilot testing, the researcher eliminated the responses that lasted less than 200 seconds as unreasonably short.

Second, this study did not use the experienced MTurkers--*Masters*, and filtered MTurk works by the three filtering metrics: 1) number of finished surveys approved is less than or equal to 50, 2) finished survey approval rate is greater than or equal to 95%, 3) location is the United States, to avoid the automated behaviors after exposure to a random experiment condition (Marder, 2015).

Third, in the case that some subjects rush through the questionnaire by choosing "no" without paying attention to the stimuli, the researcher included the following instruction,

> *You will read 6 Facebook posts from an organization or shared by one of your Facebook friends. Please read the entire posts and answer the short questions such as your emotions and whether you want to repost them.*
>
> *Please answer the questions based on what you normally will do on Facebook. It will not shorten the questionnaire by saying "No."*

Fourth, the researcher checked whether the participants paid attention to the Facebook posts by asking, “What are the issues in the Facebook posts?” Since there were six issues featured in the posts, the research provided a list of ten choices for the subjects to select. It included *environmental protection*, *gun control*, *animal welfare*, *education*, *psychological wellness*, *autism*, *women’s rights/feminism*, *peace*, *LGBTQ*, and *child welfare*. The researcher did not choose issues such as *animal protection* beside the posts’ issues to avoid making any confusion of the respondents.

Fifth, to prevent participants from simply signing up to take the study without completing it, the researcher assigned them a random number via Qualtrics. They will receive the numbers and the payment only after they finished the survey.

Sixth, bonus granting method was adopted in the current study, which has been found effective in maximizing response rates in longitudinal MTurk designs (Stoycheff, 2016). Hence, the subjects received $0.50 for participating in the first-wave questionnaire (pretest) and received $1.00 bonus through Amazon Mechanical Turk for participating in the second-wave questionnaire (posttest). According to a previous study, the amount of payment influenced subjects' behavior (Mason & Suri, 2011). Mason and Suri (2011) found that the majority of Turkers care about the money made through MTurk. However, there is little to no change in behavior "in going from a low amount to a higher amount" (Mason & Suri, 2011, p. 9). According to the same study, the reservation wage of workers is $1.38 per hour, therefore, fifty cents is an ethical and reasonable price for the subjects in the current 10 to 15 minutes survey. To encourage them to participate in the second-wave questionnaire, the researcher doubled the incentive by granting them a $1.00 bonus if the subjects finished the second-wave questionnaire.

Poor quality responses with many missing data and signs of satisficing in the pretest were not invited to do the posttest.

For the manipulation check, the researcher asked, “Who posted the Facebook post” by giving a list of six sources, including “one of your Facebook friends,” “State Farm,” “Frontier Airlines,” “United Nations Foundation,” “Amazon,” and “Marriott.” The subjects were excluded from the data analysis if the answers were incorrect.

Measurement

Perceived credibility of the post creators (organizations) and sharers, trustingness, issue involvement, social media use, Facebook use, Facebook network size, past sharing behavior and experience on Facebook, personalities, and demographics were put in the pre-test (1st wave questionnaire). A post-test (2nd wave questionnaire) examined people's message elaboration, emotions, the likelihood to read the full article of the posts, and sharing behavior after exposure to six Facebook posts. A summary of scales can be found in Table 3.

Table 3

The Summary of Scales

	Variable/Scale	Sources
Pre-test	***Sharer Credibility***	Adapted from McCroskey & Teven, 1999; Developed a new dimension based on Rogers, 1995; Jahng & Littau, 2015
	Organization Credibility	Adapted from sharer credibility scale
	Trustingness	Adapted from Ben-Ner & Halldorsson, 2010; Sote & Good, 1974
	Prior Sharing Experience	Adapted from Choi, 2016
	Perceived Social Approval	Developed the scale based on Bernstein, Bakshy, Burke, & Karrer, 2013
	Issue Involvement	Adapted from McKeever, McKeever, Holton, & Li, 2016
	Personalities (10-item Big Five)	Gosling, Rentfrow, & Swann Jr., 2003
Post-test	***Valence of Emotions***	Dillard & Shen, 2007; Fredrickson, 2013; Goetz, Keltner, & Simon-Thomas, 2010; Myrick, 2015
	Sharing Dimension	Adapted from Choi, 2016

Independent Variables

Sharer Credibility. Prior to evaluating the credibility of subjects' Facebook friends who became the sharers of Facebook posts, the researcher asked the subjects to list the name of their Facebook friend who was the most active on Facebook. The researcher encouraged them to fill out the full name of the friend to evaluate the credibility of the person. The name was also used in the second-wave questionnaire when the subjects were randomly assigned to the mixed-source conditions. Sharer credibility was constructed by four dimensions with a seven-point bipolar

scale of 20 items. Three dimensions were adopted from McCroskey & Teven (1999). The researcher also develops a new dimension by examining the literature on opinion leadership (Rogers, 1995; Jahng & Littau, 2015), see Table 4. The four dimensions are *competence*, *trustworthiness*, *goodwill*, and *resourcefulness*. The closer to an adjective, the more certain they are of their evaluation of the friend. For example, *intelligent* is one item under the *competence* dimension. Choosing "1" indicates that the subject thinks his/her Facebook friend is more intelligent than if choosing "2."

Table 4

Sharer Credibility Scale

Competence		
Informed	1 2 3 4 5 6 7	Uninformed
Qualified	1 2 3 4 5 6 7	Unqualified
Intelligent	1 2 3 4 5 6 7	Unintelligent
Expert	1 2 3 4 5 6 7	Inexpert
Intellectual	1 2 3 4 5 6 7	Unintellectual
Trustworthiness		
Honest	1 2 3 4 5 6 7	Dishonest
Trustworthy	1 2 3 4 5 6 7	Untrustworthy
Just	1 2 3 4 5 6 7	Unjust
Moral	1 2 3 4 5 6 7	Immoral
Ethical	1 2 3 4 5 6 7	Unethical
Goodwill		
Cares about me	1 2 3 4 5 6 7	Doesn’t care about me
Has my interests at heart	1 2 3 4 5 6 7	Doesn’t have my interests at heart
Not Self-centered	1 2 3 4 5 6 7	Self-centered
Sensitive	1 2 3 4 5 6 7	Insensitive
Understanding	1 2 3 4 5 6 7	Understanding
Resourcefulness		
Connected	1 2 3 4 5 6 7	Isolated
Resourceful	1 2 3 4 5 6 7	Unresourceful
Active	1 2 3 4 5 6 7	Passive
Interactive	1 2 3 4 5 6 7	Noninteractive
Engaged	1 2 3 4 5 6 7	Unengaged

Organization Credibility. Organizational credibility scale was adapted from the current sharer credibility scale. Several items in the sharer credibility scale are removed since they specifically describe a person (e.g., connected, resourceful). Three dimensions are *competence*, *trustworthiness*, *goodwill*, see Table 5. A seven-point bipolar scale of nine items was adopted in evaluating three organizations, including the United Nations Foundation (UNF), Westin Hotel (WH), and Frontier Airlines (FA). Only UNF and FA were used as the sources in the second-wave experiment.

Table 5

Organizational Credibility Scale (United Nations Foundation/ Westin Hotel/Frontier Airlines)

Competence		
Informed	1 2 3 4 5 6 7	Uninformed
Qualified	1 2 3 4 5 6 7	Unqualified
Expert	1 2 3 4 5 6 7	Inexpert
Trustworthiness		
Honest	1 2 3 4 5 6 7	Dishonest
Trustworthy	1 2 3 4 5 6 7	Untrustworthy
Ethical	1 2 3 4 5 6 7	Unethical
Goodwill		
Cares about me	1 2 3 4 5 6 7	Doesn't care about me
Has my interests at heart	1 2 3 4 5 6 7	Doesn't have my interests at heart
Understanding	1 2 3 4 5 6 7	Not understanding

Emotions. The researcher used 14 items to measure subjects' affective responses immediately after viewing the Facebook posts (adapted from Dillard & Shen, 2007; Fredrickson, 2013; Goetz, Keltner, & Simon-Thomas, 2010; Myrick, 2015). After exposure to each Facebook

post, the researcher asked, "how do you feel about the Facebook post you just saw?" Eight positive emotions and six negative emotions were inquired. Each item was measured by a seven-point scale from "Not at all" to "Very much." The positive emotions include happy, joyful, proud, confident, hopeful, optimistic, compassionate, and sympathetic. The negative emotions include annoyed, angry, worried, anxious, sad, and dismal. The researcher combined the items with acceptable factor loading within each Facebook post, and then created two variables of positive and negative emotions by adding the emotional response after exposure of all six issues within the same conditions. A higher score in emotion means a higher level of emotions.

Dependent Variables

Sharing in General. The variable inquired subjects' sharing decision by asking, "Would you like to share the post on your Facebook?" It was measured by “No (0),” “Yes, share the post without comment (1),” and “Yes, share the post with comment (1).” Because the researcher adopted the multiple-post design so that six posts were exposed to the subjects, it made the “sharing decision” a continuous variable that the minimum is identical to 0 (sharing none of the posts) and the maximum is 6 (sharing all the posts, 100% likelihood).

Sharing to Imagined Audience. When they chose to share with or without comment, they were exposed to the follow-up question asking about their audience choice. Three choices were available, including "Public," "Friends," and "Specific friends." The choices simulate the real experience of sharing a Facebook post. It was measured by perceived average tie-strength of individuals’ imagined audience when sharing a Facebook message. The researcher categorized low average tie-strength as “*public* (1),” medium tie-strength as “*friends* (2),” and high average tie-strength as “*specific friends* (3).”

Message Elaboration. The subjects were asked whether they want to add comments after reading the Facebook posts. Message elaboration was measured through the comment coding, which has been adopted from the elaboration studies where participants listed their thoughts on the materials they read (Jones, Sinclair, & Courneya, 2003; Perry & Cacioppo, 1986). High elaboration is associated with more thoughts (e.g., Burnkrant & Howard, 1984; Petty & Cacioppo, 1979), suggesting that people who provide more feedback and were exposed to the full text of the posts elaborate more on the materials. The variable was measured by number of words in the comments. The more they wrote in the comment box, the more they elaborated.

Control Variables

Issue Involvement. Issue involvement was measured by the subjects' cognitive involvement with three items, which was adapted from McKeever, McKeever, Holton, & Li (2016). The researcher used a five-point Likert scale from strongly disagree (1) to strongly agree (5) to measure subjects' feeling about a total of six issues, including *animal welfare*, *environmental protection*, *children's welfare*, *feminism*, *LGBTQ rights*, and *psychological well-being*, see Table 6.

Table 6

Scales of Trustingness, Issue Involvement, and Perceived Social Approval

Variable Name	Scales
Trustingness	Generally speaking, I trust most people. Generally speaking, I am careful when dealing with people. (Reversed)
	I am relatively cautious when interacting with other people. (Reversed)
	I will not trust until I have clear evidence that a person can be trusted. (Reversed)
	I am suspicious of others. (Reversed)
Issue Involvement	It is important to me to know as much as possible about _____ (children's welfare / environmental protection / feminism / LGBTQ rights / psychological well-being).
	The more information I get regarding _____ (children's welfare / environmental protection / feminism / LGBTQ rights / psychological well-being), the better.
	I am interested in specific information regarding _____ (children's welfare / environmental protection / feminism / LGBTQ rights / psychological well-being).
Perceived Social Approval	I always receive "like" when I share links to Facebook.
	Many of my friends "like" what I repost on my Facebook feed.
	I always receive positive feedback on what I repost on Facebook.
	I receive many comments from my Facebook friends every time I share a link to Facebook.
	I receive many "likes" when I share articles from other sources.

Trustingness. The subjects indicated the extent to which they agree or disagree with five statements. It was measured by five items with a five-point Likert scale from “strongly disagree” to “strongly agree” (Ben-Ner & Halldorsson, 2010; Sote & Good, 1974). The researcher controlled the variable when examining the source credibility, see Table 6.

Familiarity. The researcher used familiarity of the three organizations as the control variables when examining the organization credibility. The scales range from 0 to 100. "0" indicates that the subjects did not know the organization at all, while "100" indicates that the subjects were very familiar with the organization.

Likeability. The researcher used likability of the three organizations as the control variables when examining the organization credibility. The scales range from 0 to 100. "0" indicates that the subjects did not like the organization at all, while "100" indicates that the subjects very favorite the organization.

Previous Sharing Behavior. The researcher asked the subjects to indicate how often they share any online content such as links and articles to Facebook, Twitter, Instagram, Snapchat, Pinterest, Reddit, LinkedIn, YouTube, Facebook Messenger, WhatsApp, Email, and other. The researcher used a seven-point scale ranges from “Never,” “Less than once a month,” “Several times a month,” “Once a week,” “Several times a week,” “Daily,” “Several times a day.”

Perceived Social Approval on Facebook Sharing Behavior. Based on Bernstein, Bakshy, Burke, and Karrer (2013), the researcher developed a five-item scale with a five-point Likert scale from “strongly disagree” to “strongly agree” to measure subjects’ perceived social approval of their past sharing behavior, see Table 6.

General Social Media Use. Both social media use intensity and frequency were examined in the study. First, the researcher measured the intensity by asking “how many hours do you spend on social media (e.g. Twitter, Snapchat, etc.) daily?” Second, the researcher asked the subjects to indicate how frequently they used a set of online platforms, including Facebook, Twitter, Instagram, Snapchat, Pinterest, Reddit, LinkedIn, YouTube, Facebook Messenger, WhatsApp, Email, and other. The researcher used a seven-point scale that includes “Never,” “Less than once a month,” “Several times a month,” “Once a week,” “Several times a week,” “Daily,” “Several times a day.

Facebook Use. The researcher measured both intensity and frequency of Facebook use. The intensity was measured by asking “how many hours do you spend on Facebook daily?” In addition, the frequency was measured by a seven-point frequency scale from "never" (1) to "always" (5). The scales are adapted from Choi's (2016) sharing dimensions theory. The subjects indicated how frequently they did the following activities via Facebook, including 1) click on links to articles that other users have posted, 2) post my own articles or thoughts, 3) share links (including stories, pictures, or video clips) from other online sources, 4) share links (including stories, pictures, or video clips) together with my comments about the content, 5) repost what other users have posted, 6) repost what other users have posted together with my comments about the content, 7) post comments, questions, or information in response to the article that I read, 8) use “like” button to express approval of other users’ posts.

Personalities. A 10-item Big Five questionnaire was adopted in the study (Gosling, Rentfrow, & Swann Jr., 2003), which is far shorter than the 44-item BFI (John & Srivastava, 1999). The 10-item scale has been adopted by scholars to examine the relationships between personality traits and their social media using behaviors (Back, et al., 2010; Kuo & Tang, 2014;

Lee-Won, Shim, Joo, & Park, 2014; Ryan & Xenos, 2011; Whaite, Shensa, Sidani, Colditz, & Primack, 2018; Wu, Chang, & Yuan, 2015). In the current study, the researcher used a 7-point Likert scale ranging from "strongly disagree" (1) to "strongly agree" (7) to inquire participants' personalities. The dimension of *extraversion* was measured with two items, "extroverted, enthusiastic" and "reserved, quiet." *Agreeableness* was measured with two items, "critical, quarrelsome" and "sympathetic, warm." *Conscientiousness* was measured with two items, "dependable, self-disciplined" and "disorganized, careless." *Neuroticism* was measured with two items, "anxious, easily upset" and "calm, emotionally stable." Two items measured *openness*, "open to new experiences, complex" and "conventional, uncreative" (Gosling, et al., 2003, p. 525).

Demographics. The researcher collected demographic information of the respondents, namely gender, age, education, race, and income.

Data Screening and Statistical Analysis

Data Cleaning

The researcher combined the pre-test and post-test dataset using IBM SPSS version five. The respondents who did not participate in the second wave were excluded from the final dataset. Then, the researcher used a series of frequency analyses to describe each variable in the dataset and eliminated five respondents due to the missing of most of the critical variables. The final sample size was 431. The data was then cleaned by reverse coding.

Reliability Statistics

The credibility construct included multiple dimensions. The reliability statistics of the scales was calculated through a series of factor loading and Cronbach's alpha. In addition, to

combine positive and negative emotions for each issue within each condition, factor loading and Cronbach's alpha were also used in the data analysis.

Analysis of Covariances (ANCOVA)

Analysis of covariance tests (ANCOVA) were adopted to test the main effects of source types and organizational types on sharing in general and sharing non-controversial and controversial issues with audience in different tie-strength. ANCOVA allows the researcher to control source credibility in the models when examining the main effects and interaction effects on sharing, and to observe the interaction effects of the credibility of sharer and organizations on sharing the Facebook posts.

Mediation Analysis

The researcher also used multiple Hayes PROCESS Models to test the moderation effects of message elaboration on the association between emotions and sharing using Model 4. In addition, Model 8 was used to test the moderated mediation effects—how sharer credibility moderates the mediating effects of message elaboration in the relationship between emotions and sharing.

CHAPTER V. RESULTS

Demographic Profile of Research Participants

The researcher collected demographic information about participants, including gender, age, race/ethnicity, education, and household income, and other information, including social media use frequency and intensity, Facebook use intensity, Facebook using behavior, and general sharing behavior, see TABLE 7 and 8.

Among the total of 431 participants, 174 (40.7 percent) of respondents were male, and 254 (59.3 percent) were female. The age ranges from 25 to 35 (46.9 percent) was the largest age group; only 31 (7.3 percent) of participants were 51 years or older. In terms of ethnicity, 77.3 percent were white, 10.8 percent were black or African American, 6.1 percent were Asian, and 4.4 percent were Hispanic. More than half of participants (52.5 percent) had a bachelor's or higher degree. Almost every respondent had at least a high school diploma. Regarding household income, 20.6 percent said their annual income was between $50,000 and $74,999. More than half of the participants' income was more than $40,000.

As for their social media use in general, 39.4 percent of respondents said they used social media for two to three hours per day. The respondents who did not use Facebook (N=78, 8.8%) were excluded from the invitation of the second-wave questionnaire because the study setting was on Facebook. The respondents who have never shared on Facebook were still eligible to participate, because the researcher aimed to observe the behavior of entire Facebook users. In the pretest-posttest combined dataset, all of the participants have used Facebook, and 332 participants (77%) reported that they used Facebook every day, 352 (82.3%) shared online content on Facebook, 356 (82.6%) respondents used Facebook more than one hour per day. Specifically, more than 90 percent would read shared content by clicking on links to articles that

other users have posted on Facebook, 324 (75.2%) have posted their own articles or thoughts, 352 (81.9%) have shared links to their walls, 341 (79.4%) shared links with comments, 330 (76.8%) have reposted what other users have posted, 341 (78.4%) have reposted other users have posted together with their comments, 305 (70.8%) would post comments, questions, or information in response to the articles on Facebook, and over 90 percent have clicked "like" to other users' posts.

Among the respondents who participated in the two waves, 262 (61.2%) respondents said they used Twitter; 329 (76.5%) used Instagram; 241 (56%) used Snapchat; 366 (84.9%) reported that they never used YouTube. In terms of social media sharing, 153 (35.8%) shared online content to Twitter, 156 (36.3%) shared to Snapchat, and 294 (68.2%) shared through Facebook Messenger.

Manipulation Check and the Final Sample

After the manipulation check, the researcher found a total of 271 respondents (62.9% of total participants) who identified the source they were exposed to be included in our final dataset and completed the two-wave of the experiment. Because of this screening process, the cell size of each treatment became different. Among them, 95 were exposed to a one-layer non-profit source, 87 were exposed to a one-layer for-profit source, 52 were exposed to the two-layered non-profit source, 37 were exposed to the two-layered for-profit source. It was revealed that about half the respondents who were exposed to the two-layered sources did not identify their Facebook friend as the secondary source. In the second sample labeled as *check sample*, the researcher eliminated the respondents who did not pass the manipulation check.

In terms of the profile of *check sample*, it has similar demographics compared to the *entire sample*. As for social media use, 204 (75.3%) used Facebook daily, 58 (21.5%)

respondents have never shared anything to Facebook, 221 (81.5%) used Facebook at least one hour per day. Specifically, 218 (80.4%) have clicked on links to articles that other users have posted on Facebook, 209 (77.1%) have posted their own articles or thoughts, 204 (75.3%) have shared links from other online sources to their Facebook walls, 204 (75.3%) have shared links from other online sources to their Facebook walls, 209 (77.5%) have shared the links with their comments, 187 (69.0%) have reposted other users have posted together with their comments, 200 (73.8%) have posted comments, questions, or information in response to the articles on Facebook, and 255 (94.1%) have clicked “like” to other users’ posts.

As for other social media and online communication tool use, 164 (61.2%) used Twitter, 203 (74.9%) used Instagram, 154 (56.8%) used Snapchat, 266 (98.2%) used YouTube and 152 (66.1%) used it every day, 239 (88.2%) used Facebook Messenger, and 268 (98.9%) used Email. N=100 (36.9%) have shared to Twitter, 100 (36.9%) shared online content via Snapchat, 187 (69.0%) would share messages through Facebook Messenger.

Table 7

Demographics of Entire Sample and Check sample

Demographics	Entire Sample (N=431)		Check sample (N=271)	
	Frequency	**Valid Percentage (%)**	**Frequency**	**Valid Percentage (%)**
Gender				
Male	174	40.7	109	40.7
Female	254	59.3	159	59.3
Total	428	100.0	268	
Age (18-68, Mean = 32.80, SD = 10.0)				
18-24 years old	92	21.3	46	17.4
25-35 years old	202	46.9	125	47.3
36-50 years old	97	22.5	73	27.7
51 years old or above	31	7.3	20	7.6
Total	422	100.0	264	100.0
Race/Ethnicity				
White	316	77.3	196	77.2
Black or African American	44	10.8	30	11.8
American Indian or Alaska Native	5	1.2	3	1.2
Asian or Asian American	25	6.1	14	5.5
Hispanic	18	4.4	10	3.9
Native Hawaiian or Pacific Islander	1	.2	1	0.4
Total	409	100.0	254	100
Education (1-8, Mean = 4.25, SD = 1.36)				
Less than a high school degree	3	.7	1	0.4

High school degree or equivalent	46	10.7	26	9.6
Some college but no degree	105	24.4	66	24.4
Associate degree in college (2-year)	50	11.6	28	10.4
Bachelor's degree in college (4-year)	148	34.4	93	34.4
Master's degree	66	15.3	48	17.8
Professional degree (JD, MD)	8	1.9	4	1.5
Doctoral degree	4	.9	4	1.5
Total	431	100.0	270	100
House income/year (1-9, Mean = 5.24, SD = 2.21)				
Under $10,000	31	7.4	22	8.3
$10,000-$19,999	26	6.2	21	7.9
$20,000-$29,999	43	10.0	29	10.9
$30,000-$39,999	51	12.2	34	12.8
$40,000-$49,999	52	12.4	26	9.8
$50,000-$74,999	86	20.6	52	19.6
$75,000-$99,999	57	13.6	37	14.0
$100,000-$150,000	50	12.0	29	10.9
Over $150,000	22	5.3	15	5.7
Total	418	100.0	265	100

Table 8

Social Media Use and Comparison of Entire Sample and Check sample

	Entire Sample (N=431)		Check sample (N=271)	
	Mean	SD	Mean	SD
Social media use intensity (0-16 hours)	3.0	2.26	2.84	2.15
Online/Social media use frequency (1=never, 7=several times a day)				
Facebook	5.98	1.46	5.91	1.52
Twitter	3.14	2.23	3.18	2.23
Instagram	4.30	2.40	4.27	2.44
Snapchat	3.19	2.42	3.16	2.36
Pinterest	2.96	1.93	2.86	1.89
Reddit	3.05	2.36	3.11	2.42
LinkedIn	2.50	1.76	2.44	1.73
YouTube	5.48	1.61	5.44	1.57
Facebook Messenger	4.53	2.10	4.58	2.10
WhatsApp	2.21	2.06	2.35	2.16
Email	6.51	.92	6.48	1.00
Facebook use intensity (0-16 hours)	1.90	1.87	1.79	1.80
Facebook use frequency				
Click on links	4.48	1.69	4.39	1.64
Post my own articles or thoughts	3.27	1.97	3.19	1.96
Share links without comments	3.83	2.03	3.74	1.99
Share links with comments	3.66	1.97	3.56	1.95
Repost others' posts without comments	3.42	1.98	3.30	1.94

Repost others' posts with comments	3.12	1.96	3.06	1.95
Post comments	3.39	1.96	3.35	1.95
"Like" others' posts	5.40	1.77	5.31	1.79
Social Media Sharing				
Facebook	3.79	2.07	3.66	2.11
Twitter	2.08	1.74	2.07	1.70
Instagram	2.51	1.82	2.50	1.80
Snapchat	2.18	1.92	2.17	1.88
Pinterest	1.97	1.61	1.88	1.51
Reddit	1.74	1.53	1.77	1.56
LinkedIn	1.54	1.17	1.51	1.07
YouTube	2.10	1.78	2.03	1.70
Facebook Messenger	3.43	2.19	3.49	2.22
WhatsApp	1.88	1.86	1.97	1.91
Email	3.98	2.23	4.09	2.27

As noted, the demographics of the sample did not correspond to the United State census or national data. Compared to the report of Pew Research Center (2018, March) using national data, the social media use of the current sample was heavier than the general United States population. Except for Facebook use which is similar to the general US population (68% reported they use Facebook), the respondents' usage of other social media sites was twice what Pew Research has reported. However, the experiment's goal was to explore how individuals react in response to different stimuli and focus on Facebook. Hence, the gaps in demographics and social media use would not cause problems when drawing the causal relationships between the independent and dependent variables.

Factor Loading and Composite Reliability

The researcher first conducted Confirmatory Factor Analysis (CFA) using Principal Axis Factoring and Promax rotations to identify the dimensions of constructs. In the current study, sharer credibility has four dimensions, while organization credibility has three dimensions. EFA was used to separate items into factors and combine the items into the construct of source credibility. The common range of factor loading in social sciences is from .40-.70 with no cross-loadings that is acceptable (Costello & Osborne, 2005). Tabachnick, Fidell, and Ullman (2007) further suggested that the more stringent cut-offs go from 0.32 (poor), 0.45 (fair), 0.55 (good), 0.63 (very good) or 0.71 (excellent). The researcher also adopted Cronbach alpha to test the reliability of the constructs and to determine how well a set of items within one construct can go together to create a single scale. With a comparison of "scale if item deleted" in the Cronbach alpha test, the current study adopted the cut-off of .50 and dropped the items that were under .50, see Table 9. Whitley and Kite (2012) suggested that a minimum internal consistency coefficient should be at least .70. The alpha levels were all higher than the .70. Then, the researcher

computed the average of ratings of the items to create the scales for sharer credibility and the credibility of the non-profit and for-profit organizations.

Table 9

Exploratory Factor Loading of the Credibility of Sharer and Organizations

Construct	Items	Complete pretest-posttest dataset (N=431)		Dataset after manipulation check (N=271)	
		Standardized Factor Loading (>.50)	**Composite reliability (>.70)**	**Standardized Factor Loading (>.50)**	**Composite reliability (>.70)**
Sharer Credibility (1-7)					
Competence	Informed	.78	.94	.75	.93
	Qualified	.96		.89	
	Intelligent	.80		.74	
	Expert	.91		.98	
	Intellectual	.84		.89	
Trustworthiness	Honest	.75	.94	.65	.94
	Trustworthy	.74		.63	
	Just	.81		.74	
	Moral	.95		.99	
	Ethical	1.01		.99	
Goodwill	Cares about me	.94	.86	.91	.89
	Has my interests at heart	1.0		.99	
	Not Self-centered	.47		.33	
	Sensitive	.56		.51	
	Understanding	.49		.57	
Resourcefulness	Connected	.86	.90	.82	.89
	Resourceful	.60		.58	
	Active	.75		.74	

	Interactive	.80		.77	
	Engaged	.85		.87	
Total			**.95**		**.95**
Organizational credibility - United Nation Foundation (1-7)					
Competence	Informed	.86	.96	.87	.96
	Qualified	.95		.94	
	Expert	.95		.96	
Trustworthiness	Honest	.92	.96	.94	.96
	Trustworthy	.96		.96	
	Ethical	.80		.80	
Goodwill	Cares about me	1.02	.92	.99	.92
	Has my interests at heart	.96		.99	
	Understanding	.56		.58	
Total			**.94**		**.93**
Organizational credibility - Frontier Airlines (1-7)					
Competence	Informed	.77	.91	.64	.91
	Qualified	.95		.72	
	Expert	.85		.76	
Trustworthiness	Honest	.92	.95	.80	.95
	Trustworthy	.87		.86	
	Ethical	.87		.82	
Goodwill	Cares about me	.96	.95	.90	.95
	Has my interests at heart	1.03		.92	
	Understanding	.73		.77	
Total			**.94**		**.94**

In addition, the researcher used Cronbach alpha to test the reliability of other constructs for the control purpose, see Table 10. Those alpha levels were all above .70, see Table 12. Pearson-r was used to evaluate the correlation of the two-item big five personality scales. In the *entire sample*, the two-item scales of extraversion, conscientiousness, neuroticism, and openness were computed, while the two items that measured agreeableness were not significantly correlated. However, only extraversion, conscientiousness, and neuroticism were created in the *check sample*. The correlation between the two items that measured agreeableness and openness were not significantly correlated.

Table 10

Cronbach Alpha and Pearson-r of Constructs in the Entire Sample and Check sample

		Issue Involvement						**Perceived Social Approval**
Sample		Children's welfare	Environmental protection	Animal welfare	Feminism	LGBTQ rights	Psychological well-being	
Entire	**α**	.91	.93	.92	.96	.96	.92	.85
Checked		.91	.93	.92	.96	.95	.90	.83
		Big Five Personality						**Trustingness**
		Extraversion	Agreeableness	Conscientiousness	Neuroticism	Openness		
Entire	**r**	.48***	.04	.38***	.45***	.13**	**α**	.83
Checked		.46***	-.014	.36***	.51***	.10		.84

Note: *** $p<.001$, ** $p<.01$

Main Source Effects of Source Cues and Credibility on Sharing

To test the main effects, the researcher used both *entire sample* and *check sample* to test the main effects of the outcome variable. The researcher adopted an analysis of covariance (ANCOVA) to test H1 that the Facebook post sent by two-layered source were more likely to be shared than single/non-layered organization source, H2 that interaction effects of organization types source types on sharing the Facebook post. H3 that the roles of perceived credibility of a non-profit organization, a for-profit organization, a sharer on the likelihood of sharing the Facebook post.

Entire Sample Model

A hierarchical linear regression analysis was used before the ANCOVA test, which aimed to test the effects of demographics, media use behavior, issue involvement, trustingness, and source credibility on sharing Facebook posts. Gender, age, income, education, and big five personality traits were entered in the first block showing insignificant results, Adjusted R^2 = -.004, F (8, 214) = .89, p = .53. Then, social media use frequency and intensity, Facebook use intensity, and Facebook activities were entered in the second block and the result was insignificant, Adjusted R^2 = .04, F (12, 210) = 1.78, p = .054; Sharing habits and perceived social approval on sharing were entered in the third block and the results were also insignificant, Adjusted R^2 = .04, F (14, 208) = 1.59, p = .09. Issue involvement regarding the six social issues was entered in the fourth block and the results were insignificant, Adjusted R^2 = .03, F (20, 202) = 1.34, p = .16. Finally, when source credibility of the organizations, sharer credibility, and trustingness were entered in the last block and the results were significant, Adjusted R^2 = .07, F (24, 198) = 1.72, $p < .05$.

An ANCOVA was run to test the main effects of source cue and source credibility on

sharing. Demographics, social media use behavior, issue involvement, trustingness, big five personalities were not included from the model because the regression analysis suggested their insignificant effects on sharing.

An ANCOVA test suggested a significant effect of the source manipulation on sharing, $R^2 = .205$, $F\ (9, 294) = 8.41$, $p < .001$ (see Table 11). The results revealed that organizational types, the interaction of source and organization types, the credibility of the non-profit organization, and interaction between sharer credibility and for-profit credibility predicted the sharing of the Facebook posts. The exposure of Facebook posts from the non-profit organization significantly predict sharing, $F\ (1, 294) = 46.38$, $p < .001$, $\eta^2 = .13$. Specifically, it positively predicted sharing ($t=3.15$, $p<.01$). The exposure of the two-layered source was not associated with sharing, $F\ (1, 190) = .03$, $p = .87$, $\eta^2 = .000$. Hence, H1 that Facebook posts sent by two-layered sources are more likely to be shared was rejected.

However, the interaction of organization types and source types significantly predicted sharing, $F\ (1, 190) = 5.53$, $p < .05$, $\eta^2 = .015$. Specifically, when the original source is a for-profit organization, the post from a two-layered source was more likely to be shared than a one-layer source. When the original source is a non-profit organization, the post from the original source was more likely to be shared, see Figure 2. Therefore, H2a and H2b were supported.

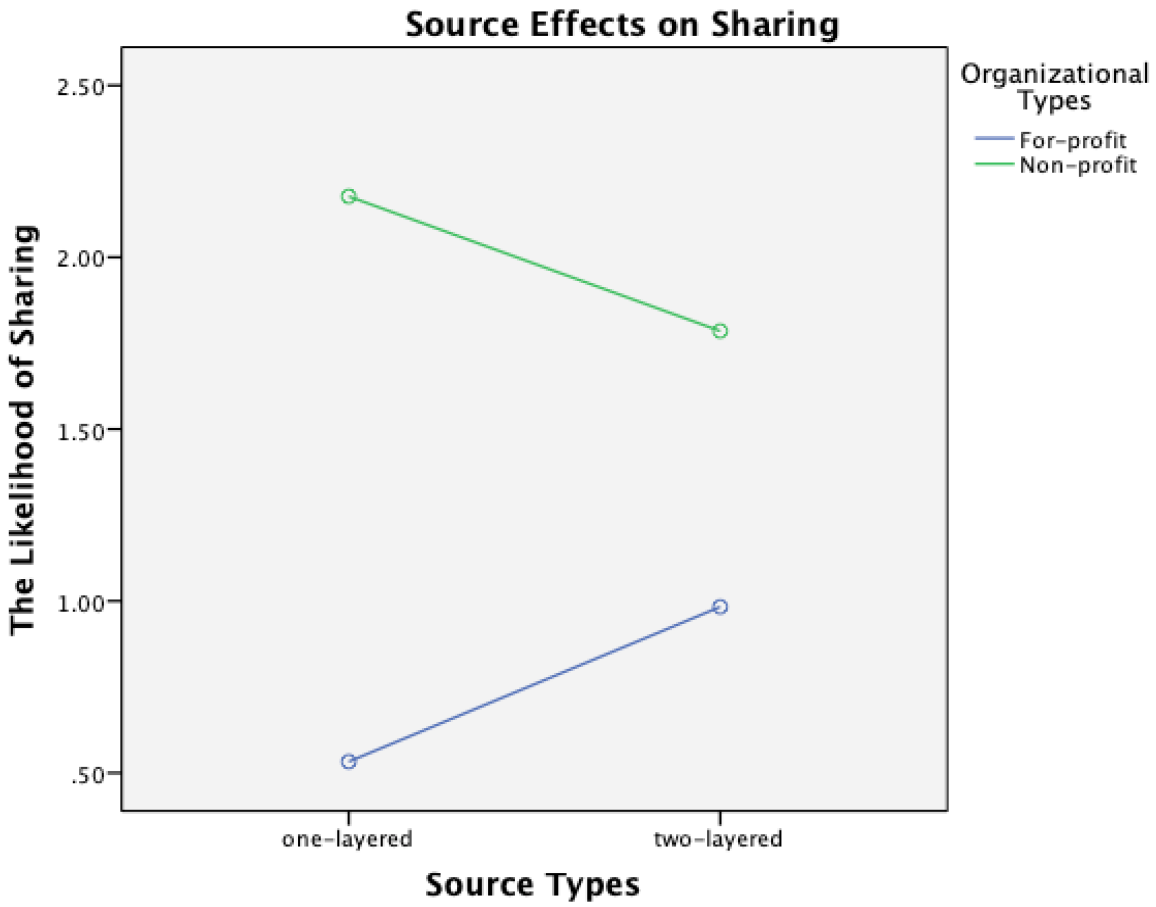


Figure 2. *Interaction Effects on Sharing: Entire Sample*

In addition, the credibility of the non-profit (F (1, 294) = 6.39, $p < .05$, $\eta^2 = .017$), but not the for-profit organization (F (1, 294) = 3.05, $p = .08$, $\eta^2 = .008$) and the sharer credibility (F (1, 294) = .02, $p = .90$, $\eta^2 = .000$), affect sharing of a Facebook post. The perceived credibility of the non-profit organization was positively associated with sharing (t=2.53, $p<.05$). H3a that perceived credibility of a non-profit organization increases the likelihood of sharing the Facebook post was supported. H3b that sharer credibility increases the likelihood of sharing the Facebook posts was rejected. Interestingly, sharer credibility interacted with the credibility of the for-profit organization (F (1, 294) = 4.71, $p < .05$, $\eta^2 = .013$), but not the non-profit organization on sharing (F (1, 294) = 3.14, $p = .08$, $\eta^2 = .009$). The interaction effects of sharer credibility and for-profit credibility positively predicted sharing (t = 2.17, $p < .05$). Overall, these results supported H3c that sharer credibility moderates the effects of the credibility of original sources on sharing the Facebook posts. Regarding RQ1, sharer credibility did not moderate non-profit source credibility on sharing the Facebook post.

Table 11

ANCOVA: Main Effects on Sharing: Entire Sample

	d.f.	Mean of Squares	F-value	Eta Squared (η^2)
Model	9	20.06	8.41***	.195
Organization types (0=for-profit, 1=non-profit)	1	110.58	46.38***	.127
Source types (0=one-layered, 1=two-layered source)	1	.06	.027	.000
Organization type*Source type	1	13.18	5.53*	.015
Sharer credibility	1	.04	.015	.000
Non-profit credibility	1	15.22	6.39*	.017
For-profit credibility	1	7.48	3.14	.008
Trustingness	1	5.39	2.26	.006
Sharer*Non-profit	1	7.48	3.14	.009
Sharer*For-profit	1	11.23	4.71*	.013
R^2 for overall effect = .205				

*$p < .05$; ***$p < .001$

Check Sample Model

Before the ANCOVA test, a hierarchical linear regression analysis was again used to test the effects of demographics, media use behavior, issue involvement, trustingness, source credibility on sharing Facebook posts. Gender, age, income, education, and big five personality traits were entered in the first block showing insignificant results, Adjusted R^2 = .007, F (8, 132) = 1.12, p = .35. Then, social media use frequency and intensity, Facebook use intensity, and Facebook activities were entered in the second block and the result was almost significant, Adjusted R^2 = .06, F (12, 128) = 1.80, p = .054; Sharing habits and perceived social approval on sharing were entered in the third block and the results were also insignificant, Adjusted R^2 = .05, F (14, 126) = 1.52, p = .11. Issue involvement regarding the six social issues was entered in the fourth block and the results were insignificant, Adjusted R^2 = .04, F (20, 120) = 1.30, p = .19. Finally, source credibility of the organizations, sharer credibility, and trustingness were entered in the last block and the results were significant, Adjusted R^2 = .10, F (24, 116) = 1.67, $p < .05$.

Then, an ANCOVA was adopted to test the main effects of source cue and source credibility on sharing Facebook posts. Demographics, social media use behavior, issue involvement, and big five personalities were excluded from the ANCOVA model since the regression analysis revealed that they had insignificant effects on the dependent variables.

The ANCOVA test suggested a significant effect of the source manipulation on sharing, R^2 = .243 F (9, 190) = 6.78, $p < .001$, see Table 12. The results revealed that organizational types, the credibility of the non-profit and for-profit organization, the interaction of source and organization types, and interaction between sharer credibility and organizational credibility predicted sharing of Facebook posts. The exposure of a non-profit organization post significantly predicts sharing, F (1, 190) = 19.42, $p < .001$, η^2 = .081. Specifically, a post by a non-profit is

more likely to be shared than the same post by a for-profit organization (t = 2.2, *df* = 1, $p < .05$). The exposure of two-layered source was not associated with sharing, F (1, 190) = 1.01, $p = .32$, $\eta^2 = .004$. Hence, H1 that Facebook posts sent by two-layered sources are more likely to be shared was rejected as in the *entire* sample.

The interaction of organization types and source types significantly predicted sharing, F (1, 190) = 4.28, $p < .05$, $\eta^2 = .018$. Specifically, when the original source is a for-profit organization, the post from the two-layered source was more likely to be shared than original source only. However, when the original source is a non-profit organization, the post from the source was more likely to be shared than a two-layered source, see Figure 3. Therefore, H2 that organization types interact with source types on sharing the Facebook post was supported in the *check sample* as in the *entire* sample.

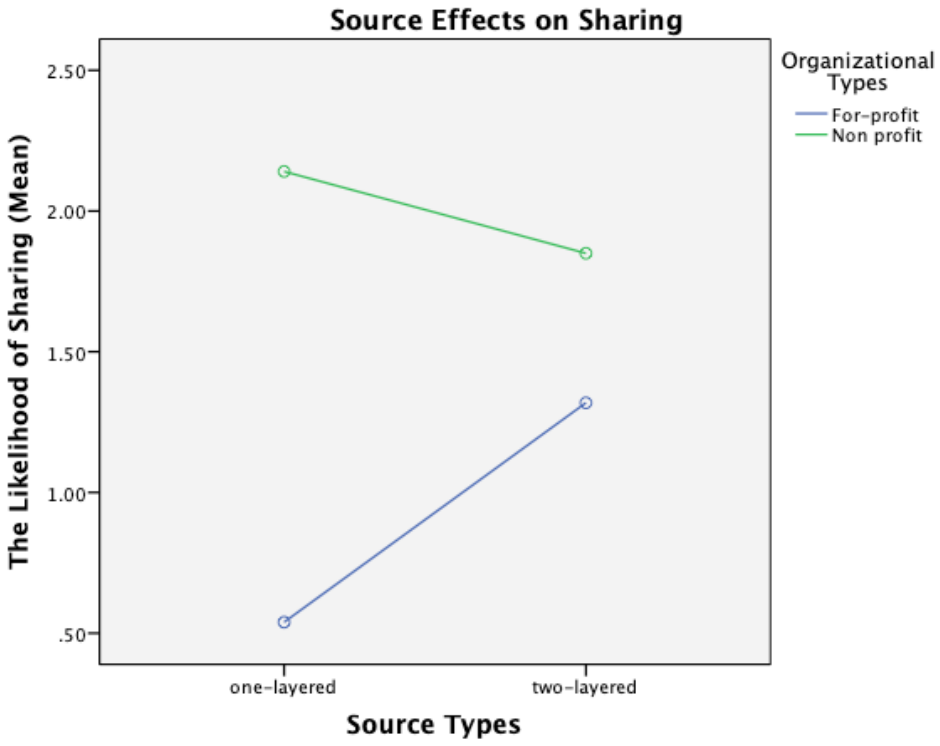


Figure 3. *Interaction Effects on Sharing: Check Sample*

As for the *check sample*, an ANCOVA still suggested a significant main effect on sharing, F (8, 190) = 7.25, $p < .001$, η^2 =.254. The credibility of the non-profit (F (1, 190) = 8.01, $p < .01$, η^2 = .033) and the for-profit organization were associated with sharing (F (1, 190) = 4.15, $p < .05$, η^2 = .017), but not the credibility of the sharer (F (1, 190) = .23, p = .63, η^2 = .001). The perceived credibility of the non-profit was positively associated with sharing (t=2.83, p<.01), while the for-profit credibility negatively predicted sharing (t=-2.04, p<.05). H3a that perceived credibility of a non-profit organization increases the likelihood of sharing the Facebook post was supported. Since the sharer credibility itself did not increase the likelihood of sharing the posts, H3b was also rejected. However, sharer credibility interacted with the credibility of both nonprofit (F (1, 190) = 4.11, $p < .05$, η^2 = .017) and for-profit on sharing the Facebook posts (F (1, 190) = 6.90, $p < .01$, η^2 = .029) but with opposite effects. The interaction effects of the credibility of sharer and the non-profit negatively predicted sharing (t = -2.03, df = 1, $p < .05$), while interaction effects of the credibility of sharer and the for-profit positively predicted sharing (t = 2.63, df = 1, $p < .01$). Overall, these results supported H3c that perceived sharer increases the effects of the credibility of for-profit source on sharing the Facebook post. On the contrary, sharer credibility decreases the effects of non-profit source credibility on sharing the Facebook post. The results of the two models revealed some differences in the predictors of sharing, suggesting whether participants perceive the organization as credible and the post is shared by a credible friend influenced their sharing of a post. Such interaction effect is present regardless of the trustingness of the participants.

Table 12

ANCOVA: Main Effects on Sharing: Check Sample

	d.f.	Mean of Squares	F-value	Eta Squared (η^2)
Model	8	17.37	7.25***	.207
Organization types (0=for-profit, 1=non-profit)	1	49.75	19.42***	.081
Source types (0=one-layered, 1=two-layered source)	1	2.59	1.01	.004
Organization type*Source type	1	10.97	4.28*	.018
Sharer credibility	1	.60	.23	.001
Non-profit credibility	1	20.52	8.01**	.033
For-profit credibility	1	10.62	4.15*	.017
Trustingness	1	4.53	1.77	.007
Sharer*Non-profit	1	10.52	4.11*	.017
Sharer*For-profit	1	17.67	6.90**	.029
R^2 for overall effect = .243				

*$p < .05$; **$p < .01$; ***$p < .001$

Final Sample Selection

The researcher selected the *check sample* over the *entire sample* to test other hypotheses because the secondary source (sharer) is the main focus of the study, although the researcher asked respondents' friends' name at the beginning of the post-test questionnaire (second-wave). The manipulation might fail to draw causal relationships between the sources and the follow-up actions if the participants could not identify sources, especially their Facebook friends as the secondary source of a Facebook post.

The researcher compared the group difference of the *check sample* in terms of demographics and social media use, including gender, age, income, and education, big five personalities, general social media use frequency and intensity, Facebook use intensity, Facebook activities, previous sharing habits, issue involvement, perceived social approval on sharing, credibility of sharer, non-profit organization, and for-profit organization, trustingness, and familiarity and likeability of the two organizations. None of them shows significant differences across the four groups, although the numbers of subjects were not even.

Issues Differences on Sharing with Imagined Audience

Controversial Issue versus Non-controversial Issue Groups

The researcher separated the six social issues into two groups--controversial issue and non-controversial issue, to avoid counter effects on sharing caused by issue variation. A series of paired-sample t-test revealed the mean score differences of sharing different issues across the experimental conditions. The sharing of feminism (M=.30, SD=.51) and LGBTQ issues (M=.22, SD=.50) were significantly lower than sharing of other four issues including children’s welfare (M=.39, SD=.57), animal welfare (M=.35, SD=.57), psychological well-being (M=.35, SD=.56), and environmental protection (M=.33, SD=.57). The difference in the sharing seems to be caused

by the issue controversality—feminism and LGBTQ are topics that do not have common consensus in society with some highly supporting and some totally oppose to them. Therefore, *feminism* and *LGBTQ* were grouped into a controversial issue, while *children's welfare*, *animal welfare*, *psychological well-being*, and *environmental protection* were grouped into a non-controversial issue.

Sharing Controversial Issues to Imagined Audience

To answer the RQ2 and test the hypotheses H4a, H4b, H4c of how individuals share when facing their imagined audience, the researcher first adopted a paired-sample t-test and found that people were less likely to share the controversial issues (M=.37, SD=.62) to their strong-tie audience, compared to non-controversial issues (M=.47, SD=.59; t=2.75, p<.01).

Then, an ANCOVA was again used to test the main effects and interaction effects on sharing to the audience with different tie strength. Source type, organizational type, sharer credibility, organization credibility, trustingness were entered into the ANCOVA table. For the non-controversial issue group, an ANCOVA test did not suggest a significant effect of the source manipulation on sharing, $R^2 = .06$, F (9, 189) = 1.43, $p = .18$.

However, an ANCOVA test revealed a significant effect for the controversial issue, $R^2 = .10$, F (9, 189) = 2.24, $p < .05$, see Table 13. The current model suggested that the exposure of controversial issues carried by a non-profit organization increased the likelihood of sharing to the strong-tie Facebook friends (F (1, 189) = 5.67, $p < .05$, $\eta^2 = .026$). The perceived credibility of the non-profit (F (1, 189) = 3.97, $p < .05$, $\eta^2 = .018$) and the for-profit organization were associated with sharing to audiences with different tie strength (F (1, 189) = 4.50, $p < .05$, $\eta^2 = .021$), but not the credibility of the sharer (F (1, 189) = .04, $p = .84$, $\eta^2 = .000$). Specifically, the credibility of the non-profit positively predicted sharing with strong tie audience (t=2.00, p

< .05), while the for-profit credibility negatively predicted sharing (t=-2.12, $p < .05$). Although the sharer credibility itself did not predict sharing to a strong-tie audience, sharer credibility interacted with for-profit credibility on sharing controversial issues with a strong-tie audience ($F(1, 189) = 7.84$, $p < .01$, $\eta^2 = .036$; $t = 2.80$, $p < .01$). Overall, H4a that the nonprofit credibility increases sharing controversial issues was supported, whereas H5b that stated for-profit source credibility increases sharing controversial issues was rejected. H4c that the presence of sharer increases the sharing of controversial issues was rejected.

Table 13

ANCOVA: Main Effects on Sharing Controversial Issues with Imagined Audience

	d.f.	*Mean of Squares*	*F-value*	*Eta Squared* (η^2)
Model	9	.92	2.24*	.120
Organization types (0=for-profit, 1=non-profit)	1	2.323	5.67*	.026
Source types (0=one-layered, 1=two-layered source)	1	.010	.03	.000
Organization type*Source type	1	.041	.10	.000
Sharer credibility	1	.681	1.66	.008
Non-profit credibility	1	1.628	3.97*	.018
For-profit credibility	1	1.845	4.50*	.021
Trustingness	1	.017	.04	.000
Sharer*Non-profit	1	.959	2.34	.011
Sharer*For-profit	1	3.212	7.84**	.036
R^2 for overall effect = .096				

*$p < .05$; **$p < .01$

The Effects of Emotions on Sharing to Imagined Audience

Positive and Negative Emotions

Before testing the hypotheses, the researcher adopted a series of factor analyses and Cronbach alpha to select items to create two variables-positive and negative emotions. Table 14 shows the factor loading and Cronbach alpha of different issues (children's welfare, animal welfare, psychological well-being, environmental protection, feminism, and LGBTQ) and conditions. The researcher adopted the cut-off of .65 with no cross-loadings and dropped the items that were under .65, see Table 14. A lower cut-off could allow the construct can be indicated by different types of emotions. The alpha levels were all higher than the .70. The comparison of respondents' emotional arousal on different social issues were reported in Appendix F.

Table 14

Factor Loading and Cronbach Alpha of Positive and Negative Emotions

		O_1											
		CW		**AW**		**PW**		**EP**		**F**		**LG**	
	Items	SFL	CR	SFL	CR	SFL	CR	SFL	CR	SFL	CR	SFL	CR
P	Happy	**.74**	.88	**.93**	.86	**.95**	.96	**.83**	.96	**.90**	.97	**.88**	.96
	Joyful	**.73**		**.93**		**.94**		**.86**		**.95**		**.90**	
	Proud	**.76**		**.90**		**.83**		**.88**		**.88**		**.86**	
	Confident	**.75**		**.81**		**.85**		**.89**		**.94**		**.92**	
	Hopeful	**.77**		**.81**		**.85**		**.76**		**.83**		**.81**	
	Optimistic	**.74**		**.80**		**.84**		**.82**		**.92**		**.81**	
	Compassionate	.46		.29		**.83**		**.76**		**.87**		**.73**	
	Sympathetic	.48		.14		.63		.58		**.69**		**.65**	
N	Angry	**.80**	.89	**.80**	.91	**.83**	.93	**.88**	.93	.61	.90	**.92**	.94
	Annoyed	**.67**		**.70**		.58		**.83**		.50		**.78**	
	Worried	**.85**		**.85**		**.97**		**.86**		**.90**		**.91**	
	Anxious	**.78**		**.81**		**.81**		**.77**		**.82**		**.82**	
	Sad	**.80**		**.75**		**.79**		**.86**		**.91**		**.91**	
	Dismal	**.72**		**.70**		**.80**		**.73**		**.84**		**.71**	
		O_2											
		CW		**AW**		**PW**		**EP**		**F**		**LG**	
	Items	SFL	CR	SFL	CR	SFL	CR	SFL	CR	SFL	CR	SFL	CR
P	Happy	**.89**	.91	**.96**	.94	**.85**	.94	**.86**	.95	**.89**	.97	**.91**	.96
	Joyful	**.88**		**.98**		**.91**		**.84**		**.94**		**.89**	

	Proud	**.80**		**.95**		**.77**		**.86**		**.91**		**.84**	
	Confident	**.86**		**.90**		**.92**		**.89**		**.87**		**.87**	
	Hopeful	**.74**		**.77**		**.80**		**.85**		**.94**		**.93**	
	Optimistic	**.71**		**.73**		**.86**		**.84**		**.93**		**.88**	
	Compassionate	.43		.21		**.80**		**.77**		**.90**		.63	
	Sympathetic	.33		.15		**.70**		.63		**.74**		.57	
N	Angry	.66	.87	**.80**	.9	**.84**	.95	**.91**	.95	**.86**	.95	**.89**	.93
	Annoyed	.54		**.72**		**.82**		**.87**		**.82**		**.80**	
	Worried	**.86**		**.89**		**.88**		**.87**		**.94**		**.92**	
	Anxious	**.76**		**.77**		**.87**		**.89**		**.87**		**.88**	
	Sad	**.84**		**.82**		**.88**		**.86**		**.92**		**.86**	
	Dismal	**.66**		.52		**.89**		**.79**		**.88**		.63	
		O_3											
		CW		**AW**		**PW**		**EP**		**F**		**LG**	
	Items	CR	SFL	CR	SFL	CR	SFL	CR	SFL	CR	SFL	CR	CR
P	Happy	**.84**	.93	**.92**	.94	**.86**	.95	**.88**	.95	**.91**	.97	**.96**	.97
	Joyful	**.83**		**.92**		**.84**		**.80**		**.93**		**.98**	
	Proud	**.81**		**.90**		**.77**		**.85**		**.91**		**.93**	
	Confident	**.84**		**.82**		**.90**		**.94**		**.91**		**.93**	
	Hopeful	.61		.48		**.85**		**.88**		**.91**		**.83**	
	Optimistic	.63		.59		**.91**		**.86**		**.94**		**.95**	
	Compassionate	.30		.08		**.94**		**.81**		**.85**		.42	
	Sympathetic	.30		.07		.56		**.73**		**.69**		.30	
N	Angry	.37	.79	**.91**	.91	**.87**	.91	**.76**	.92	**.82**	.92	**.83**	.93
	Annoyed	.38		**.77**		**.68**		**.67**		**.69**		**.76**	
	Worried	**.78**		**.83**		**.83**		**.89**		**.88**		**.95**	

	Anxious	**.78**		**.84**		**.76**		**.82**		**.91**		**.80**	
	Sad	**.69**		**.79**		**.91**		**.96**		**.83**		**.79**	
	Dismal	.55		.50		**.84**		**.75**		**.80**		**.78**	
		O_4											
		CW		**AW**		**PW**		**EP**		**F**		**LG**	
	Items	CR	SFL	CR	SFL	CR	SFL	CR	SFL	CR	SFL	CR	CR
P	Happy	**.89**	.93	**.84**	.96	**.96**	.97	**.86**	.95	**.95**	.95	**.87**	.93
	Joyful	**.89**		**.84**		**.95**		**.90**		**.84**		**.87**	
	Proud	**.93**		**.81**		**.91**		**.92**		**.93**		**.85**	
	Confident	**.90**		**.87**		**.93**		**.86**		**.88**		**.64**	
	Hopeful	**.71**		**.95**		**.92**		**.95**		**.89**		**.91**	
	Optimistic	**.77**		**.99**		**.93**		**.83**		**.95**		**.86**	
	Compassionate	.23		.52		**.82**		**.77**		**.74**		.66	
	Sympathetic	.24		.43		.58		.60		.66		.57	
N	Angry	**.72**	.89	**.81**	.92	**.85**	.83	**.86**	.94	**.92**	.96	**.91**	.93
	Annoyed	.37		**.78**		**.69**		**.85**		**.94**		**.82**	
	Worried	**.79**		**.84**		**.91**		**.93**		**.95**		**.86**	
	Anxious	**.83**		**.81**		.51		**.84**		**.95**		.64	
	Sad	**.84**		**.72**		**.90**		**.83**		**.92**		**.91**	
	Dismal	**.73**		**.66**		.61		**.77**		**.81**		.64	

Note: P=positive emotions, N=negative emotions, SFL=Standardized Factor Loading (>.65), CR=composite reliability (>.70), CW=children's welfare, AW=animal welfare, PW=psychological well-being, EP=environmental protection; F=feminism, LG=LGBTQ; O1=non-profit source only, O2=for-profit source only, O3=non-profit and sharer combined source, O4=for-profit and sharer combined source.

Hypothesis Testing

To test H5 and H6 that message elaboration mediates the effects of emotions on sharing, the researcher employed a bootstrapping technique that allows simultaneous tests of mediators (Hayes, 2013). The researcher analyzed the 95 percent confidence intervals associated with the indirect effects of positive and negative emotion arousal on sharing non-controversial issue and controversial issue with 5,000 bootstrap samples. Four mediation analysis models using PROCESS Model 4 (Hayes, 2013) were adopted, to examine these mediation effects.

A mediation analysis model using PROCESS Model 4 (Hayes, 2013) was adopted to examine how positive emotions are associated with sharing non-controversial issue through message elaboration by controlling source types, organizational types, and the credibility of non-profit, for-profit, and sharer. The absence of the value 0 in the confidence interval indicates a significant relationship. The path coefficients are not standardized and do not reflect the strength of the relationship. As shown in Figure 4, the results revealed a direct effect (Bootstrap confidence interval = [.0828, 2445]) and an indirect effect of positive emotions on sharing non-controversial issue, significantly mediated by message elaboration (Bootstrap confidence interval = [.0027, .0273]). The confidence intervals do not include zero, suggesting significant mediation relationships. Specifically, positive emotion arousal positively predicts individuals' elaboration on Facebook posts (B = .69, SE = .33, CI = [.0318, 1.3460]) and sharing non-controversial issue to their audience with stronger tie (B = .16, SE = .04, CI = [.0828, .2445]). Message elaboration positively associated with sharing the posts to their strong-tie audience (B = .02, SE = .009, CI = [.0003, .0359]). Overall, H5a was not supported. Message elaboration mediates the effects of positive emotion arousal on sharing a non-controversial issue.

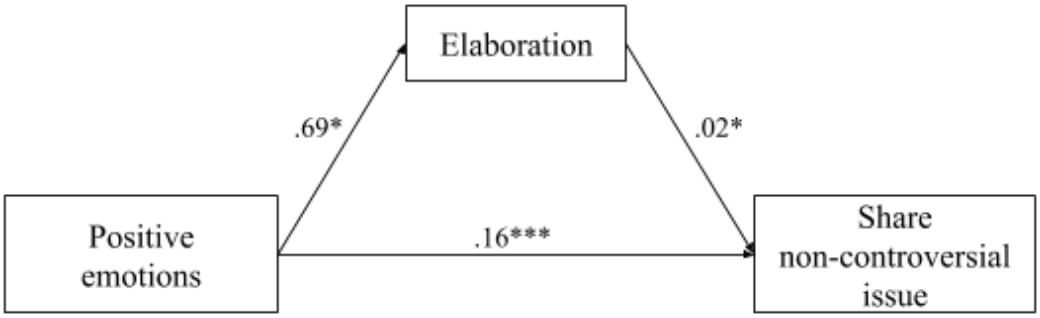


Figure 4. *Mediation Effects of Message Elaboration on the Relationships between Positive Emotion Arousal and Sharing Non-controversial issue***;** Note: ***$p < .001$, *$p < .05$

The second mediation model using PROCESS Model 4 (Hayes, 2013) was adopted to examine how negative emotions associated with sharing a non-controversial issue through message elaboration by controlling the same set of variables as the first PROCESS Model. The results again indicate a direct effect (Bootstrap confidence interval = [.0209, 1720]) and an indirect effect of negative emotions on sharing a non-controversial issue, significantly mediated by message elaboration (Bootstrap confidence interval = [.0003, .0253]). The confidence intervals also do not include zero, suggesting significant mediation relationships. As shown in Figure 5, negative emotion arousal positively predict sharing non-controversial issue to their more strong-tie audience ($B = .10$, $SE = .04$, CI = [.0209, .1720]), but did not predict message elaboration after the exposure of the Facebook posts ($B = .43$, $SE = .30$, CI = [-.1593, 1.0184]). Message elaboration marginally significantly associated with sharing the posts to their strong-tie audience ($B = .02$, $SE = .009$, CI = [-.0028, .0340]). Overall, H5b was supported. Message elaboration mediates the effects of negative emotion arousal on sharing a non-controversial issue.

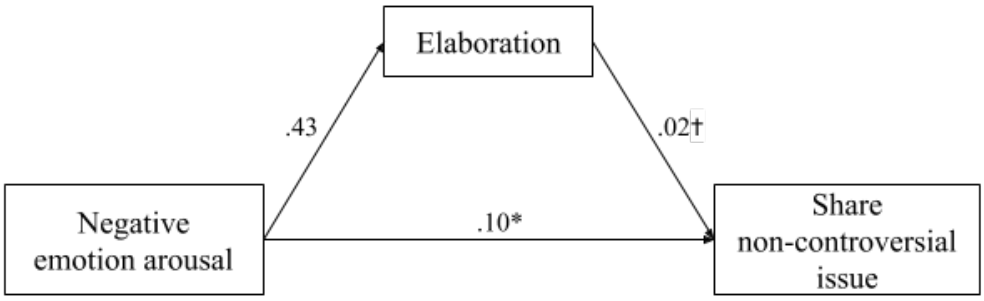


Figure 5. *Mediation Effects of Message Elaboration on the Relationships between Negative Emotion Arousal and Sharing Non-controversial issue***;** Note: *$p < .05$, † $p < .10$

Another mediation model using PROCESS Model 4 (Hayes, 2013) was again adopted to examine how positive emotions is related to sharing controversial issue through message elaboration by controlling the same set of variables. The results indicate a direct effect (Bootstrap confidence interval = [.0009, .1592]), but does not reveal an indirect effect of positive emotions on sharing controversial issue through message elaboration (Bootstrap confidence interval = [-.0161, .0244]). The presence of the value 0 in the confidence interval indicates the insignificant relationship. As shown in Figure 6, positive emotion arousal positively predict sharing controversial issue to their more strong-tie audience (B = .08, SE = .04, CI = [.0009, .1592]), but did not associate with message elaboration (B = .10, SE = .10, CI = [-.1075, .3032]). The elaboration on the Facebook posts significantly predicted sharing with a stronger tie audience (B = .10, SE = .03, CI = [.0456, .1560]). Hence, H6a was supported. Positive emotion arousal directly triggers sharing of the controversial issue. However, positive emotion does not trigger elaboration of message when exposure to a controversial issue. H6b was rejected.

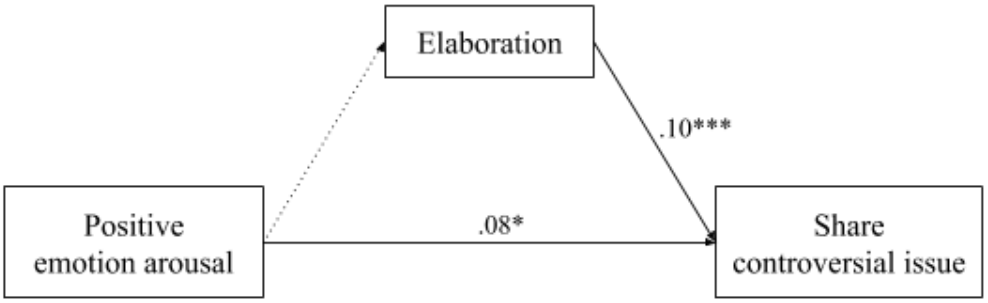


Figure 6. *Mediation Effects of Message Elaboration on the Relationships between Positive Emotion Arousal and Sharing Controversial issue***;** Note: ***$p < .001$, *$p < .05$

A PROCESS model using Model 4 (Hayes, 2013) was again adopted to examine whether negative emotions is related to sharing controversial issue through message elaboration by controlling the same set of variables. The results revealed a direct effect (Bootstrap confidence interval = [.0331, .1801]), but also does not reveal an indirect effect of negative emotions on sharing controversial issue through message elaboration (Bootstrap confidence interval = [-.0036, .0406]), see Figure 7. Specifically, negative emotion arousal positively associated with sharing controversial issue to their more strong-tie audience ($B = .11$, $SE = .04$, CI = [.0331, .1801]), but did not associate with message elaboration ($B = .12$, $SE = .10$, CI = [-.0719, .3118]). The elaboration on the Facebook posts significantly predicted sharing with a stronger tie audience ($B = .10$, $SE = .03$, CI = [.0437, .1524]). Overall, H6b was supported. Negative emotion arousal directly influences the sharing of the non-controversial issue.

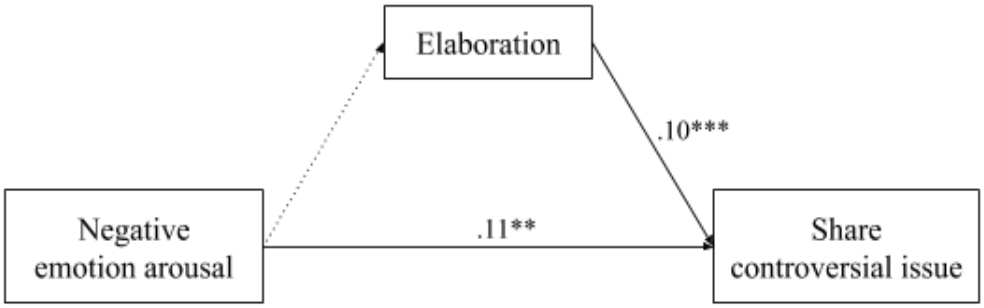


Figure 7. *Mediation Effects of Message Elaboration on the Relationships between Positive Emotion Arousal and Sharing Controversial issues***;** Note: ***$p < .001$, **$p < .01$

Moderated Mediation Effects of Sharer Credibility on Sharing

H7 and H8 posited that sharer credibility moderates the mediating effects of message elaboration in the relationship between emotions and sharing. To test the moderated mediation effects on sharing, the researcher adopted a regression model using the PROCESS Model 8 proposed by Hayes (2013). A moderated mediation model allows the researcher to examine whether and how the strength of a mediation relationship is contingent on the level of a moderator (Preacher, Rucker, & Hayes, 2007). The model was used to examine how emotions were directly and indirectly associated with sharing Facebook posts through a mediator of message elaboration that is conditioned by sharer credibility.

The first model using PROCESS Model 8 was adopted to test how positive emotions were directly and indirectly associated with sharing a non-controversial issue through a mediator of message elaboration that is conditioned by sharer credibility. The results revealed that sharer credibility significantly moderated the mediating effects of message elaboration in the association between positive emotion arousal and sharing a non-controversial issue, by controlling source types, organizational types, and the credibility of non-profit and for-profit organizations (Bootstrap confidence interval = [-.0262, -.0007]). The confidence intervals do not

include zero, suggesting significant moderated mediation relationships. Specifically, the mediating effect of message elaboration is stronger when the sharer credibility is low. However, the interaction effects of sharer credibility and positive emotion arousal on sharing a non-controversial issue is only marginally significant (B = -.56, SE = .33, p < .09, CI = [-1.2236, .0942]), see Figure 8. Overall, H7a was rejected.

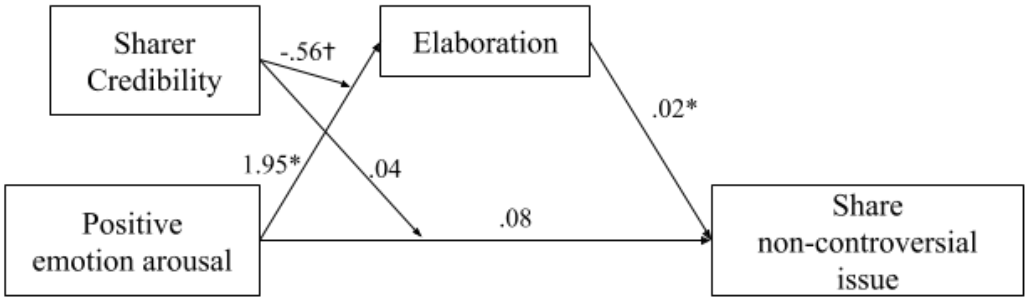


Figure 8. *Moderated Mediation Effects of Positive Emotion Arousal on Sharing Non-controversial issue***;** Note: *p < .05, † p < .10

Another PROCESS model using Model 8 was used to test how negative emotions were directly and indirectly associated with sharing a non-controversial issue through a mediator of message elaboration that is conditioned by sharer credibility. The results did not suggest that sharer credibility moderated the mediating effects of message elaboration in the association between negative emotions and sharing a non-controversial issue, when controlling the same set of variables (Bootstrap confidence interval = [-.0134, .0081]). The presence of the value 0 in the confidence interval revealed an insignificant relationship. Overall, H7b was rejected.

The researcher used a third PROCESS Model to test how positive emotions were directly and indirectly associated with sharing a controversial issue through a mediator of message elaboration that is conditioned by sharer credibility. The results also did not reveal a significant

moderated mediation effect. Sharer credibility did not moderate the mediating effects of message elaboration in the association between positive emotion arousal and sharing a controversial issue (Bootstrap confidence interval = [-.0587, .0077]). However, the interaction effect of sharer credibility and positive emotion arousal on sharing a controversial issue is significant (B = -.24, SE = .09, p < .01, CI = [-.4256, -.0615]), indicating that sharer credibility decreases the effects of positive emotion arousal on sharing controversial issue, which is opposite to the original hypothesis. Overall, H8a was rejected.

The final PROCESS Model was adopted to test how negative emotions were directly and indirectly associated with sharing a controversial issue through a mediator of message elaboration that is conditioned by sharer credibility. The results again did not find a significant moderated mediation effect, suggesting that the sharer credibility did not moderate the mediating effects of message elaboration in the association between negative emotions and sharing a controversial issue (Bootstrap confidence interval = [-.0555, .0040]). The interaction effect of sharer credibility and negative emotion arousal on sharing a controversial issue is again significant (B = -.22, SE = .09, p < .05, CI = [-.3965, -.0524]). It revealed that sharer credibility decreases the effects of negative emotion arousal on a sharing controversial issue, which is opposite to the original hypothesis. Overall, H8b was rejected. The summary of the results is as follows, see Table 15.

Table 15

The Summary of the Results of RQ and Hypothesis Testing

	Path	Results
H1	Two-layered source → sharing	Rejected
H2a	Non-profit source → Sharing	Supported
H2b	For-profit*secondary combined source → Sharing	Supported
H3a	Non-profit source credibility → Sharing	Supported
H3b	Sharer credibility → Sharing	Rejected
H3c	Sharer credibility*for-profit source credibility → Sharing	Supported
RQ1	How sharer credibility moderate non-profit credibility on sharing?	Answered
H4a	Non-profit credibility → share controversial issues	Supported
H4b	For-profit credibility → share controversial issues	Rejected
H4c	Sharer → share controversial issues	Supported
RQ2	How does source credibility influence sharing non-controversial issues to imagined audience?	Answered
H5a	Positive emotions → share non-controversial issues	Rejected
H5b	Negative emotions → elaboration → share non-controversial issues	Supported
H6a	Positive emotions → share controversial issues	Supported
H6b	Negative emotions → share controversial issues	Supported
H7a	Moderated mediation effects of sharer credibility on the effects of negative emotions on sharing non-controversial issues	Supported
H7b	Moderated mediation effects of sharer credibility on the effects of negative emotions on sharing non-controversial issues	Rejected
H8a	Moderated mediation effects of sharer credibility on the effects of positive emotions on sharing controversial issues	Rejected
H8b	Moderated mediation effects of sharer credibility on the effects of negative emotions on sharing controversial issues	Rejected

CHAPTER VI. DISCUSSION AND CONCLUSIONS

Audience's perceptions of communicators have a great impact on persuasive effects such as reinforcing or changing attitudes and behavior. One of the common communication behaviors after persuasion is information sharing. The shared message generates a greater impact on the recipients' follow-up behavior, suggesting its crucial role in branding an organization's image. Previous studies have discussed the impacts of shared messages on overcoming a social media algorithm because social media platforms usually prioritize the posts from friends and family (Cohen, 2018, January 16). Sharing can increase the visibility of organization-related messages on social media sites. The researcher adopted an electronic Word-of-Mouth (eWOM) perspective to understand online users' message diffusion behavior, based on a previous definition of eWOM that includes both customers' own statements about a product and the shared posts from other sources (Hu & Ha, 2015). It provides a significant contribution to eWOM literature that this study explored the effects of sources and emotional response to a persuasive message on message endorsement. The study aimed to propose a model with the lens of the Elaboration Likelihood Model (ELM) to explain the effects of layered-source cues, organizational cues, source credibility, and emotion on sharing. It advanced the ELM model in terms of the exposure of different tissue types and its application to the concept of imagined audience.

The Effects of Source Cues on Sharing

It has been a long debate whether message factors could generate more systematic or heuristic information processing when exposure to a message. As one of the message factors, source cues were found influencing individuals' attitudes and behaviors (e.g. Eastin, 2001; Mondak, 1993; Petty, et al., 1997). It suggests that low-effort information process affects the

audience when they simply pick up the cues. The current study found the same results. The first cue is whether the source of the message is for-profit or non-profit.

Our result shows that the exposure of a non-profit source generates more sharing than a for-profit source even if the message is the same. The results are consistent with previous literature that the stereotypes of non- and for-profit organizations' influence individuals' judgment on the source. People tend to perceive nonprofits as being warm and caring (Aaker, et al., 2010), which makes it easier for the individual to pick up cues through a peripheral mechanism. It becomes more salient when they are exposed to social issues. People may generate more positive feelings about non-profits when they think the organizations are trying to advocate social justice and bridge the gaps between social capital and economic development (Anheier, 2012). As a result, people may support nonprofits by sharing their posts. On the contrary, a for-profit does not elicit sharing because people may perceive it as a promotion ploy that prohibits their actions. It might also be because sharing social issues featured by nonprofits satisfies their self-presentation motivation (Turner & Onorato, 1999; Kim, et al., 2017). Associating with a non-profit by sharing its message makes them look good in their social networks.

Interestingly, organizational type interacts with source type on the likelihood of sharing: the two-layered source increased the sharing behavior of for-profits but not for non-profits. When the original source is a for-profit organization, the post from the two-layered source was more likely to be shared than original source only. When the original source is a non-profit organization, the original post is more likely to be shared by the individual than a reposted message (layered source) from the individual's friends. The finding suggests that a secondary source (a sharer) can help the for-profit organizations to overcome the obstacle of the diffusion

of persuasive messages. However, it does not work for non-profit sources. The judgment on nonprofits makes it a persuasive source in predicting people's sharing behavior. It indicates that the secondary source makes the Facebook post salient if it is carried by for-profit organizations rather nonprofits. Considering one of the motivations of sending an eWOM is helping companies, the findings indicate that audiences might tend to spread the word for less trustworthy companies because the shared messages show endorsement from their friends so they feel safe to share and it minimizes any risk (Hennig-Thurau & Walsh, 2004; Jin & Phua, 2014). However, the effects of secondary source fade away when online users were exposed to a non-profit source since they might think the source is credible enough to make a powerful impact.

The Effects of Perceived Credibility on Sharing

In addition to the source cue (original organization source and layered-source), the study also measured source credibility through several dimensions. This means an examination of how the source factor influences persuasiveness not only through heuristic process but also cognitive process, since the respondents carefully evaluate the credibility of each source in several dimensions, namely competence, trustworthiness, goodwill, and resourceful (only for sharer evaluation). In addition, the non-profit credibility score is significantly higher than the for-profit credibility score, suggesting a cognitive process when the exposure to organization source manipulation. The study found that the more trust people generate through exposure to a non-profit source, the more they tend to share the message. On the contrary, the more they think a profit source is credible, the less likely they are to share the Facebook posts. If a non-profit source is trustworthy, the audience is more likely to help it out by spreading the word for them. However, people may think credible for-profit organizations have a stronger competence in

producing high-quality products and branding themselves (Aaker, et al., 2010). They do not need to spread positive word for them.

In addition, the effects of original source credibility on sharing are conditionally affected by perceived sharer credibility. The interaction effect is present regardless of the trustingness of the participants. Specifically, a personal source attenuates the association between a non-profit source and information sharing, whereas it increases the association between a for-profit source and sharing. The findings on source credibility effects also explain why the source cue affects behavior. A credible secondary source (sharer credibility) increases the likelihood of re-sharing the for-profit organization's post. The credibility of a non-profit source already makes it a strong case in influencing people's sharing behavior. The dual credibility model that sharer increases credibility due to implicit endorsement (Lafferty et al., 2000) has been challenged under different organization types. Sharer credibility does not always have greater impacts on attitudes and behaviors, especially the action of sharing. Hence, this study shows that the dual credibility model should be examined separately in terms of the original source, organization type, and message.

The researcher used two samples--*entire sample* and *check sample* to test the main effects on sharing and found a few differences. *The check sample* includes only the respondents who passed the manipulation check. As noted, about half of the respondents did not identify the secondary source. It suggests that many people may not pay attention to the second layer source. As for the main effects, the total effect size of *the entire sample* and *check sample* increases from .21 to .24, suggesting the independent variables' explanatory power of the outcome variable was improved. In other words, whether they noticed the secondary source increases the likelihood of sharing. Specifically, the effect size of the organization type cue to sharing

decreases, while the interaction effects of organization type and source type increases in the *check sample.* Additionally, the effects of for-profit credibility and the interaction of sharer and non-profit organization become significant. The effect size of the interaction of sharer and for-profit increases, explaining the finding that the interaction of source type and organization type becomes more salient. Therefore, when people recognize an online friend who shares an original post, they will pay attention to the secondary source. But as the researcher noted, quite a number of participants did not pay attention to the sharer identity. We cannot assume that all people pay attention to the sharer's identity. Future research should examine factors that lead to people's attention to the identity of the sharer.

However, the total effects size of source cues and perceived source credibility to sharing are not very large (R^2 for overall effect = .243 in the *check sample*), suggesting that sources are only one of the message factors that influences sharing behavior. Another two significant factors that can also affect individuals' behavior include message content and channel. In the study, the respondents were exposed to different social issues that delivered distinctive messages in terms of issue types. Therefore, the researcher examined the sharing decision when they approach the audience with different tie-strength considering a message factor--whether the Facebook post feature a controversial issue.

Sharing of Controversial and Non-Controversial Issues to Imagined Audience

People have a tendency to build a positive impression. Sharing societal issues might play a critical role in self-presentation motivation (Turner & Onorato, 1999; Baumeister & Hutton, 1987). Based on the results, the likelihood of sharing differs in terms of different social issues. The more controversial the issues are, the less sharing will be generated. In other words, people are less likely to share controversial issues such as women's rights and LGBTQ rights to others,

especially their strong ties. It might be because people tend to avoid the conflict of opinions on those controversial issues to present an ideal self-image. Although the act may also bring social benefits to sharers by gaining more attention from their audience (Baumeister & Hutton, 1987), controversial issues may threaten sharer's self-image through disclosure of their identity and opinion that may be opposed by others.

The findings suggest that the source factor matters more for sharing controversial issues than non-controversial issues since neither source cues nor source credibility predicts sharing in the non-controversial issue model. It indicates that sharing controversial issues should be examined differently in terms of imagined audience. Individuals are more likely to share the controversial issue carried by non-profits to their strong-tie audience. It reveals that people might perceive social benefits when they get the opportunity to advocate a critical societal issue for a non-profit organization rather than for-profits, suggesting that they care more about their impression when facing strong-tie audience, which is consistent to what Kim & Ihm (2019) have found. People are willing to be identified as feminist or LGBTQ rights activists to their friends and family. At the same time, the perceived credibility of nonprofits increases and for-profits decreases when sharing a controversial issue to their friends and family. It might be because people suspect for-profits' intention of communication, even if they perceive the for-profit organization as credible. A for-profit with high credibility might be associated with producing high-quality products and services (Aaker, et al., 2010). They might feel that sharing the messages bring potential risks on the self-presentation, because they not only take a stand on the social issue, but also show their support for the company.

Sharer credibility itself does not predict sharing to a more strong-tie audience, but sharer credibility interacted with for-profit credibility on sharing controversial issues with a more

strong-tie audience. Specifically, sharer credibility increases the effects of for-profit credibility on sharing Facebook posts to their close friends and family. It again suggests that people feel safe to share the "second-hand" brand-made message because it has been vetted by others and increases the likelihood of getting social approval (Ewoldsen, Rhodes, & Fazio, 2015; Geusens & Beullens, 2015). However, the cue of two-layered sources did not predict sharing, indicating that simple exposure to messages shared by an online friend did not influence their decision to share. Only a credible friend could let people feel safe to generate re-sharing behavior. The distrust on their social media friends might decrease the effectiveness of the persuasive message. It is possible that the secondary source is also the friend of the person's other social media friends. Re-sharing of the shared messages strengthens their interpersonal relationships among their social circle if that friend is considered credible.

Interestingly, individual differences did not predict sharing, such as personalities, demographics, and issue involvement. Issue involvement matters less in the sharing phenomenon, probably because people tend to hide their stands if they do not feel safe to express it even if the issue does matter. The findings suggest that everyone, regardless the gender, age, personalities, social media use, and previous sharing habits, has the basic need of belonging and want to maintain a positive impression among others. They even care more about their ideal self when approaching their close relationships, because they are eager to seek social acceptance from the people who surround them.

The Effects of Emotions on Sharing

The findings indicate that emotional response to a message depends on both low and high degrees of elaboration to influence sharing, which is consistent with ELM and past related literature (e.g. Petty & Briñol, 2014; Petty, et al., 1993). It affects people's behavior by serving as

simple, effective cues that produce judgments, or by serving as arguments which biases thought or validates them when elaboration is high (Petty & Briñol, 2014). Specifically, emotions elicit sharing of a controversial issue when the elaboration is low and increase the likelihood of sharing non-controversial issues when the elaboration is high. In other words, the emotions generated by controversial societal issues go through a heuristic process. The controversial issues such as LGBTQ rights makes people more emotional, which triggers sharing because people might perceive more personal relevance and eagerness to advocate social justice. In other words, sharing a controversial issue is under influence of impulse, whereas a non-controversial issue is under influence of rational evaluation. From the analysis, people think more about and have higher level of elaboration on non-controversial issues than controversial issues, which also indicates that people become impulsive when facing those more personal relevant issues. Nonetheless, a post concerns an important national and social issue like environmental protection, the inner voice rather than an impulsive emotion helps one makes the decision to spread the word.

The messages that generate high emotional response are more likely to go viral (Berger & Milkman, 2012; Myrick, 2015). The study found that both positive and negative emotions directly influence sharing, indicating that people tend to share happiness and express negative feelings when they diffuse the messages that they feel personally involved in. It also reveals that a mix of emotional states may elicit more sharing behaviors (Myrick, 2015). Although a few negative emotion states were found less effective in predicting sharing, a mix of states might increase the diffusion of a persuasive message to a wider audience.

Emotions are crucial in predicting sharing. The study contributes to the emotions and ELM literature because it explored whether positive and negative emotions affect the ELM

process, prospectively. The results suggest that social issue types rather than valence of emotions matter more in information processing. People use either a central or peripheral route to process non-controversial and controversial issue-related social media posts, respectively. In addition, positive emotions, but not negative emotions, generate more elaborations when exposure to a non-controversial issue post, which contradicts with the previous literature that negative emotions increase sharing because it suggests that current situation is problematic, requiring more efforts to process (Schwarz & Clore, 1983). It might be because negative feelings are more impulsive, whereas positive emotion states actions depend on more rational argumentation. The motivation of passing along the messages that generate negative emotions is self-centered. People have a strong tendency to express feelings to reduce the tension caused by the negative messages. On the contrary, the messages that elicit positive emotions may be perceived as more useful, credible, and authentic (Lim & Van Der Heide, 2015). It makes people think more about the content, influencing their follow-up behavior.

The results also link emotions and sharing to the imagined audience. As the researcher discussed earlier, sharing social issues served the function of presenting oneself. Sharers feel less pressure when sharing a non-controversial issue with their strong-tie audience, especially when their emotional arousal is strong. But for controversial issues, people might perceive fewer social risks when the emotional response to the messages did not arouse message elaboration and directly take action of sharing without thoughtful response. The result has implications for activism and other social movement messages in explaining why controversial messages are actually being forwarded more by impulse rather than rational decision. The person may regret sharing the message after a second thought, but the negative consequence may already be incurred.

The findings reveal that sharer credibility moderates the mediating effects of message elaboration in the association between positive emotion arousal and sharing non-controversial issue. Sharer credibility interacts with positive emotion states in predicting the effects of elaboration on sharing non-controversial issues. Specifically, sharer credibility decreases the association between emotions and elaboration, indicating an online friend led to fewer thoughts on the content. It means that having a secondary source helps individuals more easily endorse the message by decreasing the doubt on social benefits. However, sharer credibility does not play a moderation role in controversial issue sharing, suggesting that people might not care much about the secondary source. Their own position on the controversial issue is more important.

Theoretical Implications

The study advanced the Elaboration Likelihood Model (ELM) by investigating how the source cues (organization type and layered-source) and perceived credibility of multiple message communicators influence individuals' behavior. It suggests that people use both the central and peripheral route to process information on social media by revealing the link between source factors and a specific follow-up behavior—sharing after the exposure of a persuasive message. ELM provides a framework to understand source effects on persuasion—how high- and low-effort processes of information influence sharing. The study found that both the source cues as a low-effort process and perceived source credibility as a high-effort process would influence the diffusion of a message. It contributes to ELM in the context of social media by examining the effect of multiple sources on behavior changes. The dual-source influence is more salient when the original source is a for-profit rather than a non-profit. Secondary source strengthens the effects of company-made messages on individuals. It contributes to the ELM literature that

examines heuristic and cognitive processes at the same time and indicates that the two processes are generated simultaneously.

ELM also provides a framework to understand how emotions play a role in information processing (Petty & Briñol, 2014). Both high degree and low degree of elaboration influence the effects of emotions on sharing. It contributes to ELM by examining the sharing of controversial and non-controversial issues and the valence of emotions. The study linked the effects of emotions on sharing by considering individuals' imagined audience. The study explores two types of message factors—source and emotions generated by the message itself. It reveals that the message itself could produce effects on attitude and behavior changes by the emotional response to it if people do not pay much attention to the source. In addition, it examined the effects of secondary source credibility and emotion valence on sharing, revealing that the interaction of multiple message factors could influence sharing at the same time.

The study also advances Two-step Flow Theory's perspective (Rogers, 2007) by showing how ordinary online individuals' opinion-leading behavior generates even greater impact on others. In the context of social media, the audience is under two types of "two-step" influence—KOLs' and their peers'. The research broadens the horizon of the theory and explain how peers are critical to the spreading of messages.

The findings contribute to Self-Presentation theory by confirming that social media sharing serves as a tool for impression management. It links self-presentation to an online imagined audience in a message sharing context. According to the previous studies, social norms affect behavior when the norm is made salient (Ewoldsen, et al., 2015). However, online users could not determine that "actual" audience since we do not know who are exposed to the messages we post (Litt, 2012). Any message has embedded beliefs and attitudes that are

important identity indicators. Hence, people tend to tailor information for different groups to maintain an appropriate public persona. Specifically, they care how their strong-tie audience perceives them rather than weak-tie audience by selecting the right content to share, balancing the posts, and customizing privacy settings.

The study contributes to the literature of imagined audience and advances Litt's (2012) proposed model of the imagined audience by considering message factors when approaching their online friends. The source factor, namely source cues, source credibility, and the interaction of two-layered source credibility affect how they position themselves to different audience groups. Nonprofits and credible source credibility are crucial indicators of presenting an ideal self. People might want their audience to think highly of them when endorsing a message from an honest and trustworthy source. In addition, sharing non-controversial societal issues is perceived as a better strategy to manage their impressions by ignoring social risks.

Methodological Implications

The study contributes to the online experiment methodology by demonstrating how much a post-pay strategy to recruit participants in a two-wave experiment can reduce attrition. The researcher granted an additional bonus to the first-wave respondents who finished the second-wave questionnaire, which was adopted from Stoycheff (2016) to increase the response rate. The respondents received an email that invited them to join the second-wave study. After the final round invitation, the response rate was about 60%, which is not as good as Stoycheff's (2016) study that increased the response rate to 82%. It might be caused by the length of the study. In the current study, it cost the participants 10 to 15 minutes to complete the questionnaire, while Stoycheff's (2016) questionnaire only was about 5 minutes. Furthermore, Stoycheff (2016) only asked general questions such as attitudes toward current US events, online behavior, and

demographics. However, the focus of the first-wave questions was source credibility. If the participants were not familiar with the source, they probably would drop off the study. In addition, as the number of days between initial participation and the follow-up email grows, the response rate decreases. If the wave timing intervals are 7 to 10 days, the response rate drops to 44% (Claycomb, Porter, & Martin, 2000). Although it was not a perfect sampling method, it is still replicable for future longitudinal studies conducted through other online sampling pools, since an extra money incentive indicates the "gestures of goodwill" between participants and the researcher (Stoycheff, 2016, p.3). This method might also improve the data quality from the utilitarian perspective that the respondents were under the impression of only receiving a reward for good work (Stoycheff, 2016).

In addition, this study's use of multiple reminder emails effectively improves the response rate from 35.70% (first invitation), to 55.27% (third invitation), to 59.64% (fourth invitation). The improvement from the first reminder to the third reminder is significant, whereas the increase was diminishing from the third to the fourth reminder. It might be because people were distracted by other things and ignored the initial invitation but were still interested in the study. After the third-round invitation, participants who did not participate might think the researcher compelled them to reciprocate and dropped from the study (Stoycheff, 2016). However, the third- and final- rounds still increase the rate, suggesting that the follow-up invitation could be a compensation to Stoycheff (2016) in improving response rate in a longitudinal study on MTurk.

This also contributes to the experimental method on the topic of credibility and message sharing by using multi-stimuli and actual individuals the participants know in examining the sharing phenomenon and simulate the real-life experience of exposure to different types of issues

on social media. The study measured the intention to share with multiple messages, which increases the authenticity and reliability of the experiments. It contributes to the multi-stimuli experiment literature and provides a prototype process of data analysis. Six societal issues were selected, namely *environmental protection*, *feminism*, *animal welfare*, *children's welfare*, *LGBTQ rights*, and *psychological well-being,* and they were randomly exposed to the respondents. The design could make sure that the effects on sharing can be replicable in other settings. In addition, those are also global issues that are not limited to a specific nation or a region. During the data analysis, *Environmental protection*, *animal welfare*, *children's welfare*, and *psychological well-being* were grouped as non-controversial issues, while *feminism* and *LGBTQ rights* were grouped as controversial issues. This strategy can examine the effects of source and emotions on sharing different types of issues through different ANCOVA and PROCESS models.

Practical Implications

The study provides practical implications for strategic communicators on how to engage ordinary people to spread persuasive messages to a wider audience and provide greater impacts on people's attitudes and behavior. Public relations practitioners and marketers could utilize the findings to market their organizations and engage online users to spread words for them by understanding how people share based on their individual needs such as self-presentation and social justice activism.

It provides strategies for preparing organizations' social media cause marketing campaigns by exploring the effects of communicators and emotions on people's diffusion actions. Taking a stand for a social issue would be an effective strategy under certain conditions. First, it is more suitable for non-profits than for-profits because of nonprofits' goals on solving

social problems and bridging the nexus between social capital and economic development (Anheier, 2012) and users are less skeptical of the non-profit in promoting those causes on social media. They will directly forward the message on social media without the need to be endorsed by their friends. In addition, to increase the publicity of a marketing message by passing along to wider online users, organizations could consider people's needs of social participation and design the message to match people's motivation, which might encourage their followers to engage with their social media posts.

Second, this study confirmed that a secondary source can help for-profits to increase their trustworthiness and message accessibility. Taking a stand on social issues may also strengthen their corporate social responsibility (CSR) by delivering messages that benefit social and environmental development to their stakeholders if it is not very controversial because people are much more cautious in sharing controversial messages. However, Facebook's current advertising strategies—showing who "likes" a post from a brand, may not be very effective, because many people do not pay attention to the secondary source as shown in the experiment. The post is not shared, so it does not have an endorsement effect. Only when the secondary source intentionally shares the message and he/she is perceived as credible, and the message is of interest to the audience, then an endorsement effect will take place.

Third, the sharing of messages through cause marketing is worthy to consider because customers are belief-driven buyers (Harris Poll, 2018). They expect companies to advocate for a social issue that connects to them emotionally (Harris Poll, 2018). It makes it much easier for organizations to overcome the social media algorithm to deliver messages and increase the visibility of their brands, products, and services. However, organizations must choose the messages carefully and probably avoid controversial messages. Although key opinion leaders

(KOLs) such as YouTubers and Instagrammers are crucial in diffusing brand-related messages, social media campaigns could utilize the power of eWOM of peer opinion leaders to maximize publicity. For example, the Ice Bucket Challenge was an excellent campaign that took advantage of social endorsement. Under personal influence, campaigns are more effective in changing people's attitudes and behavior with high-cost efficiency.

Fourth, it makes a promotional message more effective if the audience elicits stronger emotional arousal. This study shows that people are more likely to share the message if they generate positive emotions toward it. It breaks through the boundary that one avoids expressing one's mind and position on a controversial issue to maintain a positive self-image. Hence, effective communication could be achieved if the strategic communicators design a message with a combination of credible sources, emotional appeals, and an appropriate issue.

Last but not least, posting controversial social issues fosters deliberative democracy through social debate, although it may or may not be a good strategy in a promotional campaign. On one hand, it diminishes the endorsement power because fewer online users are willing to forward the posts since people perceive more social risks of disclosure of their identity of a controversial issue. On another hand, the activism action will help organizations gain more support from the public. More than half of US consumers bought a brand for the first time when the brand takes a stand on a controversial issue according to Porter Novelli (2018). It might benefit a small organization if it selects a non-controversial issue in their social media posts since it has more needs to maximize its publicity. Larger non-profit organizations and corporations can feature controversial issues and maintain a good reputation and to drive social and environmental changes toward sustainability, since such influence on sharing controversial issues only limited to strong-tie audiences. The controversial issues still help increase knowledge or enable

leadership perception of the sharer. The act would effectively enhance social discussions that drive positive impacts on the society.

Limitations of the Study

The study has a few limitations. The demographics of MTurk workers do not represent the United State population. The generalizability of the results to the general population is low. However, the experiment's goal was to explore how individuals react in response to different stimuli. It examined the main effects of source cues and source credibility on sharing Facebook posts. Furthermore, the numbers of subjects in each conditional group were not even. This was caused by the manipulation check that many people did not recognize the secondary sharer. The researcher argued that some people might not pay attention to the source, however, it might also have improved the validity of the study by separating the manipulation check questions—asking their online friends first and then ask the original source to make sure we included all people who recognized their friends in the stimuli messages.

In addition, the researcher did not manipulate the source credibility variable. Instead, she asked the respondents to evaluate their perceived source credibility. The goal of the experiment is to compare the sharing behavior of original and shared messages and the role of source cues and perceived credibility affect people's behavior. The effects of source credibility on sharing could not be treated as a causal effect but an association. Although the study simulates online individuals' real experience on Facebook in message elaboration measurement through the writing of response to the message, the act of "sharing" is still a behavioral intention to avoid spreading an experimental message to the participant's real friends. Furthermore, the researcher did not test the mediation effects of elaboration on source credibility and sharing behavior. Only the mediation effects of arousal on emotions and sharing were examined.

In addition, the controversality of six social issues selected in this study may vary by individuals. It is assumed rather than measured in the study. Issues like environmental protection can be controversial in terms of the policymaking process when considering the values of science, technology, and economics (Portney, 1992). The political ideology may influence the controversy in different issues and the research did not control for this factor. For the feminism issue stimulus using the Black Panther characters, females and Africa Americans may generate more positive feelings than male and other ethnicities, which may influence the effects of emotions on sharing. Future studies may examine the effects separately in terms of the gender and race. The visual used in the study should have been controlled so that it did not add confound to the study. The highest emotional arousal was found in the Feminism stimulus and Animal Welfare stimulus may indicate the powerful effect of these images (See Appendix F).

Furthermore, the findings suggest that sharing of non-controversial issues is significantly higher than controversial issues. However, the number of non-controversial and controversial issues was not even. Two were identified as controversial issues, while another four were non-controversial issues. Probably, the lack of variance in the message elaboration and sharing causes a non-significant relationship between the two for controversial issues. For example, sharer credibility does not moderate the mediating effects of message elaboration on the relationship between emotion valence and sharing in controversial issues.

Suggestions for Future Studies

Future research on source credibility's effect on sharing can explore individuals' cognitive response such as thoughts on the materials rather than simply judging the cognitive process through people's evaluation of source credibility. The researcher measured elaboration by participants' comments when they chose to share the posts. In future studies, the elaboration

measure might be separated from the dependent variables. The researcher may ask participants to write down their thoughts when reading the posts. In addition, the dependent variable "sharing" is still a behavioral intention. In the future, it may explore online users' true behavior with an advanced technique that will not actually send the shared message out but allow the participant to click the “share” icon. In the current study, the researcher used dimensional emotions by the valence. Future study can examine discrete emotion states such as happiness, pride, and anger separately, and find how different states predict sharing on social media.

The study found that friend sources have a great impact on online users’ behavior. However, many people do not pay attention to this type of source. Future studies may examine the factors that encourage or discourage people to engage with the secondary source and who and who do not pay attention to the second-layer source.

Although the Big Five Personality does not directly affect sharing as shown in the experiment, there may be indirect effects that the researcher did not explored in the study. Social media sharing may serve as the function of social interaction for extroverts who are more likely to disclose themselves and gain attention. It also serves as a tool for neurotic people because of their sensitivity to social acceptance and needs of social contacts. Conscientious people share a message to present themselves in the ways that are in line with the group norms (Seidman, 2013) because people care about what to share and whom to share. The Big Five Personality may affect credibility perception, perceived risk of sharing and imagined audience which may be examined in future.

To avoid the complexity of research, the researcher only focused on the message factors' influence on the outcome variables—sharing. Other message factors such as the medium could also affect the persuasiveness. In addition, the motivation of sharing is worthwhile to explore.

The study used self-presentation to explain the sharing of different social issues, which provides room for further investigation. Other motivations such as self-enhancement and social relationship building might be a reason to share. In addition, it is also worth exploring the effects of sharing on the senders themselves. In addition to cognitive benefits (Yoo, Kim, & Gil de Zunig, 2017), it might effectively strengthen their self-identity and increase their satisfaction with their social relations. Moreover, it is also necessary to examine why people do not share, which will expand the scope of sharing research to understand sharing and non-sharing of messages as communication behavior.

REFERENCES

Aaker, J., Vohs, K. D., & Mogilner, C. (2010). Nonprofits are seen as warm and for-profits as competent: Firm stereotypes matter. *Journal of Consumer Research*, 37(2), 224-237.

Agag, G., & El-Masry, A. A. (2016). Understanding consumer intention to participate in online travel community and effects on consumer intention to purchase travel online and WOM: An integration of innovation diffusion theory and TAM with trust. *Computers in human behavior*, *60*, 97-111.

Alaska Airlines. (2018). Where does Alaska Airlines fly? Retrieved October 16, 2018 from https://www.alaskaair.com/content/where-we-fly/travel-destinations?lid=nav:explore-destinations&int=AS_NAV_Explore_Destinations_-prodID:Destinations.

Andreoli, V., & Worchel, S. (1978). Effects of media, communicator, and message position on attitude change. *Public Opinion Quarterly*, 42, 59-70.

Anheier, H. (2013, Spring). The nonprofits of 2025. Stanford Social Innovation Review. https://ssir.org/articles/entry/the_nonprofits_of_2025#

Arbuckle, J. L. (2010). IBM SPSS® Amos 19 user's guide. Retrieved September 14, 2017 from http://amosdevelopment.com/download/amos.pdf

Asendorpf, J. B., & Wilpers, S. (1998). Personality effects on social relationships. *Journal of Personality and Social Psychology*, 74, 1531–1544.

Appelman, A., & Sundar, S. S. (2015). Measuring message credibility construction and validation of an exclusive scale. *Journalism & Mass Communication Quarterly, 93* (1), 59-79.

Back, M. D., Stopfer, J. M., Vazire, S., Gaddis, S., Schmukle, S. C., Egloff, B., & Gosling, S. D. (2010). Facebook profiles reflect actual personality, not self-idealization. *Psychological Science*, *21*(3), 372-374.

Batson, C. D., Shaw, L. L., & Oleson, K. C. (1992). Differentiating affect, mood, and emotion: toward functionally based conceptual distinctions. In M. S. Clark (Ed.), Emotion. *Review of personality and social psychology, 13*, 294-326. Thousand Oaks, CA: Sage Publications, Inc.

Baumeister, R. F., & Hutton, D. G. (1987). Self-presentation theory: Self-construction and audience pleasing. In B. Mullen & G. R. Goethals (Eds.), Theories of group behavior (pp.71-87) . New York, NY: Springer.

Ben-Ner, A., & Halldorsson, F. (2010). Trusting and trustworthiness: What are they, how to measure them, and what affects them. *Journal of Economic Psychology*, 31(1), 64-79.

Berger, J., & Milkman, K. L. (2012). What makes online content viral?. *Journal of marketing research, 49(2),* 192-205. doi: 10.1509/jmr.10.0353

Berinsky, A. J., Huber, G. A., & Lenz, G. S. (2012). Evaluating online labor markets for experimental research: Amazon.com's Mechanical Turk. *Political Analysis, 20*(3), 351-368. DOI: 10.1093/pan/mpr057

Berkowitz, L., & Donnerstein, E. (1982). External validity is more than skin deep: Some answers to criticisms of laboratory experiments. *American psychologist*, 37(3), 245.

Berlo, D. K., Lemert, J. B., Mertz, R. J. (1970). Dimensions for evaluating the acceptability of message sources. *Public Opinion Quarterly, 33*, 563-676.

Bernstein, M. S., Bakshy, E., Burke, M., & Karrer, B. (2013, April). Quantifying the invisible audience in social networks. In *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems* (pp. 21-30). ACM.

Bi, C., Zhang, R., & Ha, L. (2018). Does valence of product review matter? The mediating role of self effects and third-person effects in sharing YouTube word-of-mouth (vWOM). *Journal of Research in Interactive Marketing*. doi: 10.1108/JRIM-04-2018-0049

Blyler, M., & Coff, R. W. (2003). Dynamic capabilities, social capital, and rent appropriation: Ties that split pies. *Strategic Management Journal, 24*(7), 677-686.

Bobkowski, P. S. (2015). Sharing the news: Effects of informational utility and opinion leadership on online news sharing. *Journalism & Mass Communication Quarterly*, 92(2), 320-345.

Botha, E., & Reyneke, M. (2013). To share or not to share: the role of content and emotion in viral marketing. *Journal of Public Affairs*, *13*(2), 160-171.

Bradley, M. M., & Lang, P. J. (1994). Measuring emotion: the self-assessment manikin and the semantic differential. *Journal of Behavior Therapy and Experimental Psychiatry*, *25*(1), 49-59.

British Libarary. (2013, March 8). Myths and controversies surrounding feminism, Retrieved Feberary 20, from https://www.bl.uk/sisterhood/articles/myths-and-controversies-surrounding-feminism.

Brodie, R. J., Ilic, A., Juric, B., & Hollebeek, L. (2013). Consumer engagement in a virtual brand community: An exploratory analysis. *Journal of Business Research*, *66*(1), 105-114.

Brown, J. (2014). *The self*. Hove, United Kingdom: Psychology Press.

Brown, J., Broderick, A. J., & Lee, N. (2007). Word of mouth communication within online communities: Conceptualizing the online social network. *Journal of Interactive Marketing*, *21*(3), 2-20.

Buijzen, M., Walma van der Molen, J. H., & Sondij, P. (2007). Parental mediation of children's emotional responses to a violent news event. *Communication Research*, 34(2), 212-230.

Bullingham, L., & Vasconcelos, A. C. (2013). 'The presentation of self in the online world': Goffman and the study of online identities. *Journal of Information Science*, 39(1), 101-112.

Burleson, B. R., & MacGeorge, E. L. (2002). Supportive communication. *Handbook of Interpersonal Communication*, *3*, 374-424.

Burnkrant, R. E., & Unnava, R. (1989). Self-referencing: A strategy for increasing processing of message content. *Personality and Social Psychology Bulletin, 15*, 628-638.

Cambridge Dictionary. (2019). Retreived March 4, 2019 from https://dictionary.cambridge.org/us/dictionary/english/controversial.

Campbell, D. T. (1957). Factors relevant to the validity of experiments in social settings. *Psychological Bulletin, 54*(4), 297-312.

Carr, C., & Hayes, R. (2015). Social Media: Defining, developing, and divining. *Atlantic Journal of Communication*, 23(1), 46–65.

Casaló, L.V., Flavián, C. and Guinalíu, M. (2008). Promoting consumer's participation in virtual brand communities: a new paradigm in branding strategy. *Journal of Marketing Communications*, 14(1): 19-36.

Caspi, A., Roberts, B. W., & Shiner, R. L. (2005). Personality development: Stability and change. *Annual Review of Psychology*, 56, 453–484.

Chaiken, S., & Maheswaran, D. (1994). Heuristic processing can bias systematic processing: effects of source credibility, argument ambiguity, and task importance on attitude judgment. *Journal of personality and social psychology*, 66(3), 460.

Chan, T. K., Zheng, X., Cheung, C. M., Lee, M. K., & Lee, Z. W. (2014). Antecedents and consequences of customer engagement in online brand communities. *Journal of Marketing Analytics*, *2*(2), 81-97.

Chandler, J., Mueller, P., & Paolacci, G. (2014). Nonnaïveté among Amazon Mechanical Turk workers: Consequences and solutions for behavioral researchers. *Behavior Research Methods*, *46*(1), 112-130. DOI: 10.3758/s13428-013-0365-7

Chen, Y. R. R., Hung-Baesecke, C. J. F., & Kim, J. N. (2017). Identifying active hot-issue communicators and subgroup identifiers: Examining the situational theory of problem solving. *Journalism & Mass Communication Quarterly, 94*(1), 124-147.

Cho, S., Huh, J., & Faber, R. J. (2014). The influence of sender trust and advertiser trust on multistage effects of viral advertising. *Journal of Advertising*, *43*(1), 100-114.

Choi, J. (2016). News internalizing and externalizing: The dimensions of news sharing on online social networking sites. *Journalism & Mass Communication Quarterly, 93*(4), 816-835. doi: 10.1177/1077699016628812

Claycomb, C., Porter, S. S., & Martin, C. L. (2000). Riding the wave: Response rates and the effects of time intervals between successive mail survey follow-up efforts. *Journal of Business Research, 48*(2), 157-162.

Cohen, D. (2018, January 16). The ad community's reaction to Facebook's news feed algorithm change experts examine how the platform's announcement affects the industry. *Adweek*,

Retrieved December 12, 2018 from https://www.adweek.com/digital/the-ad-communitys-reaction-to-facebooks-news-feed-algorithm-change/.

Cozby, P. C. (1973). Self-disclosure: a literature review. *Psychological bulletin*, 79(2), 73-91.

Crutzen, R., de Nooijer, J., Brouwer, W., Oenema, A., Brug, J., & de Vries, N. (2009). Effectiveness of online word of mouth on exposure to an Internet-delivered intervention. *Psychology and Health*, 24(6), 651-661.

Cyr, D., Hassanein, K., Head, M., & Ivanov, A. (2007). The role of social presence in establishing loyalty in e-service environments. *Interacting with Computers*, 19, 43-56.

Czarnecki, S. (2017, June 6). Timeline of a crisis: United Airlines. *PR Week*. Retrieved October 16, 2018 from https://www.prweek.com/article/1435619/timeline-crisis-united-airlines.

Dabholkar, P. A. (1990). How to improve perceived service quality by increasing customer participation. In *Proceedings of the 1990 Academy of Marketing Science (AMS) Annual Conference* (pp. 483-487). Springer, Cham.

Dean, D. H., & Biswas, A. (2001). Third-party organization endorsement of products: An advertising cue affecting consumer prepurchase evaluation of goods and services. *Journal of advertising*, *30*(4), 41-57.

DeBono, K. G., & Harnish, R. J. (1988). Source expertise, source attractiveness, and the processing of persuasive information: A functional approach. *Journal of Personality and social Psychology*, *55*(4), 541.

Delta. (2018). Worldwide service. Retrieved October 16, 2018 from https://news.delta.com/corporate-stats-and-facts.

Dessart, L., Veloutsou, C., & Morgan-Thomas, A. (2015). Consumer engagement in online brand communities: a social media perspective. *Journal of Product & Brand Management*, *24*(1), 28-42.

Dichter, E. (1966). How word-of-mouth advertising works. *Harvard business review*, *44*(6), 147-160.

Dillard, J., & Shen, L. (2007). Self-report measures of discrete emotions. In *Handbook of Research on Electronic Surveys and Measurements* (pp. 330-333). IGI Global.

Dodson Jr, J. A., & Muller, E. (1978). Models of new product diffusion through advertising and word-of-mouth. *Management Science*, 24(15), 1568-1578.

Eagly, A. H. & Chaiken, S. (1975). An attribution analysis of the effect of communicator characteristics on opinion change: The case of communicator attractiveness. *Journal of Personality and Social Psychology*, 32 (1): 136-144.

Easley, D. & Kleinberg, J. (2010). *Networks, Crowds, and Markets: Reasoning about a Highly Connected World*. Cambridge University Press.

Eastin, M. S. (2001). Credibility assessments of online health information: The effects of source expertise and knowledge of content. *Journal of Computer-Mediated Communication*, 6(4), JCMC643.

Eckler, P., & Bolls, P. (2011). Spreading the virus: Emotional tone of viral advertising and its effect on forwarding intentions and attitudes. *Journal of Interactive Advertising, 11(2),* 1-11. doi: 10.1080/15252019.2011.10722180.

Eisingerich, A. B., Auh, S., & Merlo, O. (2014). Acta non verba? The role of customer participation and word of mouth in the relationship between service firms' customer satisfaction and sales performance. *Journal of Service Research*, *17*(1), 40-53.

Ekman, P., & Friesen, W. V. (1971). Constants across cultures in the face and emotion. *Journal of Personality and Social Psychology, 17*(2), 124 129.

Ellsworth, P. C., & Smith, C. A. (1988). From appraisal to emotion: Differences among unpleasant feelings. *Motivation and Emotion, 12*, 271–302.

Environmental Defense Fund. (2018). Take action: Congress is putting wildlife at risk. Retrieved Feberary 28, 2018 from https://membership.onlineaction.org/site/Advocacy?cmd=display&id=3141&page=UserAction&utm_source=facebook&utm_campaign=edf_transition_upd_dmt&utm_medium=social-media&utm_id=1518460071&utm_content=annie_esa&cg=true&aud=1.

Etikan, I., Musa, S. A., & Alkassim, R. S. (2016). Comparison of convenience sampling and purposive sampling. *American Journal of Theoretical and Applied Statistics, 5*(1), 1-4.

Ewoldsen, D. R., Rhodes, N., & Fazio, R. H. (2015). The MODE model and its implications for studying the media. *Media Psychology*, *18*(3), 312-337.

Facebook. (2019). Retrieved March 4, 2019 from https://www.facebook.com/.

Fernando, A. G., Suganthi, L., & Sivakumaran, B. (2014). If you blog, will they follow? Using online media to set the agenda for consumer concerns on “greenwashed” environmental claims. *Journal of Advertising*, *43*(2), 167-180.

Fikkers, K. M., Piotrowski, J. T., Lugtig, P., & Valkenburg, P. M. (2016). The Role of perceived peer norms in the relationship between media violence exposure and adolescents' aggression. *Media Psychology*, *19*(1), 4-26.

Filieri, R., Alguezaui, S., & McLeay, F. (2015). Why do travelers trust TripAdvisor? Antecedents of trust towards consumer-generated media and its influence on recommendation adoption and word of mouth. *Tourism Management*, 51, 174-185.

Fredrickson, B. L. (2013). Positive emotions broaden and build. In *Advances in experimental social psychology* (Vol. 47, pp. 1-53). Academic Press.

Frontier. (2018). Choose your destination. Retrieved October 16, 2018 from https://flights.flyfrontier.com/en/.

Geusens, F., & Beullens, K. (2016). Strategic self-presentation or authentic communication? Predicting adolescents' alcohol references on social media. *Journal of studies on alcohol and drugs*, 78(1), 124-133.

Gleit, N. (2017, December 5). Facebook's 2017 year in review. Retrieved March 17, 2018, from https://newsroom.fb.com/news/2017/12/facebooks-2017-year-in-review/

Gnambs, T., & Batinic, B. (2011). Evaluation of measurement precision with Rasch-type models: The case of the short Generalized Opinion Leadership Scale. *Personality and Individual Differences, 50*, 53–58. doi:10.1016/j.paid.2010.08.021

Goetz, J. L., Keltner, D., & Simon-Thomas, E. (2010). Compassion: an evolutionary analysis and empirical review. *Psychological Bulletin, 136*(3), 351.

Goffman, E. (1959). T*he Presentation of Self in Everyday Life*. NY, New York: Anchor Books.

Goldsmith, R. E., & Horowitz, D. (2006). Measuring motivations for online opinion seeking. *Journal of Interactive Advertising*, *6*(2), 2-14.

Google (2018). Google Trends. Retrieved March 17, 2018 from https://trends.google.com/trends/home/h/US

Gosling, S. D., Rentfrow, P. J., & Swann Jr, W. B. (2003). A very brief measure of the Big-Five personality domains. *Journal of Research in Personality*, *37*(6), 504-528.

Grantspace (2018). What is a foundation? Retrieved October 16, 2018 from https://grantspace.org/resources/knowledge-base/what-is-a-foundation/.

Gravetter, F. J. , & Forzano, L. B. (2012). *Research Methods for the Behavioral Sciences, 4th edition*. Belmont, CA: Wadsworth.

Green, D. P., Salovey, P., & Truax, K. M. (1999). Static, dynamic, and causative bipolarity of affect. *Journal of Personality and Social Psychology, 76(5),* 856. doi: 10.1037/0022-3514.76.5.856.

Greenwald, A. (1976). Within-subjects designs: to use or not to use?. *Psychological Bulletin*, 83(2), 314-320.

Greifeneder, R., Bless, H., & Pham, M. T. (2011). When do people rely on affective and cognitive feelings in judgment? A review. *Personality and Social Psychology Review*, 15, 107–141.

Guadagno, R. E., Rempala, D. M., Murphy, S., & Okdie, B. M. (2013). What makes a video go viral? An analysis of emotional contagion and Internet memes. *Computers in Human Behavior, 29*(6), 2312-2319.

Gulati, M. (2018, February 22). 6 best award winning social media campaigns to watch in 2018. Retrieved March 17, 2018, from https://armworldwide.com/6-best-award-winning-social-media-campaigns-watch-2018/

Ha, H.Y. (2004), Factors influencing consumer perceptions of brand trust online. *Journal of Product and Brand Management*, 13 (5): 329-342.

Hajli, N., Shanmugam, M., Papagiannidis, S., Zahay, D. and Richard, M.O. (2016). Branding co-creation with members of online brand communities. *Journal of Business Research*, 70 (1): 136-144.

Ham, C. D., Nelson, M. R., & Das, S. (2015). How to measure persuasion knowledge. *International Journal of Advertising*, 34(1), 17-53.

Harris Poll. (2006). Online survey. Reviewed from Allsop, D.T., Bassett, B.R. and Hoskins, J.A. (2007), "Word-of-mouth research: principles and applications", *Journal of Advertising Research*, *47*(4), 398-411.

Harris Poll. (2016). Harris Poll: U.S. consumers' likelihood to engage with nonprofits up more than 500 percent since 2016. Reviewed 2019, March 23 from https://theharrispoll.com/u-s-consumers-likelihood-to-engage-with-nonprofits-is-up-more-than-500-percent-since-early-2016-according-to-new-research-from-the-harris-polls-29th-annual-equitrend-study-which-m/.

Harris Poll. (2017). Social good is the new sales pitch. Reviewed 2019, March 23 from https://theharrispoll.com/social-good-is-the-new-sales-pitch/.Hayes, A. F. (2013). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach*. New York, London: Guilford Press.

Henderson, K. (2015). Trust and source credibility in consumer engagement: a fashion blog perspective. (Master's thesis). Retrieved from UC Research Repository

Hennig-Thurau, T., Gwinner, K. P., Walsh, G., & Gremler, D. D. (2004). Electronic word-of-mouth via consumer-opinion platforms: What motivates consumers to articulate themselves on the Internet?. *Journal of Interactive Marketing*, 18(1), 38-52.

Hennig-Thurau, T., & Walsh, G. (2003). Electronic word-of-mouth: Motives for and consequences of reading customer articulations on the Internet. *International Journal of Electronic Commerce*, 8(2), 51-74.

Hng, M. R., & Littau, J. (2015). Interacting is believing interactivity, social cue, and perceptions of journalistic credibility on twitter. *Journalism & Mass Communication Quarterly*, 93 (1), 38-58. doi:10.1177/1077699015606680

Homer, P. M., & Kahle, L. R. (1990). Source expertise, time of source identification, and involvement in persuasion: An elaborative processing perspective. *Journal of advertising*, 19(1), 30-39.

Hovland, C. I., Janis, I. L., & Kelley, H. H. (1953). *Communication and Persuasion.* New Haven, CT: Yale University Press.

Hovick, S. R., Kahlor, L., & Liang, M. (2014). Personal cancer knowledge and information seeking through PRISM: The planned risk information seeking model. *Journal of Health Communication, 19*(4), 511–527.

Hsu, M. H., Ju, T. L., Yen, C. H., & Chang, C. M. (2007). Knowledge sharing behavior in virtual communities: The relationship between trust, self-efficacy, and outcome expectations. *International Journal of Human-Computer Studies, 65*(2), 153-169.

Hu, X., and Ha, L. 2015. "Which form of word-of-mouth is more important to online shoppers? A comparative study of WOM use between general population and college students." *Journal of Communication and Media Research*, *7*(2), 15-35.

Huang, C. C., Lin, T. C., & Lin, K. J. (2009). Factors affecting pass-along email intentions (PAEIs): Integrating the social capital and social cognition theories. *Electronic Commerce Research and Applications*, *8*(3), 160-169.

Huffington. (2009). "United Breaks Guitars": did it really cost the airline $180 million? Retrieved October 16, 2018 from https://www.huffingtonpost.com/2009/07/24/united-breaks-guitars-did_n_244357.html.

Hur, W. M., Ahn, K. H., & Kim, M. (2011). Building brand loyalty through managing brand community commitment. *Management Decision*, *49*(7), 1194-1213.

Hussain, S., Ahmed, W., Jafar, R. M. S., Rabnawaz, A., & Jianzhou, Y. (2017). eWOM source credibility, perceived risk and food product customer's information adoption. *Computers in Human Behavior, 66*, 96-102.

iResearch (2017, November). 2017 Chinese Internet entertainment content report. Retrieved from http://mp.weixin.qq.com/s/1M_BbOseDaPdI6ftHVoWWw.

Ismagilova, E., Slade, E., Rana, N. P., & Dwivedi, Y. K. (2019). The effect of characteristics of source credibility on consumer behaviour: A meta-analysis. *Journal of Retailing and Consumer Services*.

Jahn, B., & Kunz, W. (2012). How to transform consumers into fans of your brand. *Journal of Service Management*, *23*(3), 344-361.

Jahng, M. R., & Littau, J. (2015). Interacting Is Believing Interactivity, Social Cue, and Perceptions of Journalistic Credibility on Twitter. *Journalism & Mass Communication Quarterly*, 93 (1), 38-58.

Jansen , B. J. , Sobel , K. , & Cook , G. (2011). Classifying ecommerce information sharing behaviour by youths on social networking sites. *Journal of Information Science , 37* (2), 120-136 .

Jin, S. A. A., & Phua, J. (2014). Following celebrities' tweets about brands: The impact of Twitter-based electronic word-of-mouth on consumers' source credibility perception, buying intention, and social identification with celebrities. *Journal of Advertising*, *43*(2), 181-195.

John, O. P., & Srivastava, S. (1999). *The Big-Five trait taxonomy: History, measurement, and theoretical perspectives*. In L. A. Pervin & O. P. John (Eds.), Handbook of personality: Theory and research (Vol. 2, pp. 102–138). New York: Guilford Press.

Jones, E. E., & Pittman, T. S. (1982). Toward a general theory of strategic self-presentation. In J. Suls (Ed.), *Psychological perspectives on the self* (pp. 231-261). Hillsdale, NJ: Lawrence Erlbaum.

Jones, L. W., Sinclair, R. C., & Courneya, K. S. (2003). The effects of source credibility and message framing on exercise intentions, behaviors, and attitudes: An integration of the elaboration likelihood model and prospect theory. *Journal of Applied Social Psychology*, *33*(1), 179-196.

Jöreskog, K. G., & Sörbom, D. (1993). *LISREL 8: Structural equation modeling with the SIMPLIS command language.* Scientific Software International.

Katz, E., Blumler, J. G., & Gurevitch, M. (1973). Uses and gratifications research. *The public opinion quarterly*, 37(4), 509-523.

Kang, J., Tang, L. and Fiore, A. M. (2014). Enhancing consumer–brand relationships on restaurant Facebook fan pages: maximizing consumer benefits and increasing active participation. *International Journal of Hospitality Management*, *36*(1): 145-155.

Kairam, S., Brzozowski, M., Huffaker, D. and Chi, E. (2012). Talking in circles: selective sharing in Google+. *Proc. of CHI '12*, 1065–1074. Retrieved from https://dl.acm.org/citation.cfm?id=2208552.

Kamboj, S., & Rahman, Z. (2017). Understanding customer participation in online brand communities: Literature review and future research agenda. *Qualitative Market Research: An International Journal*, 20(3), 306-334.

Kennedy, J. (2016). Conceptual boundaries of sharing. *Information, Communication & Society*, *19*(4), 461-474.

Kietzmann, J., & Canhoto, A. (2013). Bittersweet! Understanding and managing electronic word of mouth. *Journal of Public Affairs*, 13(2), 146–159. doi:10.1002/pa.1470

Kim, E. M. & Ihm, J. (2019). More Than Virality: Online Sharing of Controversial News With Activated Audience. *Journalism & Mass Communication Quarterly*, 1-23. doi: 10.1177/1077699019836950

Kim, E. M., Ihm, J., & Park, H. A. (2017). News sharing as relational communication: Focusing on self-presentation tendency and characteristics of sharing audiences. *Korean Journal of Broadcasting and Telecommunication Studies*, 31(3), 114-151.

Kim, C., & Lee, J. K. (2016). Social media type matters: investigating the relationship between motivation and online social network heterogeneity. *Journal of Broadcasting & Electronic Media*, *60*(4), 676-693.

Kim, J. N., & Grunig, J. E. (2011). Problem solving and communicative action: A situational theory of problem solving. *Journal of Communication*, *61*(1), 120-149.

Kelman, H. C. and Hovland, C. I. (1953). Reinstatement of the communicator in delayed measurement of opinion change. *Journal of Abnormal and Social Psychology*, *48*(3): 327-335.

Kozinets, R. V., De Valck, K., Wojnicki, A. C., & Wilner, S. J. (2010). Networked narratives: Understanding word-of-mouth marketing in online communities. *Journal of Marketing*, *74*(2), 71-89.

Kumar, V., Aksoy, L., Donkers, B., Venkatesan, R., Wiesel, T., & Tillmanns, S. (2010). Undervalued or overvalued customers: capturing total customer engagement value. *Journal of Service Research*, *13*(3), 297-310.

Kumkale, G. T., Albarracín, D., & Seignourel, P. J. (2010). The effects of source credibility in the presence or absence of prior attitudes: Implications for the design of persuasive communication campaigns. *Journal of Applied Social Psychology*, *40*(6), 1325-1356.

Kümpel, A. S., Karnowski, V., & Keyling, T. (2015). News Sharing in Social Media: A Review of Current Research on News Sharing Users, Content, and Networks. *Social Media+ Society*, 1(2), 1-14. Retrieved from http://journals.sagepub.com/doi/abs/10.1177/2056305115610141.

Kuo, T., & Tang, H. L. (2014). Relationships among personality traits, Facebook usages, and leisure activities–A case of Taiwanese college students. *Computers in Human Behavior*, *31*, 13-19.

Lafferty, B. A., Goldsmith, R. E., & Newell, S. J. (2002). The dual credibility model: The influence of corporate and endorser credibility on attitudes and purchase intentions. *Journal of Marketing Theory and Practice*, *10*(3), 1-11.

LaRose, R. (2009). Social cognitive theories of media selection. In T. Hartmann (Ed.), *Media choice: A theoretical and empirical overview* (pp. 10–31). New York, NY: Routledge.

Lee, M., & Youn, S. (2009). Electronic word of mouth (eWOM) How eWOM platforms influence consumer product judgement. *International Journal of Advertising*, 28(3), 473-499.

Leary, M. R. (1995). *Self-presentation: Impression management and interpersonal behavior*. Brown & Benchmark Publishers.

Leckie, C., Nyadzayo, M. W., & Johnson, L. W. (2016). Antecedents of consumer brand engagement and brand loyalty. *Journal of Marketing Management*, *32*(5-6), 558-578.

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

Lee, M. (2018, January 25). Top 10 influential social media marketing campaigns of 2017. Retrieved February 25 from https://www.adherecreative.com/blog/top-10-influential-social-media-marketing-campaigns-of-2017.

Lee-Won, R. J., Shim, M., Joo, Y. K., & Park, S. G. (2014). Who puts the best "face" forward on Facebook?: Positive self-presentation in online social networking and the role of self-consciousness, actual-to-total Friends ratio, and culture. *Computers in Human Behavior*, *39*, 413-423.

Lenhart, A., Horrigan, J., & Fallows, D. (2014, February 29). Content Creation Online. *Pew Research Center*. Retreived September 20, 2017 from http://www.pewinternet.org/2004/02/29/content-creation-online/

Leong, L. Y., Hew, T. S., Ooi, K. B., & Lin, B. (2017). Do electronic word-of-mouth and elaboration likelihood model influence hotel booking?. *Journal of Computer Information Systems*, 1-15.

Leung, L., & Wei, R. (1998). The gratifications of pager use: Sociability, informationseeking, entertainment, utility, and fashion and status. *Telematics and Informatics, 15*(4), 253–264.

Lim, Y. S., & Van Der Heide, B. (2015). Evaluating the wisdom of strangers: The perceived credibility of online consumer reviews on Yelp. *Journal of Computer‐Mediated Communication*, 20(1), 67-82.

Litt, E. (2012). Knock, knock. Who's there? The imagined audience. *Journal of Broadcasting & Electronic Media*, *56*(3), 330-345.

Litt, E., & Hargittai, E. (2016). The imagined audience on social network sites. *Social Media+ Society*, *2*(1), 1-3. Retrieved from http://journals.sagepub.com/doi/full/10.1177/2056305116633482.

Litvin, S. W., Goldsmith, R. E., & Pan, B. (2008). Electronic word-of-mouth in hospitality and tourism management. *Tourism Management*, 29(3), 458-468.

Lorence, D., & Abraham, J. (2008). A study of undue pain and surfing: using hierarchical criteria to assess website quality. *Health Informatics Journal, 14*(3), 155-173. doi:10.1177/1081180X08092827

Mahapatra, S., & Mishra, A. (2017). Acceptance and forwarding of electronic word of mouth. *Marketing Intelligence & Planning*, *35*(5), 594-610.

Marder, J. (2015, February 11). The Internet's hidden science factory. *PBS*. Retrieve February 25, 2015 from http://www.pbs.org/newshour/updates/inside-amazons-hidden-science-factory.

Marsden, P. V. & James D. W. (2010). *Handbook of Survey Research*. 2nd ed. Bingley, UK: Emerald Group Publishing Limited.

Marwick, A. E., & Boyd, D. (2011). I tweet honestly, I tweet passionately: Twitter users, context collapse, and the imagined audience. *New Media & Society*, *13*(1), 114-133.

Matthes, J. (2013). The affective underpinnings of hostile media perceptions: Exploring the distinct effects of affective and cognitive involvement. *Communication Research*, *40*(3), 360-387.

Mason, W., & Suri, S. (2011). Conducting behavioral research on Amazon's Mechanical Turk. *Behavior Research Methods*, 44(1), 1-23.

McCroskey, J. C. (1966). Scales for measure of ethos. *Speech Monographs, 33*, 65-72.

McCroskey, J. C., Jenson, T., & Valencia, C. (1973, April). Measurement of the credibility of peers and spouses. Paper presented at the meeting of the International Communication Association, Montreal.

McCroskey, J. C., & Teven, J. J. (1999). Goodwill: A reexamination of the construct and its measurement. *Communications Monographs*, 66(1), 90-103.

McKeever, B. W., McKeever, R., Holton, A. E., & Li, J. Y. (2016). Silent majority: Childhood vaccinations and antecedents to communicative action. *Mass Communication and Society*, 19(4), 476-498.

McCroskey, J. C., & Teven, J. J. (1999). Goodwill: A reexamination of the construct and its measurement. *Communication Monographs, 66*, 90-103.

Meikle, G. (2016). *Social media: Communication, sharing and visibility*. Routledge.

Mitchell, A., Gottfried, J., Shearer, E., & Lu, K. (2017, February 9). How Americans, encounter, recall and act upon digital news. Retrieved October 11 from http://assets.pewresearch.org/wp-content/uploads/sites/13/2017/02/08183209/PJ_2017.02.09_Experiential_FINAL.pdf.

Mondak, J. J. (1993). Public opinion and heuristic processing of source cues. *Political behavior*, 15(2), 167-192.

Morgan, S. L. & Christopher, W. (2007). *Counterfactuals and Causal Inference: Methods and Principles for Social Research*. New York: Cambridge University Press.

Mosquera, P. M. R., Manstead, A. S., & Fischer, A. H. (2000). The role of honor-related values in the elicitation, experience, and communication of pride, shame, and anger: Spain and the Netherlands compared. *Personality and Social Psychology Bulletin, 26(7),* 833-844. doi: 10.1177/0146167200269008.

Mun, Y. Y., & Hwang, Y. (2003). Predicting the use of web-based information systems: self-efficacy, enjoyment, learning goal orientation, and the technology acceptance model. *International Journal of Human-Computer Studies*, *59*(4), 431-449.

Munzel, A., & H. Kunz, W. (2014). Creators, multipliers, and lurkers: who contributes and who benefits at online review sites. *Journal of Service Management*, *25*(1), 49-74.

Myrick, J. G. (2015). *The role of emotions in preventative health communication*. Lexington Books.

Nabi, R. L., Roskos-Ewoldsen, D., & Carpentier, F. (2008). Subjective knowledge and fear appeal effectiveness: Implications for message design. *Health Communication*, *23*(2), 191–201.

Nekmat, E., Gower, K. K., Zhou, S., & Metzger, M. (2019). Connective-collective action on social media: Moderated mediation of cognitive elaboration and perceived source credibility on personalness of source. *Communication Research*, 46(1), 62-87.

O'Keefe, D. J. (2012). The Elaboration Likelihood Model. In Shen, L., & Bigsby, E. (2012). *The SAGE handbook of persuasion developments in theory and practice.* SAGE Publications, Inc.

Ohanian, R. (1990). Construction and Validation of a Scale to Measure Celebrity Endorsers' Perceived Expertise, Trustworthiness, and Attractiveness. *Journal of Advertising*, *19*(3), 39-52.

Oppenheimer, D. M., Meyvis, T., & Davidenko, N. (2009). Instructional manipulation check*s: Detecting satisficing to increase statistical power. Journal of Experimental Social Psychology,* 45(4), 867-872.

Osman, M. (February 15, 2018). 28 powerful Facebook stats your brand can't ignore in 2018. Retrieved February 24, 2018 from https://sproutsocial.com/insights/facebook-stats-for-marketers/.

Oxford Dictionary. (2018). Share. Retrieved March 21, 2018 from https://en.oxforddictionaries.com/definition/share.

Park, D., Lee, J., & Han, I. (2007). The effect of on-line consumer reviews on consumer purchasing intention: The moderating role of involvement. *International Journal of Electronic Commerce*, *11*(4), 125–148.

Petty, R. E., Barden, J., & Wheeler, S. C. (2009). The Elaboration Likelihood Model of persuasion: Developing health promotions for sustained behavioral change.

Petty, R. E. (2018). *Attitudes and persuasion: Classic and contemporary approaches*. London, UK: Routledge.

Petty, R. E., & Briñol, P. (2014). Emotion and persuasion: Cognitive and meta-cognitive processes impact attitudes. *Cognition and Emotion*, 29(1), 1-26.

Petty, R. E., & Cacioppo, J. T. (1979). Issue-involvement can increase or decrease persuasion by enhancing message-relevant cognitive responses. *Journal of Personality and Social Psychology, 37,* 1915-1926.

Petty, R. E., & Cacioppo, J. T. (1986). The elaboration likelihood model of persuasion. L. Berowitz (Ed.), *Advances in experimental psychology* (Vol. 19, pp. 124-203). New York, NY: Academic Press.

Petty, R. E., Cacioppo, J. T., & Goldman, R. (1981). Personal involvement as a determinant of argu ment-based persuasion. *Journal of Personality and Social Psychology*, 41, 847-855.

Petty, R. E., Schumann, D. W., Richman, S. A., & Strathman, A. J. (1993). Positive mood and persua- sion: Different roles for affect under high and low elaboration conditions. *Journal of Personality and Social Psychology*, 64(1), 5–20.

Petty, R. E. & Wegener, D. T. (1998). Attitude change: Multiple roles for persuasion variables. *The Handbook of Social Psychology* 1, 323-390.

Petty, R. E., Wegener, D. T., & Fabrigar, L. R. (1997). Attitudes and attitude change. *Annual review of psychology*, 48(1), 609-647.

Pew Research Center. (2018, February 5). Social media fact sheet. Retrieved February 24, 2018 from http://www.pewinternet.org/fact-sheet/social-media/.

Pingree, R. J. (2007). How messages affect their senders: A more general model of message effects and implications for deliberation. *Communication Theory*, 17, 439-461. doi:10.1111/j.1468-2885.2007.00306.x

Porter Novelli. (2018). 2018 Edelman Earned Brand, Retrieve 2019, March 23 from https://www.edelman.com/earned-brand.

Portney, K. E. (1992). Controversial issues in environmental policy: Science vs. economics vs. politics (Vol. 1). Thousand Oaks, CA: Sage Publications.

Preacher, K. J., Rucker, D. D., & Hayes, A. F. (2007). Addressing moderated mediation hypotheses: Theory, methods, and prescriptions. *Multivariate behavioral research*, 42(1), 185-227.

Purdue. (2017). Structural Equation Modeling. Retrieved September 14, 2017 from www.stat.purdue.edu/~bacraig/SCS/Structural%20Equation%20Modeling.doc

Quan-Haase, A., & Young, A. L. (2010). Uses and gratifications of social media: A comparison of Facebook and instant messaging. Bulletin of Science, *Technology & Society*, 30(5), 350-361.

Rathore, S. (Ed.). (2015). *Capturing, analyzing, and managing word-of-mouth in the digital marketplace*. Hershey, PA: IGI Global.

Ratneshwar, S., & Chaiken, S. (1991). Comprehension's role in persuasion: The case of its moderating effect on the persuasive impact of source cues. *Journal of Consumer Research*, 18(1), 52-62.

Richins, M. L. (1997). Measuring emotions in the consumption experience. *Journal of consumer research, 24*(2), 127-146.

Robertson, T. S., & Myers, J. H. (1969). Personality correlates of opinion leadership and innovative buying behavior. *Journal of Marketing Research*, 6 (2), 164-168.

Roethlisberger, F. J., & Dickson, W. J. (1964). *Management and the worker: an account of a research program conducted by the Western Electric Company, Hawthorne Works.* Chicago, IL: Harvard University Press.

Rogers Everett, M. (1995). *Diffusion of innovations*. New York, NY: Free Press

Roselius, T. (1971). Consumer rankings of risk reduction methods. *The Journal of Marketing*, 35 (1), 56-61.

Rosenberg, A. (2018, January 25). In three years, LGBT Americans have gone from triumph to backlash. The Washington Post, Retrieved Feberary 20, from https://www.washingtonpost.com/news/act-four/wp/2018/01/25/in-three-years-lgbt-americans-have-gone-from-triumph-to-backlash-blame-trump/?noredirect=on&utm_term=.4eea53dcae0e.

Roy, A., Huh, J., Pfeuffer, A., & Srivastava, J. (2017). Development of Trust Scores in Social Media (TSM) algorithm and application to advertising practice and research. *Journal of Advertising*, 46(2), 269-282.

Rubin, R. B., Palmgreen, P., Sypher, H. E. (1994). *Communication research measures: A sourcebook*. New York, NY: The Guilford Press.

Rubin, R. B., Rubin, A. M., Graham, E., Perse, E. M., & Seibold, D. (2010). *Communication research measures II: A sourcebook*. Abingdon, United Kingdom: Routledge.

Russell, J. A., & Barrett, L. F. (1999). Core affect, prototypical emotional episodes, and other things called emotion: dissecting the elephant. *Journal of personality and social psychology, 76(5),* 805. doi: 10.1037/0022-3514.76.5.805.

Ryan, T., & Xenos, S. (2011). Who uses Facebook? An investigation into the relationship between the Big Five, shyness, narcissism, loneliness, and Facebook usage. *Computers in human behavior*, *27*(5), 1658-1664.

Schwarz, N., & Clore, G. L. (1983). Mood, misattribution, and judgments of well-being: Informative and directive functions of affective states. *Journal of Personality and Social Psychology*, 45, 513-523.

Scherer, K. R. (2004). Which emotions can be induced by music? What are the underlying mechanisms? And how can we measure them?. *Journal of new music research, 33*(3), 239-251.

Schermerhorn, J. R. (1977). Information sharing as an interorganizational activity. *Academy of Management Journal*, 20(1), 148-153.

Schmidt, A. M., Ranney, L. M., Pepper, J. K., & Goldstein, A. O. (2016). Source credibility in tobacco control messaging. *Tobacco regulatory science*, *2*(1), 31-37.

Seidman, G. (2013). Self-presentation and belonging on Facebook: How personality influences social media use and motivations. *Personality and Individual Differences*, *54*(3), 402-407.

Semaan, B., Faucett, H., Robertson, S., Maruyama, M., & Douglas, S. (2015, February). Navigating imagined audiences: Motivations for participating in the online public sphere. In *Proceedings of the 18th ACM Conference on Computer Supported Cooperative Work & Social Computing* (pp. 1158-1169). ACM.

Shadish, W. R., Cook, T. D, & Campbell, D. T. (2001). *Experimental and Quasi-Experimental Designs for Generalized Causal Inference*. Boston, MA: Houghton Mifflin.

Shan, S., Liu, M., & Xu, X. (2017). Analysis of the key influencing factors of haze information dissemination behavior and motivation in WeChat. *Information Discovery and Delivery*, *45*(1), 21-29.

Sheppard, B. H., Hartwick, J., & Warshaw, P. R. (1988). The theory of reasoned action: A meta-analysis of past research with recommendations for modifications and future research. *Journal of Consumer Research*, 15(3), 325-343.

Singleton, R.A. Jr. & B. Straits. (2005). *Approaches to Social Research* (4th Ed.). New York, NY: Oxford University Press.

Slater, M. D., & Rouner, D. (1996). How message evaluation and source attributes may influence credibility assessment and belief change. *Journalism & Mass Communication Quarterly, 73*(4), 974-991.

Sleeper, M., Balebako, R., Das, S., McConohy, A., Wiese, J., & Cranor, L.F. The Post that Wasn't: Exploring Self-Censorship on Facebook. Proc. CSCW 2013, 793-802

Smith, A., Anderson, M., & Caiazza, T. (2018, March). Social media use in 2018. Pew Research Center. Retrieved from www.pewinternet.org/2018/03/01/social-media-use-in-2018/

Smith, C. T., De Houwer, J., & Nosek, B. A. (2013). Consider the source: Persuasion of implicit evaluations is moderated by source credibility. *Personality and Social Psychology Bulletin*, 39(2), 193-205.

Sote, G. A., & Good, L. R. (1974). Similarity of self-disclosure and interpersonal attraction. *Psychological Reports*, 34(2), 491-494.

Spartz, J. T., Su, L. Y. F., Griffin, R., Brossard, D., & Dunwoody, S. (2017). YouTube, social norms and perceived salience of climate change in the American mind. *Environmental Communication*, 11(1), 1-16.

SPP. (2017). Welcome to earth 2045. Retrieved February 25 from http://brutalsimplicity.se/earth2045/.

Statista. (2018a). Forecast for the number of new hotel rooms opening in the United States from 2012 to 2018. Retrieved October 16, 2018 from https://www.statista.com/statistics/322366/forecast-for-the-number-of-new-hotel-rooms-opening-us/

Statista. (2018b). Insurance industry in the United States. Retrieved October 16, 2018 from https://www.statista.com/study/37002/insurance-sector-in-the-us-statista-dossier/

Stoycheff, E. (2016). Please participate in Part 2: Maximizing response rates in longitudinal MTurk designs. *Methodological Innovations*, 9.

Sundaram, D. S., Mitra, K., & Webster, C. (1998). Word-of-Mouth Communications: A Motivational Analysis. *Advances in Consumer Research*, 25(1), 527-531.

Sussman, S.W. and Siegal, W.S. (2003). Informational influence in organizations: an integrated approach to knowledge adoption. *Information Systems Research*, 14 (1): 47-65.

Tabachnick, B. G., Fidell, L. S., & Ullman, J. B. (2007). Using multivariate statistics (Vol. 5). Boston, MA: Pearson.

Thorson, K. (2014). Facing an uncertain reception: Young citizens and political interaction on Facebook. *Information, Communication & Society*, *17*(2), 203-216.

Turcotte, J., York, C., Irving, J., Scholl, R. M., & Pingree, R. J. (2015). News Recommendations from Social Media Opinion Leaders: Effects on Media Trust and Information Seeking. *Journal of Computer‐Mediated Communication*, 1-16.

Turner, J. C., & Onorato, R. S. (1999). Social identity, personality, and the self-concept: A selfcategorization perspective. In T. R. Tyler, R. M. Kramer, & O. P. John (Eds.), *The Psychology of The Social Self* (pp. 11-46). New York, NY: Lawrence Erlbaum.

Vogt, C., & Knapman, S. (2007). Personal web spaces and social networks. *Worldwide Multi Media Measurement*. Dublin. Retrieved from https://www.warc.com/Content/93f84835-19bc-430b-b037-06bfcde032eb.

Waller, W. (1937). The rating and dating complex. *American Sociological Review*, 2(5), 727-734.

Wang, Y., & Fesenmaier, D. R. (2004). Modeling participation in an online travel community. *Journal of Travel Research*, *42*(3), 261-270.

Watson, D., Clark, L., & Tellegen, A. (1988). Development and validation of Brief Measures of Positive and Negative Affect: The PANAS Scales. *Journal of Personality and Social Psychology, 54(*6), 1063–1070.

Weeks, B. E., Ardèvol-Abreu, A., & de Zúñiga, H. G. (2015). Online Influence? Social Media Use, Opinion Leadership, and Political Persuasion. *International Journal of Public Opinion Research*, 29 (2), 214-239.

Westerman, D., Spence, P. R., & Van Der Heide, B. (2012). A social network as information: The effect of system generated reports of connectedness on credibility on Twitter. *Computers in Human Behavior*, 28(1), 199-206. doi:10.1016/ j. chb. 2011.09.001

Whaite, E. O., Shensa, A., Sidani, J. E., Colditz, J. B., & Primack, B. A. (2018). Social media use, personality characteristics, and social isolation among young adults in the United States. *Personality and Individual Differences*, *124*, 45-50.

Whitehead Jr, J. L. (1968). Factors of source credibility. *Quarterly Journal of Speech*, 54(1), 59-63.

Whitelocks, S. (2013, September 26). 'Feminists are man-hating and unhygienic': Why people have a bad opinion of activists. Retrieved March 7, 2019 from https://www.dailymail.co.uk/femail/article-2433913/Feminists-man-hating-unhygienic-How-negative-activists-stereotypes-remain-barriers.html

Williams, R. (1976). *Keywords: A vocabulary of Culture and Society*. Oxford: Oxford University Press.

Winter, S., & Neubaum, G. (2016). Examining characteristics of opinion leaders in social media: A motivational approach. *Social Media+ Society, 2*(3), 2056305116665858.

Woisetschläger, D. M., Hartleb, V., & Blut, M. (2008). How to make brand communities work: Antecedents and consequences of consumer participation. *Journal of Relationship Marketing*, *7*(3), 237-256.

Woodside, A. G., & Delozier, M. W. (1976). Effects of word of mouth advertising on consumer risk taking. *Journal of Advertising*, 5(4), 12-19.

Worthington, R. L., & Whittaker, T. A. (2006). Scale development research. A content analysis for recommendations for best practices. *The Counseling Psychologist*, 34(6), 806–838.

Wu, K., Ji, X. S. and Liu, C. X. (2013). Modeling information diffusion based on behavior predicting in microblog. *Application Research of Computers*, 30(6): 1809-1812.

Wu, P. C., & Wang, Y. C. (2011). The influences of electronic word-of-mouth message appeal and message source credibility on brand attitude. *Asia Pacific Journal of Marketing and Logistics, 23*(4), 448-472.

Wu, Y. C. J., Chang, W. H., & Yuan, C. H. (2015). Do Facebook profile pictures reflect user's personality?. *Computers in Human Behavior*, *51*, 880-889.

Yeh, Y. H., & Choi, S. M. (2011). MINI-lovers, maxi-mouths: An investigation of antecedents to eWOM intention among brand community members. *Journal of Marketing Communications*, *17*(3), 145-162.

Yoo, S. W., Kim, J. W., & Gil de Zúñiga, H. (2017). Cognitive benefits for senders: Antecedents and effects of political expression on social media. *Journalism & Mass Communication Quarterly*, 94(1), 17-37.

Yzer, M. C. (2013). Reasoned action theory. *The SAGE handbook of persuasion: Developments in theory and practice*, 120-136.

Zhang, Y., Sun, X. L., Pu, Z. N. and Zhu, Q. H. (2014). Influencing factors of microblog public opinion dissemination: based on the perspective of information source characteristic and information form. *Information and Documentation Services*, 2014 (3): 59-64.

Zolkepli, I. A., & Kamarulzaman, Y. (2015). Social media adoption: The role of media needs and innovation characteristics. *Computers in Human Behavior, 43, 189-209.*

APPENDIX A. CONSENT LETTER

BGSU
BOWLING GREEN STATE UNIVERSITY

Online Sharing Study

Dear Participants,

Thank you for being interested in participating in this study! Before answering the questions in this study, please read the consent form below and check the "I Agree" box if you understand the statements and give consent to participate in the study.

Consent Form

This study is designed to research people's online sharing behavior on Facebook. The principal investigator of this study Chang Bi, a PhD student at Bowling Green State University, U.S.A. **This study has been approved by the BGSU Institution Review Board of Bowling Green State University.**

It would be greatly appreciated if you would simply complete the following questionnaires. Your contribution and participation in this survey is important for the further examination of the online sharing phenomenon. **This study includes two parts. In the first part, you will be asked complete a questionnaire. It is expected to take 10 minutes to complete it. Three-day after, you will complete the second part of the study. You will be exposed to some online posts and will answer questions based on the posts. It is expected to take another 10 minutes to complete it. You will have to pick a unique ID in the first questionnaire and enter it in the second questionnaire. Participants need to be 18 years old or older.**

You will receive $1.00 for participating in the study. There is a minimal risk that security of any online data may be breached, but our survey host (QUALTRICS) uses strong encryption and other data security methods to protect your information. Only the researchers will have access to your information on the Qualtrics server. No identifying information will be collected or connected with your responses, which will be anonymous. Revise confidentiality language to say that researchers won't know their identity, and their responses will be anonymous. There are no known risks to you if you decide to participate in this survey and we guarantee that your responses will not be identified with you personally. We promise not to share any information that identifies you with anyone outside my research group. Also, your identity will be kept confidential to the extent provided by law. In addition, your MTurk Worker ID will be used only for the purpose of awarding

School of Media and Communication
306 Kuhlin Center
Bowling Green State University
Bowling Green, OH 43403
Phone: 419-372-8349
Fax: 419-372-0202
http://www.bgsu.edu/departments/smc

BGSU
BOWLING GREEN STATE UNIVERSITY

compensation, and will not be shared with anyone outside the research team. It will not be linked with your survey responses, and will be removed from the data set once compensation has been made (Note that your Worker ID can be linked to your Amazon user's public profile page, so you may wish to restrict what information you choose to share in your public profile).

If you have other questions, please contact the principal investigator Chang Bi, at 1-330-860-0994 and cbi@bgsu.edu or her advisor Dr. Louisa Ha at louisah@bgsu.edu; or the BGSU Institutional Review Board, at 419-372-7716 and orc@bgsu.edu. If you have any questions about their rights as a research participant, please contact the BGSU Institutional Review Board at 1-419-372-7716 and orc@bgsu.edu.

If you are 18 years of age or older, have been informed of the statements above, and give consent to participate in the study, please check the "I Agree" box and sign your name below to take the survey.

Thank you.

[ ] I Agree
[ ] I Do Not Agree

School of Media and Communication
306 Kuhlin Center
Bowling Green State University
Bowling Green, OH 43403
Phone: 419-372-8349
Fax: 419-372-0202
http://www.bgsu.edu/departments/smc

APPENDIX B. FIRST-WAVE QUESTIONNAIRE

How many hours do you spend on social media (e.g. Twitter, Snapchat, etc.) daily?

_____

How many hours do you spend on Facebook daily?

_____

How frequently do you **use** the following online platforms?

	Never (1)	Less than once a month (2)	Several times a month (3)	Once a week (4)	Several times a week (5)	Daily (6)	Several times a day (7)
Facebook (1)	○	○	○	○	○	○	○
Twitter (2)	○	○	○	○	○	○	○
Instagram (3)	○	○	○	○	○	○	○
Snapchat (4)	○	○	○	○	○	○	○
Pinterest (5)	○	○	○	○	○	○	○
Reddit (6)	○	○	○	○	○	○	○
LinkedIn (7)	○	○	○	○	○	○	○
YouTube (8)	○	○	○	○	○	○	○
Facebook Messenger (9)	○	○	○	○	○	○	○
WhatsApp (10)	○	○	○	○	○	○	○
Email (11)	○	○	○	○	○	○	○
Others (12)	○	○	○	○	○	○	○

How often do you **share** any online content (e.g. links, articles) to the following online platform?

	Never (1)	Less than once a month (2)	Several times a month (3)	Once a week (4)	Several times a week (5)	Daily (6)	Several times a day (7)
Facebook (1)	○	○	○	○	○	○	○
Twitter (2)	○	○	○	○	○	○	○
Instagram (3)	○	○	○	○	○	○	○
Snapchat (4)	○	○	○	○	○	○	○
Pinterest (5)	○	○	○	○	○	○	○
Reddit (6)	○	○	○	○	○	○	○
LinkedIn (7)	○	○	○	○	○	○	○
YouTube (8)	○	○	○	○	○	○	○
Facebook Messenger (9)	○	○	○	○	○	○	○
WhatsApp (10)	○	○	○	○	○	○	○
Email (11)	○	○	○	○	○	○	○
Other (12)	○	○	○	○	○	○	○

What is the reason that you did not share anything to **Facebook**?

_____

_____

_____

_____

_____

How many Facebook friends do you have? (Please enter a number only)

_____

How frequently do you do the following activities via **Facebook**?

	1-Never (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	7-Always (7)
Click on links to articles that other users have posted (1)	○	○	○	○	○	○	○
Post my own articles or thoughts (2)	○	○	○	○	○	○	○
Share links (including stories, pictures, or video clips) from other online sources (3)	○	○	○	○	○	○	○
Share links (including stories, pictures, or video clips) from other online sources together with my comments about the content (4)	○	○	○	○	○	○	○
Repost what other users have posted (5)	○	○	○	○	○	○	○
Repost what other users have posted together with my comments about the content (6)	○	○	○	○	○	○	○
Post comments, questions, or information in response to the article that I read (7)	○	○	○	○	○	○	○
Using "like" button to express approval of other users' posts (8)	○	○	○	○	○	○	○

Please indicate the extent to which you agree or disagree with the following statements.

	Strongly disagree (1)	Disagree (2)	Neither agree nor disagree (3)	Agree (4)	Strongly agree (5)
I always receive "like" when I share links to Facebook. (1)	○	○	○	○	○
Many of my friends "like" what I repost on my Facebook feed. (2)	○	○	○	○	○
I always receive positive feedback on what I repost on Facebook. (3)	○	○	○	○	○
I receive many comments from my Facebook friends every time I share a link to Facebook. (4)	○	○	○	○	○
I receive many "likes" when I share articles from other sources. (5)	○	○	○	○	○

Please list **one** name of your **Facebook friends** who is the **most active** on Facebook. Please write the **full name** of your friends. (The researcher highly recommends you to fill out the name to complete the questionnaire. The researcher will not contact your friends and will keep them confidential.)

○ Your Facebook Friend's name (1) _____

Please indicate your impression of your Facebook friend:

○ Your Facebook Friend's name (display one of the participant's Facebook friend name)

He/she is:

	Click to write Label 1							
	1 (1)	2 (2)	(3)	(4)	(5)	(6)	(7)	
Informed	○	○	○	○	○	○	○	Uninformed
Competent	○	○	○	○	○	○	○	Incompetent
Expert	○	○	○	○	○	○	○	Inexpert
Bright	○	○	○	○	○	○	○	Stupid
Intelligent	○	○	○	○	○	○	○	Unintelligent

He/she is:

	1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	7 (7)	
Honest	○	○	○	○	○	○	○	Dishonest
Trustworthy	○	○	○	○	○	○	○	Untrustworthy
Just	○	○	○	○	○	○	○	Unjust
Moral	○	○	○	○	○	○	○	Immoral
Ethical	○	○	○	○	○	○	○	Unethical

He/she is:

	1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	7 (7)	
Cares about me	○	○	○	○	○	○	○	Doesn't care about me
Has my interests at heart	○	○	○	○	○	○	○	Doesn't have my interests at heart
Not self-centered	○	○	○	○	○	○	○	Self-centered
Sensitive	○	○	○	○	○	○	○	Insensitive
Understanding	○	○	○	○	○	○	○	Not understanding

He/she is:

	1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	7 (7)	
Connected	○	○	○	○	○	○	○	Isolated
Resourceful	○	○	○	○	○	○	○	Unresourceful
Active	○	○	○	○	○	○	○	Passive
Interactive	○	○	○	○	○	○	○	Noninteractive
Engaged	○	○	○	○	○	○	○	Unengaged

Please indicate the extent to which you agree or disagree with the following statements.

	Strongly disagree (1)	Disagree (2)	Neither agree nor disagree (3)	Agree (4)	Strongly agree (5)
Generally speaking, I **trust** most people. (1)	○	○	○	○	○
Generally speaking, I am **careful** when dealing with people. (2)	○	○	○	○	○
I am relatively **cautious** when interacting with other people. (3)	○	○	○	○	○
I will **not** trust until I have clear evidence that a person can be trusted. (4)	○	○	○	○	○
I am **suspicious** of others. (5)	○	○	○	○	○

Please rate your **familiarity** with the following organizations.

"0" indicates that you do not know the organization at all; "100" indicates that you are very familiar with the organization.

	0 10 20 30 40 50 60 70 80 90 100
United Nations Foundation ()	
Frontier Airlines ()	
Westin Hotels ()	

Please rate your **likability** of the following organizations.

"0" indicates that you do not like the organization at all; "100" indicates that you like the organization very much.

	0 10 20 30 40 50 60 70 80 90 100
United Nations Foundation ()	
Frontier Airlines ()	
Westin Hotels ()	

Please indicate your impression of the **United Nations Foundation**.

United Nations Foundation is:

	1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	7 (7)	
Informed	○	○	○	○	○	○	○	Uninformed
Qualified	○	○	○	○	○	○	○	Unqualified
Expert	○	○	○	○	○	○	○	Inexpert

United Nations Foundation is:

	1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	7 (7)	
Honest	○	○	○	○	○	○	○	Dishonest
Trustworthy	○	○	○	○	○	○	○	Untrustworthy
Ethical	○	○	○	○	○	○	○	Unethical

United Nations Foundation is:

	1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	7 (7)	
Cares about me	○	○	○	○	○	○	○	Doesn't care about me
Has my interests at heart	○	○	○	○	○	○	○	Doesn't have my interests at heart
Understanding	○	○	○	○	○	○	○	Not understanding

Please indicate your impression of the **Frontier Airlines**.

Frontier Airlines is:

	1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	7 (7)	
Informed	○	○	○	○	○	○	○	Uninformed
Qualified	○	○	○	○	○	○	○	Unqualified
Expert	○	○	○	○	○	○	○	Inexpert

Frontier Airlines is:

	1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	7 (7)	
Honest	○	○	○	○	○	○	○	Dishonest
Trustworthy	○	○	○	○	○	○	○	Untrustworthy
Ethical	○	○	○	○	○	○	○	Unethical

Frontier Airlines is:

	1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	7 (7)	
Cares about me	○	○	○	○	○	○	○	Doesn't care about me
Has my interests at heart	○	○	○	○	○	○	○	Doesn't have my interests at heart
Understanding	○	○	○	○	○	○	○	Not understanding

Please indicate your impression of the **Westin Hotels**.

Westin Hotels is:

	1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	7 (7)	
Informed	○	○	○	○	○	○	○	Uninformed
Qualified	○	○	○	○	○	○	○	Unqualified
Expert	○	○	○	○	○	○	○	Inexpert

Westin Hotels is:

	1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	7 (7)	
Honest	○	○	○	○	○	○	○	Dishonest
Trustworthy	○	○	○	○	○	○	○	Untrustworthy
Ethical	○	○	○	○	○	○	○	Unethical

Westin Hotels is:

	1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	7 (7)	
Cares about me	○	○	○	○	○	○	○	Doesn't care about me
Has my interests at heart	○	○	○	○	○	○	○	Doesn't have my interests at heart
Understanding	○	○	○	○	○	○	○	Not understanding

The following statements describe the feelings about ***animal welfare***. Please indicate the extent to which you agree or disagree with the following statements.

	Strongly disagree (1)	Disagree (2)	Neither agree nor disagree (3)	Agree (4)	Strongly agree (5)
It is important to me to know as much as possible about animal welfare. (1)	○	○	○	○	○
The more information I get regarding animal welfare, the better. (2)	○	○	○	○	○
I am interested in specific information regarding animal welfare. (3)	○	○	○	○	○

The following statements describe the feelings about ***environmental protection***. Please indicate the extent to which you agree or disagree with the following statements.

	Strongly disagree (1)	Disagree (2)	Neither agree nor disagree (3)	Agree (4)	Strongly agree (5)
It is important to me to know as much as possible about environmental protection. (1)	○	○	○	○	○
The more information I get regarding environmental protection, the better (2)	○	○	○	○	○
I am interested in specific information regarding environmental protection. (3)	○	○	○	○	○

The following statements describe the feelings about ***children welfare***. Please indicate the extent to which you agree or disagree with the following statements.

	Strongly disagree (1)	Disagree (2)	Neither agree nor disagree (3)	Agree (4)	Strongly agree (5)
It is important to me to know as much as possible about children welfare. (1)	○	○	○	○	○
The more information I get regarding children welfare, the better (2)	○	○	○	○	○
I am interested in specific information regarding children welfare. (3)	○	○	○	○	○

II_F The following statements describe the feelings about ***feminism***. Please indicate the extent to which you agree or disagree with the following statements.

	Strongly disagree (1)	Disagree (2)	Neither agree nor disagree (3)	Agree (4)	Strongly agree (5)
It is important to me to know as much as possible about feminism. (1)	○	○	○	○	○
The more information I get regarding feminism, the better (2)	○	○	○	○	○
I am interested in specific information regarding feminism. (3)	○	○	○	○	○

The following statements describe the feelings about ***LGBTQ rights***. Please indicate the extent to which you agree or disagree with the following statements.

	Strongly disagree (1)	Disagree (2)	Neither agree nor disagree (3)	Agree (4)	Strongly agree (5)
It is important to me to know as much as possible about LGBTQ rights. (1)	○	○	○	○	○
The more information I get regarding LGBTQ, the better (2)	○	○	○	○	○
I am interested in specific information regarding LGBTQ rights. (3)	○	○	○	○	○

The following statements describe the feelings about ***psychological well-being***. Please indicate the extent to which you agree or disagree with the following statements.

	Strongly disagree (1)	Disagree (2)	Neither agree nor disagree (3)	Agree (4)	Strongly agree (5)
It is important to me to know as much as possible about psychological well-being. (1)	○	○	○	○	○
The more information I get regarding psychological well-being, the better (2)	○	○	○	○	○
I am interested in specific information regarding psychological well-being. (3)	○	○	○	○	○

Here are a number of personality traits that may or may not apply to you. Please indicate the extent to which you agree or disagree with the following statements.

I see myself as:

	Strongly disagree (1)	Moderately disagree (2)	Disagree a little (3)	Neither agree nor disagree (4)	Agree a little (5)	Moderately agree (6)	Strongly agree (7)
Extroverted, enthusiastic. (1)	○	○	○	○	○	○	○
Critical, quarrelsome. (2)	○	○	○	○	○	○	○
Dependable, self-disciplined. (3)	○	○	○	○	○	○	○
Anxious, easily upset. (4)	○	○	○	○	○	○	○
Open to new experiences, complex. (5)	○	○	○	○	○	○	○
Reserved, quiet. (6)	○	○	○	○	○	○	○
Sympathetic, warm. (7)	○	○	○	○	○	○	○
Disorganized, careless. (8)	○	○	○	○	○	○	○
Calm, emotionally stable. (9)	○	○	○	○	○	○	○
Conventional, uncreative. (10)	○	○	○	○	○	○	○

What is your gender?

- ○ Male (0)
- ○ Female (1)
- ○ Prefer not to disclose (3)

What is your year of birth?

- ○ Year (1) _____
- ○ Prefer not to disclose (0)

Choose one or more races that you consider yourself to be:

- ○ White (1)
- ○ Black or African American (2)
- ○ American Indian or Alaska Native (3)
- ○ Asian (4)
- ○ Native Hawaiian or Pacific Islander (5)
- ○ Prefer not to disclose (6)
- ○ Other (7) _____

What is the highest level of school you have completed or the highest degree you have received?

- ○ Less than high school degree (1)
- ○ High school graduate (high school diploma or equivalent including GED) (2)
- ○ Some college but no degree (3)
- ○ Associate degree in college (2-year) (4)
- ○ Bachelor's degree in college (4-year) (5)
- ○ Master's degree (6)
- ○ Doctoral degree (7)
- ○ Professional degree (JD, MD) (8)
- ○ Prefer not to disclose (9)
- ○ Others (10) _____

Please indicate your current household income per year in U.S. dollars.

- ○ Under $10,000 (1)
- ○ $10,000 - $19,999 (2)
- ○ $20,000 - $29,999 (3)
- ○ $30,000 - $39,999 (4)
- ○ $40,000 - $49,999 (5)
- ○ $50,000 - $74,999 (6)
- ○ $75,000 - $99,999 (7)
- ○ $100,000 - $150,000 (8)
- ○ Over $150,000 (9)
- ○ Prefer not to disclose (10)

Please enter your **Email** and your MTurk Worker ID. You will use your MTurk ID to participate the second part of the study. **The research will grant you 1 dollar bonus through Amazon Mechanical Turk if you complete the second questionnaire.** You will receive the email with a survey link one day after today.

Please provide your MTurk ID to receive the bonus.

Your participation in the second part of the study is voluntary. The researcher will appreciate your help if you choose to participate in the second part.

You can find your MTurk ID on the Amazon Mturk Worker cover page:

- ○ Your Email address (1) _____
- ○ Your MTurk ID (2) _____

APPENDIX C. SECOND-WAVE QUESTIONNAIRE

Please list the Facebook friend that you listed in the previous study. In the previous study, you are asked to list one name of your Facebook friends who is the most active on Facebook.

Please write the full name of your friend. (The researcher highly recommends you fill out the name to complete the study. The researcher will not contact your friends and will keep them confidential.)

○ Your Facebook Friend's Name (1) _____

You will read 6 Facebook posts from an organization or shared by one of your Facebook friends. Please read the entire posts and answer the short questions such as your emotions and whether you want to repost them.

Please answer the questions based on what you normally will do on Facebook. It will not shorten the questionnaire by saying "No."

Please read the entire post below and answer the questions on the next page. Below is a (organization).

(A Facebook post)

You are about to answer some questions based on the Facebook post. Please click the "Next" button when you ready.

Would you like to read the full article in the post?

○ Yes (1)

○ No (0)

(The participant who chooses "Yes" will be exposed to a related article)

How do you feel about the Facebook post you just saw?

	1-Not at all (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	7-Very much (7)
Happy (1)	○	○	○	○	○	○	○
Joyful (2)	○	○	○	○	○	○	○
Proud (3)	○	○	○	○	○	○	○
Confident (4)	○	○	○	○	○	○	○
Angry (5)	○	○	○	○	○	○	○
Annoyed (6)	○	○	○	○	○	○	○
Worried (7)	○	○	○	○	○	○	○
Anxious (8)	○	○	○	○	○	○	○
Hopeful (9)	○	○	○	○	○	○	○
Optimistic (10)	○	○	○	○	○	○	○
Compassionate (11)	○	○	○	○	○	○	○
Sympathetic (12)	○	○	○	○	○	○	○
Sad (13)	○	○	○	○	○	○	○
Dismal (14)	○	○	○	○	○	○	○

Would you like to share the post on your Facebook?

- ○ No (0)
- ○ Yes, share the post without comment (1)
- ○ Yes, share the post with comment (Please simply add your thoughts/comments below) (2)

_____

What is the reason that you did not want to share the post on Facebook?

_____

_____

_____

_____

_____

Would you share with the public or (a) specific friend(s)?

- ○ The Public (1)
- ○ Friends (2)
- ○ Specific friend(s) (3)

APPENDIX D. FULL STIMULI ARTILES

Children Welfare

Mental health problems affect about 1 in 10 children and young people. They include depression, anxiety and conduct disorder, and are often a direct response to what is happening in their lives. Alarmingly, however, 70% of children and young people who experience a mental health problem have not had appropriate interventions at a sufficiently early age.

It's important to recognize and treat mental illnesses in children early on. Once mental illness develops, it becomes a regular part of your child's behavior. This makes it more difficult to treat. But it's not always easy to know when your child has a serious problem. Warning signs that it might be a more serious problem include:

Problems in more than one setting (at school, at home, with peers)
Changes in appetite or sleep
Social withdrawal or fear of things he or she did not used to be not afraid of
Returning to behaviors more common in younger children, such as bedwetting
Signs of being upset, such as sadness or tearfulness
Signs of self-destructive behavior, such as head-banging or suddenly getting hurt often
Repeated thoughts of death

Animal Welfare

Dogs are a favored species in toxicology studies. In these studies, large doses of a test substance (a pharmaceutical, industrial chemical, pesticide, or household product) are pumped into animals' bodies, slowly poisoning them. Out of all the dogs used for research purposes, the breed that tops the list are beagles.

The reason Beagles are used in such a big quantity is because of their size. They are not too small like the toy sized breeds and they aren't very huge, who are really hard to handle, making them just the apt size. They are equally trusting and loyal, and easy to manipulate.

Imagine being cramped into a cage that barely contains all the parts of your body. Imagine being kept there for days and months together without having the freedom to feel the grass on your feet and the wind on your skin. You forget what being in the sun feels. You are just there, in a cold cage, either sleeping or gawking at your pathetic existence.

Even human criminals aren't kept like that. How can anyone even think of keeping those harmless, beautiful creatures in a place like that?

Feminism

Marvel's Black Panther is already cementing its place in cinematic history as the most high-profile black superhero movie to date. It's the women behind the catsuit-clad African king, however, who are the movie's true marvels.

Black Panther is Marvel's attempt at being "woke," and it confronts colonialism, racism and nationalism in profound ways, while also crafting a vision of black womanhood that's both

inspiring and empowering.

One movie isn't going to eradicate racism, or fix gender or racial issues in America, but it's a step in the right direction. Representation in pop culture matters, and the women of Black Panther are celebrated and validated throughout the film in powerful ways.

Young black girls who may have been ashamed to wear clothing specific to their African parents' home country might be prouder of their heritage upon leaving the theater. And if the movie becomes as big a success as predicted, there's a strong possibility that generations of black women and girls will live in a society where it's normal to see a majority black cast in a major Hollywood film.

LGBTQ Rights

HRC released the following statement condemning Trump's decision to replace Secretary of State Rex Tillerson with anti-LGBTQ Mike Pompeo.

"Mike Pompeo's longstanding opposition to LGBTQ equality makes him a reckless choice to lead our nation's diplomatic efforts," said HRC President Chad Griffin. "The decision to nominate anti-LGBTQ Mike Pompeo could have serious consequences for the United States and LGBTQ people around the globe. The State Department has a crucial role to play in advancing human rights - a role which was already rapidly declining under Tillerson. This decision has the potential to make a dire situation even worse. Pompeo does not deserve to be confirmed."

Pompeo's attacks on LGBTQ equality are long and well-documented: he opposes marriage equality, and, as a member of Congress, co-sponsored legislation to allow states to not recognize same-sex marriage and to allow businesses and organizations using taxpayer dollars a license to discriminate against LGBTQ people. Equally as troubling, his political career has been funded by anti-LGBTQ hate groups, including the Family Research Council.

Psychological Well-being

Stress and anxiety are everywhere. If they're getting the best of you, you might want to hit the mat and give yoga a try. Yoga is a mind-body practice that combines physical poses, controlled breathing, and meditation or relaxation. The potential health benefits of yoga include:

Stress reduction. A number of studies have shown that yoga may help reduce stress and anxiety. It can also enhance your mood and overall sense of well-being.

Improved fitness. Practicing yoga may lead to improved balance, flexibility, range of motion and strength.

Management of chronic conditions. Yoga can help reduce risk factors for chronic diseases, such as heart disease and high blood pressure. Yoga might also help alleviate chronic conditions, such as depression, pain, anxiety and insomnia.

Environmental Protection

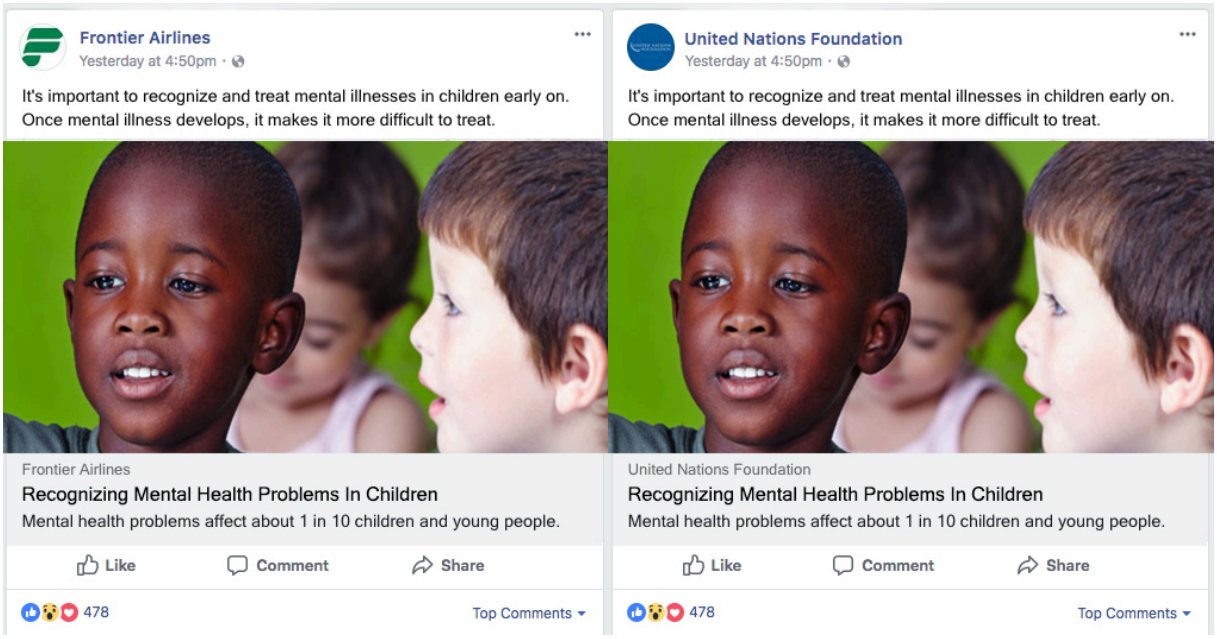
China is cracking down on pollution like never before, with new green policies so hard-hitting and extensive they can be felt across the world, transforming everything from electric vehicle demand to commodities markets.

Four decades of breakneck economic growth turned China into the world's biggest carbon emitter. China's air pollution is so extreme that in 2015, independent research group Berkeley Earth estimated it contributed to 1.6 million deaths per year in the country. But now the government is trying to change that without damaging the economy-and perhaps even use its green policies to become a leader in technological innovation.

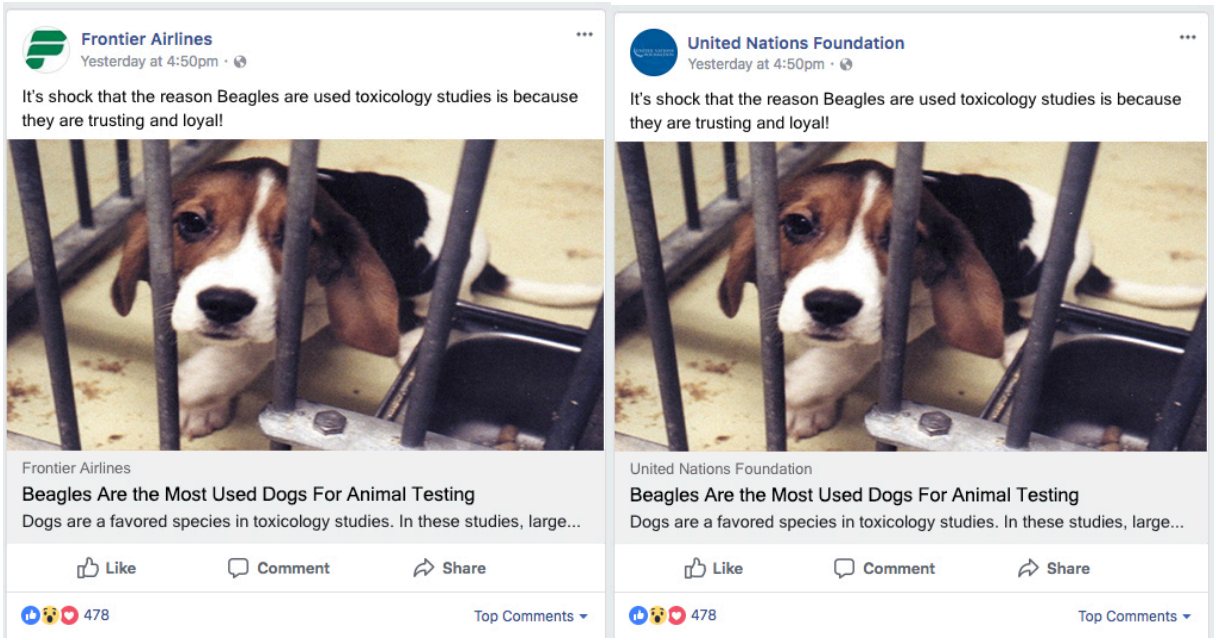
Leaders at the Congress said heavy air pollution days in key cities are down 50 percent in five years. What's more, China sees high-tech industries like electric cars and solar panels as its chance to lead the world, setting standards and cornering markets as they begin to build momentum.

APPENDIX E. STIMULI USED IN THE STUDY

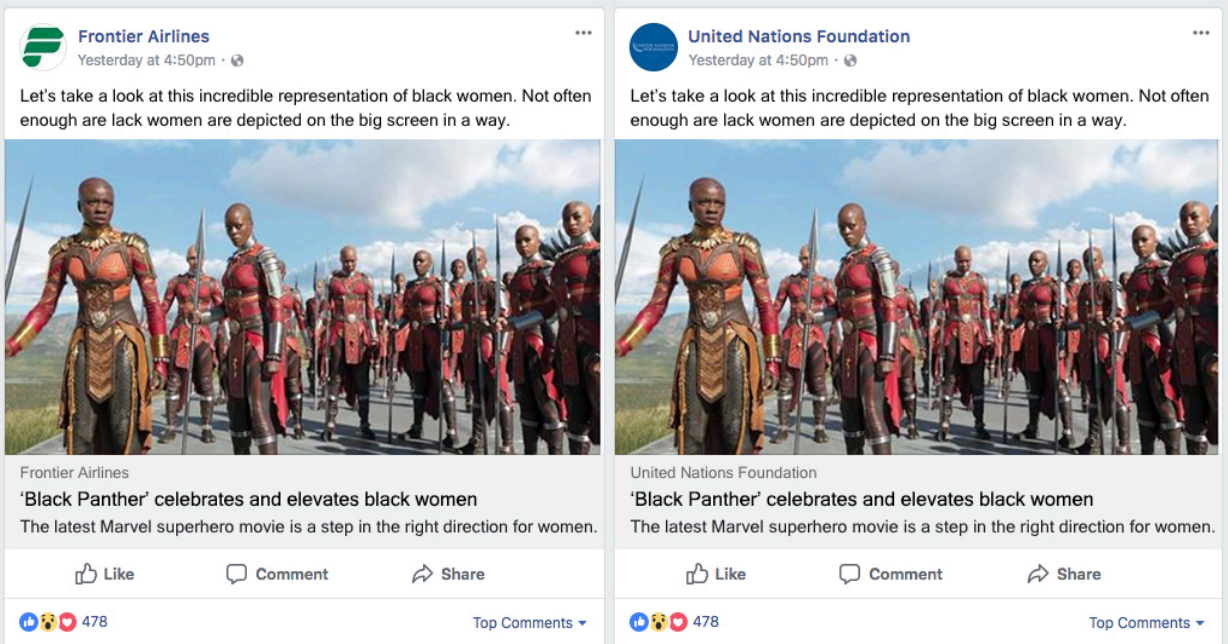
Children Welfare



Animal Welfare



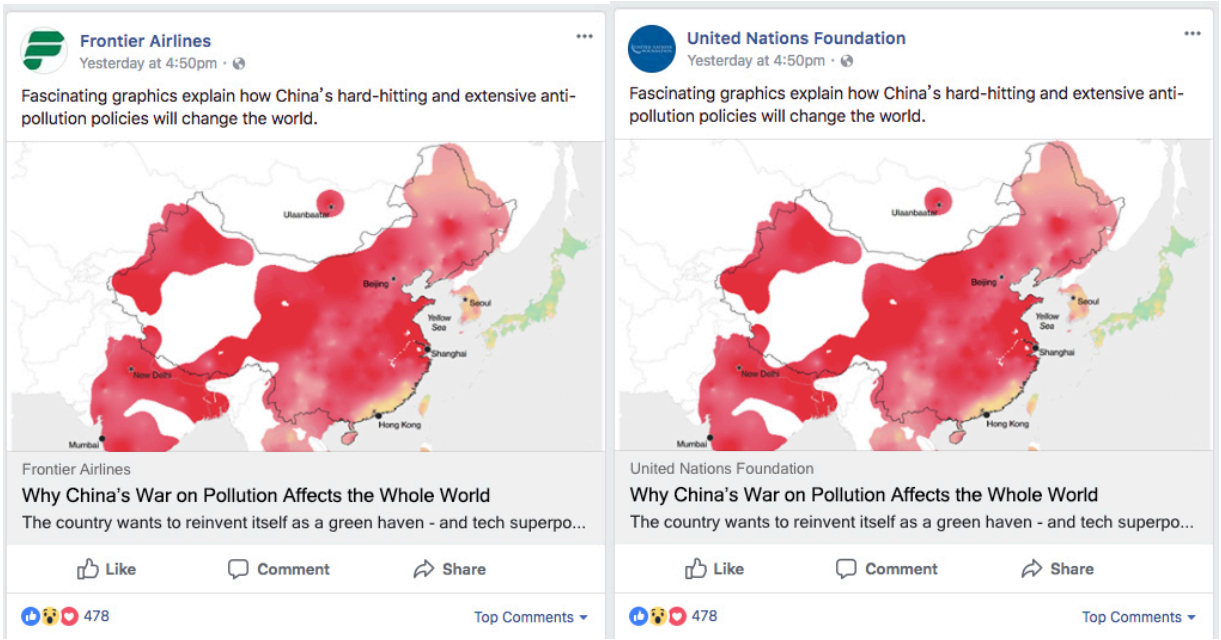
Feminism



LGBTQ Rights

Psychological Well-being

Environmental Protection



APPENDIX F. A COMPARISON OF EMOTIONAL AROUSAL

	Emotional Arousal between Issues					
Positive emotions	**CW**	**AW**	**PW**	**EP**	**F**	**LG**
	Mean (SD)					
	2.58 (1.37)	1.65 (1.06)	3.61 (1.67)	3.61 (1.73)	4.29 (1.74)	2.10 (1.44)
	Mean (SD)					
Negative emotions	3.63 (1.74)	4.81 (1.73)	2.48 (1.72)	3.07 (1.80)	1.92 (1.33)	4.32 (2.15)