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PURDUE UNIVERSITY GRADUATE SCHOOL Thesis/Dissertation Acceptance

This is to certify that the thesis/dissertation prepared

Bv Douglas E. Pruim

Entitled ADVICE ON FACEBOOK: CHANNEL EFFECTS ON THE EVALUATION OF ADVICE

For the degree of _____Master of Arts

Is approved by the final examining committee:

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Erina L. MacGeorge

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Head of the Department Graduate Program

Date

ADVICE ON FACEBOOK:

CHANNEL EFFECTS ON THE EVALUATION OF ADVICE

A Thesis

Submitted to the Faculty

of

Purdue University

by

Douglas E. Pruim

In Partial Fulfillment of the

Requirements for the Degree

of

Master of Arts

December 2014

Purdue University

West Lafayette, Indiana

For my wife, my children, myself, and our future.

ACKNOWLEDGMENTS

This thesis could not have been written and completed without the tireless help, guidance, and effort of Erina MacGeorge. Thank you.

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ABSTRACT

Pruim, Douglas E. M.A., Purdue University, December 2014. Advice on Facebook: Channel Effects on the Evaluation of Advice. Major Professor: Erina L. MacGeorge.

This thesis explores the evaluation of advice given in comments on Facebook status updates. To date, most research on advice has focused on dyadic, face-to-face interactions. The masspersonal channel of Facebook introduces a public into advice exchanges, including not only an audience but multiple advisors. The current study extends advice response theory by examining how advice recipients are affected by perceived consensus and tailoring in advice messages, and by the trait of conformity or the desire to conform to others' opinions. Participants (N = 269) completed questionnaires about past status updates on Facebook in which they disclosed a problem and received advice in comments from friends. Hierarchical multiple regression and mediation analyses were used to test the effects of consensus, tailoring, and conformity, along with message content and advisor characteristics. Message content was the strongest predictor of intention to implement advice, and mediated the influence of advisor characteristics. Consensus was a significant independent predictor. The effect of tailoring was mediated by message content and advisor characteristics. Finally, problem

seriousness had a direct effect on intention to implement advice, moderated by tailoring. Theoretical and practical implications are discussed, along with directions for future research.

CHAPTER 1: INTRODUCTION

Advice is an important and ubiquitous form of support and social influence with highly variable outcomes (MacGeorge, Feng, & Burleson, 2011). Advice on different issues and in various contexts has been explored by a number of communication scholars (e.g. Feng, 2008; Goldsmith & Fitch, 1997; Feng & MacGeorge, 2006; Feng and MacGeorge, 2010; MacGeorge, Lichtman & Pressey, 2002; MacGeorge, Feng, Butler, & Budarz, 2004; Van Swol, 2011). Advice functions both as persuasive appeal, in that it can affect people's decisions and shape courses of action (e.g. Dillard, 1991), and a form of social support (MacGeorge et al., 2004).

Advice can be helpful or harmful depending on how it is given (MacGeorge, Feng, & Thompson, 2008). 'Good' advice can provide both instrumental and emotional support. 'Bad' advice can alienate and hurt, and even good content can be dismissed (Dalal & Bonaccio, 2010). Researchers have studied both advice recipients' evaluations and motivations, as well as advice givers' evaluations and motivations (Feng & MacGeorge, 2006; Guntzviller & MacGeorge, 2013). Ultimately, advice is an important form of communication to study because it impacts people's beliefs, attitudes, and behaviors.

Advice Response Theory (ART) was developed as a synthesis and extension of prior theory on factors known to influence advice outcomes (MacGeorge, Guntzviller, Hanasono, & Feng, 2013). To date, ART has focused on message and advisor features as influences on advice outcomes, with less attention to situation or recipient features. Since ART is a relatively new theory, there has been limited testing on some aspects of the theory. Most of the testing has focused on face-to-face interactions between pairs of friends and associates, thus the theory has given little attention to the channel in which advice is given.

In our media-rich society, people interact in a variety of ways beyond traditional face-to-face interactions. Presently, one of the most popular ways for connecting with friends and associates is Facebook. According to a 2013 Pew study (Brenner & Smith, 2013), 72% of adults (i.e., people 18 or older) use social media, and of this percentage nearly 90% use Facebook. While other media are vying for popularity (e.g. Twitter and Tumbler), Facebook continues to be the most popular. According to Facebook's most recent statistics (September, 2013), the site has over one billion monthly active users and over 700 million daily active users. To put these statistics in perspective, the number of Facebook users is only slightly less than the populations of China and India.

Interactions through Facebook can happen through a variety of channels. Some interactions happen privately through instant messages; these interactions resemble more traditional dyadic, interpersonal communication. Interpersonal interactions can also occur through status updates; this method introduces an audience to the interpersonal interaction and allows other voices to join the conversation.

Social network sites like Facebook serve a social purpose, facilitating relationship maintenance and socio-emotional information exchange (boyd & Ellison, 2007). As such, Facebook is a place where people discuss problems, as well as seek and receive advice (Gray, Vitak, Easton, & Ellison, 2013). For example, a status update like, "Ugh! My baby's been crying all night. I don't know what to do?!" is not uncommon. Nor would it be uncommon for sympathetic friends to write comments offering support (e.g. "Can I help?"), ask clarifying questions (e.g. "Is she feeling sick?"), or offer advice (e.g. "Try playing some light music." or "You should go see Dr. X, we've taken our kids there for years.")

As a medium through which people regularly communicate advice (Jung, Gray, Lampe, & Ellison, 2013), Facebook provides a "natural laboratory" for testing ART. Furthermore, it provides an opportunity to examine how channel-related influences affect advice evaluation and the opportunity to test the boundary conditions of the theory. Studying advice on Facebook will extend ART because it will help to show how advising interactions and relationships are conducted via computer-mediated communication.

LITERATURE REVIEW

Advice is a recommendation from one person to another about what might be said or done to address a problem, including actions, thoughts, and feelings (MacGeorge, Feng, & Thompson, 2008). Taking advice allows recipients to obtain help, improve judgments, and share responsibility with others (Harvey & Fischer, 1997). As such, advice is both supportive and persuasive communication: supportive in that it helps people manage emotionally and instrumentally (Thompson & O'Hair, 2008), and persuasive in that it recommends a specific course of action (MacGeorge et al., 2004). Furthermore, advice can have positive and negative consequences (MacGeorge, Samter, & Gillihan, 2005) for both the individual advice recipient, relationships, and potentially the broader society (Vitak & Ellison, 2012). Advice can happen across the full spectrum of relationships, whether between close friends and associates (Feng & MacGeorge, 2010), between associates in virtual communities (Enter & Michopoulou, 2013), from relative strangers (Brady, Zhong, Morris, & Bigham, 2013), or in more specific populations that include blind users on Facebook (Brady et al., 2013). Advice can be given about any topic, and has been studied regarding topics such as finances (Marsden, Zick, & Mayer, 2011), raising children (Reid, Schmied, & Beale, 2010), travel (Enter & Michopoulou, 2013), health concerns (Colon-Ramos, Atienza, Weber, Taylor, Uy, & Yaroch, 2009) entertainment (Van Swol, 2011), relationships (Adams & Williams, 2011), consumer goods (Mackiewicz, 2010), and adolescent social ties (Lee, 2009). The range of things people can give advice about is essentially limitless.

Advice provides emotional and instrumental support, and its outcomes have been studied for several decades (Goldsmith, 1994). If done well, advice can provide recipients with a number of positive outcomes including new insights and information, lowered anxiety and reduced uncertainty, greater affection for the advice-giver, and boldness to act (Arora, Rutten, Gustafson, Moser, & Hawkins, 2007; Feng & MacGeorge, 2010). For example, Gray et al. (2013) found that students adjusted better to college when connected through Facebook with intentional communities that could offer them, among other things, advice about college life. When done poorly, advice can increase the recipient's anxiety (Dalal & Bonaccio, 2010), reduce affection toward the advice-giver, and lead the recipient to feel more isolated or alone (Servaty-Seib & Burleson, 2007).

Advice Response Theory

Research indicates that advice outcomes are influenced by message content and style, features of the interaction, advisor characteristics, recipient perceptions and characteristics, and aspects of the situation, context, or problem. Advice Response Theory (ART) was developed as an effort to synthesize existing theory and research findings regarding these variables (Feng & MacGeorge, 2010; MacGeorge et al., 2013). In its current form, the theory has a primary focus on message and advisor characteristics, but the theorists have given increased attention to recipient and context variables. Consistent with ART, the current study focuses on message content (efficacy, feasibility, limitations, and confirmation), advisor characteristics (expertise, trustworthiness, closeness), and context (problem seriousness) as principle influences on the intention to implement advice.

Content. According to ART, message content features are a key influence on responses to advice (MacGeorge et al., 2004). From the recipient's perspective, important message content features include efficacy (does the advised action address the problem?), feasibility (can the advised action be accomplished?), absence of limitations (are the drawbacks of the advised action minimal?), and confirmation (does the advice confirm what the recipient already intended to do?).

Researchers testing ART have found that these dimensions of message content are consequential for advice outcomes, including implementation intention (Feng & MacGeorge, 2010; MacGeorge et al., 2004; MacGeorge et al., 2013). In some studies, these have been examined as separate predictors (MacGeorge, Feng, Butler, & Budarz, 2004; Feng & MacGeorge, 2010), whereas others have treated them as observed variables underlying a "message content" factor (MacGeorge, Guntzviller, Hanasono, & Feng, 2013). Furthermore, when advice includes explicit arguments to support the efficacy, feasibility, and minimal limitations of the advised action, this increases intention to implement (Feng & Burleson, 2008).

Since message content factors (i.e. efficacy, feasibility, absence of limitations, and confirmation) are features of the message itself, their influence should remain constant regardless of where or through which medium the advice is given. Given this, I expect perceptions of efficacy, feasibility, absence of limitations, and confirmation to have effects on implementation intention consistent with ART and prior research when advice is given through the medium of Facebook.

H₁: As the recipient's evaluation of Facebook message content improves, so will the intention to implement advice.

Advisor Characteristics. A great deal of research from multiple disciplines has examined how various advisor characteristics impact advice outcomes (Bonaccio & Dalal, 2006, 2010; Van Swol, 2011; Yaniv & Milyavsky, 2007). These characteristics include expertise, intentions, and confidence. The connection between the perception of advisor expertise and advice utilization is especially well-established (Bonaccio & Dalal, 2010; Feng & MacGeorge, 2010). Advisor expertise refers to the perception that the advisor has unique insight, skill, or knowledge to address the specific problem. Recipients evaluate the task-related knowledge, experience, and training of their advisors, and advice recipients follow expert advice more than novice advice regardless of their own personal level of expertise (Harvey & Fischer, 1997). Trustworthiness is also an important influence (Jodlbauer and Jonas, 2011; Van Swol, 2011) and refers to the advice recipient's confidence in the motives of the advisor. The advice from a trusted advisor tends to be followed because it is perceived to be more reliable. In addition to expertise and trustworthiness, studies based on ART have given specific attention to the advisor characteristics of liking and similarity (Feng and MacGeorge, 2010), as well as relational closeness (Feng & MacGeorge, 2006). Liking is a significant predictor of intention to implement, and similarity is a near significant predictor (Feng and MacGeorge, 2010). These findings make intuitive sense as advisors would be more likely to accept advice from people they like, as well as those to whom they feel similar. The findings for liking were again supported by MacGeorge et al. (2013). The current study will examine the influence of four advisor characteristics: expertise, trustworthiness, liking and similarity.

Many people who give advice via Facebook are also 'offline' friends, so their perceptions of these relationships are not solely dependent on online interactions. Joseph Walther (1992) proposed in the social information processing theory that established relationships can have the same relational dimensions online as face-to-face. The advisor characteristics mentioned above are relational perceptions and should similarly apply to Facebook advice interactions. As such, the usual effects of advisor characteristics on advice outcomes are expected.

H₂: As the evaluation of advisor characteristics improves, so should the intention to implement advice.

Indirect effects of advisor characteristics. In ART, advisor characteristics are described as having indirect effects; specifically, message content is argued to mediate the effect of advisor characteristics on various advice outcomes (Feng & MacGeorge, 2010; MacGeorge et al., 2013). While advice recipients do evaluate pieces of advice more

positively from people they respect, like, trust or feel similar to, the content of the advice itself is still the most important feature when it comes to predicting the intention to implement that advice. However, if the advice is good and comes from a favored source, Given the expectation that Facebook recipients of advice will respond to message content and advisor characteristics much as they do offline, message content features are expected to mediate the influence of advisor characteristics (expertise, trustworthiness, and relational closeness) on the advice outcome of intention to implement.

H₃: The influence of advisor characteristics on the intention to implement advice is mediated by the effect of message content features.

Context Features. According to ART, certain features of the situation or context will moderate the influence of message content on implementation intention. However, only two studies have tested this contention, focusing on the influence of problem seriousness (Feng & MacGeorge, 2010; MacGeorge et al., 2013). Problem seriousness refers to an advice recipient's evaluation of an issue's personal significance or importance.

To explain the effects of problem seriousness, ART draws on the Elaboration Likelihood Model (ELM), which states that individuals follow peripheral or central routes to persuasion (Petty & Cacioppo, 1986). In the ELM, the peripheral route to persuasion involves low levels of elaboration, and decisions are made through a series of heuristic cues. The central route involves critical thinking and deeper levels of cognition. While there are some individual differences regarding tendency to use a particular route, the peripheral route is typically the default route if the central route is not activated. The central route becomes activated when it becomes evident that critical thinking is required. According to ART, if the problem seriousness of the advice is rated as high, then advice recipients should elaborate more on the advice and therefore message content should have a stronger influence on advice outcomes. Consistent with this prediction, Feng and MacGeorge (2010) found that problem seriousness moderated the influence of message content on the intention to implement advice, with the intention to implement increasing as the problem was perceived to be more serious. It should be noted that MacGeorge et al. (2013) did not replicate this result. Their participants, as opposed to the earlier study, were evaluating advice they had just received; MacGeorge et al. postulated that participants did not yet have enough time to process problem seriousness. In immediate advice encounters, problem seriousness may have less influence, and thus they were not able to replicate the results. They also suggest that further research into this is needed. In line with Feng and MacGeorge's (2010) finding and the call for further research by MacGeorge et al. (2013), the following hypothesis was advanced:

H₄: The influence of message content on intention to implement will increase as problem seriousness increases.

Extending ART

While ART focuses on senders, messages, and to some extent recipients and contexts, other models of the communication process (e.g. Weaver & Shannon, 1963) also include the channel, the media or means through which communication occurs. Since ART research has focused solely on face-to-face encounters, this is understandable; however, the channel and its effects become a relevant consideration if the focus shifts from advice given face-to-face to advice on Facebook. Advice giving occurs through a variety of channels like email, online discussion groups, instant messaging, chat, video conferencing, blogs, wikis, and document sharing (An & Lipscomb, 2010), and it certainly occurs on Facebook, as well (Vitak & Ellison, 2012). Since advice is ubiquitous and occurs through various channels, it is important to examine it how it is given via different channels, and how those channels influence the communication process.

In research on computer-mediated communication (CMC), "channel effects" traditionally refer to ways in which the temporal and spatial affordances of a medium affect communication outcomes. For example, Walther and Tidwell (1995) studied how chronemics affect "perceptions of communicators' intimacy/liking or dominance/submissiveness," and Nowak, Watt, and Walther (2005) found that synchronicity and cue richness affect a CMC conversational partner's social attraction, self-reported involvement, and certainty in the interaction. However, beyond these affordances, channels also vary in how they facilitate discussions among two or more communicators.

Consistent with the vast majority of advice research, ART has focused almost exclusively on dyadic, face-to-face interactions. While some research has been conducted to examine the influence of multiple advisors (Yaniv & Milyavsky, 2007), ART has not been applied or extended to situations with multiple advisors or where there is an audience to the advice interaction. Yet people on Facebook often receive advice from multiple advisors in response to a single status update, and the advice provided can be viewed by many others, and these factors may affect how advice is evaluated. Examining advice on Facebook (specifically through comments on Facebook status updates) expands ART beyond dyadic communication by introducing multiple advisors and an audience into the advice interaction.

Advice on Facebook

In an informal poll through my own Facebook account, I asked the question "what (if anything) is unique about receiving advice through Facebook? Furthermore, how (if at all) do these unique features affect how you evaluate or adopt the advice?" Some of the responses I got were:

Friend A: "I tend to get advice from people you wouldn't normally ask or think to ask. I guess it matters on who is giving me the advice, but sometimes it means more because it's from people who went out of their way to give me advice.

Friend B: "I tend to use Facebook as a place to ask a lot of my friends something at once, but it does open it up to people I wouldn't normally ask (which is sometimes good, sometimes bad). I still value the advice of certain people more, though, based on their areas of expertise, how much I trust them, and how well they know me, though.

As seen in the comments above, one of the draws of Facebook is that a person can solicit advice from multiple sources at the same time. This is a community, an interactive environment where advice becomes social. The diversity of Facebook is seen as a strength because people can get a variety of opinions. Gray et al. (2013) note that people experience value in using Facebook for advice-seeking because users receive advice from a "wide range of people" (p. 253).

Facebook as a Masspersonal Context

Facebook is a multi-user platform, and multiple individuals can communicate with single partners or a group (Bazarova & Choi, 2013). Interactions through comments on status updates are visible to anyone with security access to those posts. Facebook users can vary in their awareness of the audience of their statuses, and awareness levels affect self-disclosure (Bazarova & Choi, 2013).

Facebook provides a platform for significant social support (Bryant & Marmo, 2012; Gray et al., 2013; Jung et al., 2013; Manago, Taylor, & Greenfield, 2012; Vitak & Ellison, 2012). Furthermore, support via Facebook, including advice, has been shown to have positive impact. In a study of new parents seeking advice via Facebook, Bartholomew, Schoppe-Sullivan, Glassman, Kamp Dush, & Sullivan, (2012) found that Facebook interactions fostered better parental adjustment for mothers when more of a mother's friends were on the network and mothers interacted more those friends. Similarly, in a study of college freshman adjusting to college, Gray et al. (2013) found that Facebook was a positive tool for social support and was positively correlated with social adjustment.

Facebook is best understood as a masspersonal communication medium since it facilitates personal interactions in a public space (O'Sullivan, 2005). O'Sullivan (2005) argued that there is a false dichotomy between mass communication and interpersonal communication. Traditionally interpersonal communication has been conceptualized as both private and personal, and mass communication as both public and impersonal. There are two other quadrants: that which is private and impersonally produced, as well as that which is public information and personal in nature.



Lower Exclusivity (public)

Figure 1: The Masspersonal Communication Model

In this model (see Figure 1), Facebook fits in quadrant 3 as being both public and personal. Facebook has different communication channels including status updates, wall posts, and instant messaging. Instant messaging could be classified as private and personal, whereas status updates and wall posts are displayed in a more public setting (i.e., they are available to anyone with security access to the posts) yet are typically personal in nature (Bazarova, 2012).

In his conclusion, O'Sullivan poses a series of questions about when people know their conversation is observed by others, which all seem relevant to our use of Facebook today including:

> • How does the public nature of the message or exchange shape the process, message interpretations, and consequences for both the interactants and those witnessing the interaction?

- How do these interactions differ from private personal interactions in outcomes?
- How does awareness (or lack of awareness) of the public nature of the oneto-one interaction (one or the other or both communicators) shape the communication episode and the outcomes?

These questions provide a call for research, and the current study will address these questions with regard to advice. Because Facebook is masspersonal, it is a natural place for the social activities of advice seeking and giving to occur. Furthermore, it has features that are likely to influence how people evaluate the advice they are given through this medium. The following sections outline three potential effects in two groups that the masspersonal channel of Facebook potentially has on advice evaluation. The "masspersonalness" of this medium introduces multiple advisors and an audience into the advice interaction. Having multiple advisors creates a condition in which consensus effects might occur. Having an audience creates a condition in which the recipient may be influenced by conformity or perceived tailoring of the message.

Consensus. Advice on Facebook is potentially affected by the perception of consensus because Facebook allows for the presence of multiple advisors. As a masspersonal medium, Facebook facilitates "friendsourcing", which according to Hayzlett (2013) "is reaching out to your most valued advisors (the people you really know) and finding out what they think." Friendsourcing differs from "crowdsourcing," the more traditional way to describe a similar process of online information gathering from a variety of sources. Crowdsourcing leverages the aggregate wisdom of broad online communities (Brabham, 2012). This concept works well when describing large-scale data collection

by businesses from a group of disparate, largely anonymous, relative strangers; however, this process does not exactly describe people's experience of asking their friends for advice on Facebook.

Having multiple advisors opens the possibility of consensus effects taking place. Different advisors could offer different advice, but they could also possibly offer similar advice or even identical advice to other advisors. A recipient may react differently to having multiple pieces of advice which offer convergent or divergent opinions. Advice that converges with group opinion should be evaluated more positively (Cialdini & Goldstein, 2004). Cialdini (1993) refers to this as the "social proof" heuristic, which states that individuals tend to follow the group (or their perception that there is a group). In an experimental study on friends' willingness to donate to a charity, Zafar (2011) found that even when group members' identities were unknown, people tended to conform to the social norm. When identities were revealed, the decision conformed even more strongly to the direction and decisions of the group. Bak and Keßler (2012) studied the effects of "likes" on evaluation of Facebook posts and found that items with more likes were more positively evaluated. This research suggests that when advice recipients perceive advice to be supported by consensus they are more likely to follow that advice. Consequently, I anticipate a main effect of consensus on the intention to implement advised actions.

H₅: As the consensus in support of an advice message increases, implementation intention increases.

Consensus acts as information for a systematic processor, much as message content does. As such, consensus could function as evidence for an advice recipient who is thinking carefully about how advice from different advisors is similar and different. The presence of higher consensus could actually encourage processing of content features, whereupon recipients give more weight to content. This reasoning is reflected in the following hypothesis:

H₆: The perception of consensus increases the influence of content features on the intention to implement.

If consensus operates as a heuristic, problem seriousness should reduce its influence. Cialdini and Goldstein (2004) argue that people rely on heuristic thinking when issues are not centrally as important to them; however, when issues are important, they tend to think more critically. Social proof functions as a heuristic for decision making, namely people tend to agree with the group when issue centrality is low. If consensus functions as this type of heuristic, then people should follow the advice of a crowd more when their problem is not too serious. When their problem is more serious, they will care less about the group and think more critically about their problem. Greater problem seriousness could reduce the impact of consensus on intention to implement because advice recipients are more inclined to use central processing with regards to decision making. However, if consensus triggers systematic thinking about the object of consensus, problem seriousness could influence an advice recipient to process the consensus information more carefully, therefore increasing its effect on implementation intention.

R₁: How does consensus influence the intention to implement advice as problem seriousness changes?

Conformity. Consensus is the perception of receiving similar advice from multiple sources, and conformity is a person's desire to comply with the opinions of

others. The implementation of advice received on Facebook is potentially affected by conformity. As a masspersonal venue, most Facebook interactions via status updates and comments potentially have an audience. Unless otherwise indicated through commenting or liking, Facebook users do not know exactly who will read their status updates and who will miss them. This creates a phenomenon that Litt (2012) described as an imagined audience. This perception of an audience may affect advice outcomes because surveillance has been shown to affect behavior.

Conformity here is conceptualized as essentially a personality trait, a relatively stable individual difference that affects all responses to persuasive behavior rather than something that is situationally variable. In a masspersonal context in which the perception of an audience exists, a predisposition toward conformity could influence one's intention to implement advice. For example, a qualitative study of older and younger Facebook users by Brandtzæg, Lüders, and Skjetne (2010) observed a common theme of people modifying their behavior based on their perceptions of others. On Facebook, advice recipients who worry about the approval of others should be more motivated to implement advice given to them.

H₇: As conformity increases, intention to implement increases.

Conformity potentially could influence an advice recipient to evaluate the merits of the advised action more carefully. However, it also could motivate more attention to the source of the advice and advisor characteristics over the merits of the advice message content. The answer is unclear, but the questions are interesting and should be explored:

R₂: Does the influence of content on implementation intention become stronger as conformity increases?

Consensus and conformity should work together to create a stronger effect than either alone. Advice that is perceived to represent the will of the group should influence behavior (Cialdini and Goldstein, 2004), and the perception of being observed should also influence behavioral choices (Ajzen, 1991). Thus, if agreement occurs within the comments and the recipient tends to be aware of being observed, these two should result in a higher level of intention to implement.

H₈: As conformity increases, the influence of consensus on intention to implement increases.

Tailoring. Because of the audience, the evaluation of advice on Facebook is potentially affected by the perceived tailoring of those messages. In this case, message tailoring refers to the degree to which an individual feels a message was written specifically for them (Jensen, King, Carcioppolo, & Davis, 2012), as opposed to a message written for the benefit or entertainment of the larger audience present in Facebook interactions. This concept is akin to "person-centeredness" as described in constructivist theory (Clark & Delia, 1979, Delia, O'Keefe, & O'Keefe, 1982; Waldron & Applegate, 1998). Person-centeredness refers to how focused a message is to addressing the specific needs and wants of an interactional partner. Messages with greater person centeredness are more likely to be evaluated positively (Burleson, 2009).

Facebook status updates go out to the audience of Facebook friends, not individual recipients. Because status updates have an audience, responses to status updates may be written as much for the audience as for the person who posted the update (Gray et al., 2013). Examples of this might include comments that respond to other comments rather

than the status, comments that 'tag' other individuals into the conversation, or comments meant to be jokes for the broader conversational community.

In the case of advice on Facebook, the perception of tailoring should affect advice outcomes. Advice recipients are motivated to solve their problems precisely because they are *their* problems, and they are the ones who need to address them. When recipients perceive that advice is tailored for them, they should be more motivated to implement that advice; conversely, if a piece of advice is not tailored for them, the recipient should feel less motivated to implement that advice (MacGeorge, 2008). Therefore, I hypothesized:

H₉: As perceived tailoring increases, intention to implement advice increases.

Tailoring may also have a moderating effect, wherein the influence of content gets weaker or stronger depending on how much it's tailored. This type of interaction may occur if the perception of tailoring encourages advice recipients to pay even more attention to the content of advice messages. In the language of ELM (Petty & Cacioppo, 1986), tailoring could improve motivation to process the message, which would in turn increase systematic processing, which should make message content a more powerful influence on intention to implement (Feng & MacGeorge, 2010).

H₁₀: As perceived tailoring increases, the influence of content on the intention to implement increases.

Although tailoring seems likely to have a moderating effect on the influence of message content, it could also be involved in mediating relationships with other variables. One possibility is that perceptions of tailoring are a consequence of content perceptions. In other words, advice recipient may recognize how much a message is tailored from reading the comment and processing the particular features of the advice content (i.e.,

efficacy, feasibility, absence of limitations, and confirmation). In this case, advice recipients would perceive messages to be more tailored because they perceive them as higher in efficacy, feasibility, absence of limitations, and confirmation. Thus, tailoring mediates the influence of content on the intention to implement advice. This type of mediation implies that people evaluate advice content first, and then arrive at a judgment of tailoring. However, it is also possible that tailoring has a different relationship with message content.

Another type of mediation would be present if greater tailoring positively "biases" recipients' evaluation of advice content. Because the Facebook audience is comprised of known friends and associates, and users see instantly who provided them with advice, recipients may intuit a "sense" of tailoring due to the relationship with the advisor before even processing the message content. Recognizing advice as more tailored could then lead to more positive evaluations of advice content. Since a case can be made for each alternative relationship between tailoring and message content, the following competing research questions were proposed:

R₃: Does tailoring mediate the influence of content on intention to implement advice

R₄: Does content mediate the influence of tailoring on intention to implement advice?

Furthermore, if tailoring is a function of relationship type and intuited before processing message content, it probably also "biases" advisor characteristics. Specifically, more tailored advice messages should lead to higher evaluations of liking, expertise, trustworthiness, and similarity. Thus, the following research question is posed: R₅: Do advisor characteristics mediate the influence of tailoring on intention to implement advice?

Finally, tailoring may interact with problem seriousness in advice encounters on the intention to implement advice. If an individual's problem is more serious, the extent to which the advice is tailored to his or her situation may become more important to him or her because the likelihood of actually needing to use may increase. Hence, there is an expectation of an interaction, in which the influence of tailoring on intention to implement becomes stronger as problem seriousness increases. This suggests that tailoring will become increasingly important to advice recipients as the problem becomes more serious. As such, the following hypotheses are posited:

H₁₁: As problem seriousness increases, the influence of tailoring on the intention to implement increases.

CHAPTER 2: METHOD

Participants

Study participants were 269 Facebook users recruited from a large Midwestern university and a large Eastern university in the United States, and from Facebook users nationally and internationally. A larger number of people (N = 1567) initiated participation in the study but were screened out as a consequence of their Facebook use, or provided data that was unusable (see Procedures). Students at both universities were recruited through their respective colleges' research participation systems for their Communication programs, as well as with flyers around campus. Community (nonstudent) participants were recruited through Facebook and Twitter invites originating from my Facebook and Twitter accounts; other Facebook and Twitter users shared this invite with their online communities. All of the participants were given the option to be compensated with Redbox or Amazon credit; college students were given the alternative option of earning extra credit or research credit. Compensation was awarded to participants who completed the entire survey. Upon proof of completion, participants were emailed codes to redeem \$2.40 of Redbox credits for 2 DVDs or \$2.50 of credits to Amazon.com.

The participants (173 females, 96 males) ranged in age from 18 to 66 with a mean age of 23.76 years (SD = 9.10). Of the participants, 225 were students, 43 were not, and 1

did not indicate. Non-students reported a wide variety of professions including pastor, nurse, office manager, policeman, journalist, biologist, fast food worker, etc. The majority of participants reported using Facebook daily (73.2%); the rest reported using Facebook two to three times a week (14.5%), once a week (5.2%), two to three times a month (3.7%), once a month (1.5%), and less than once a month (1.9%). Despite the majority of participants using Facebook two to three times a day, the largest group of participants reported posting about personal concerns less than once a month (45.7%). In decreasing levels, the rest reported posting about personal concerns once a month (22.7%), two to three times per month (14.5%), once a week (7.1%), two to three times per week (3.3%), and the fewest reported posting about personal concerns daily (2.2%). This suggests that the status updates this current study looked at may be noteworthy in terms of not being the posts people typically make. A few participants reported "never" posting about personal concerns, but nevertheless found a post that produced advice comments from friends (4.5%); this is probably a result of people asking for advice on matters they did not consider "personal concerns."

Procedures

This survey was conducted in two phases. Phase 1 was conducted online and at one university. Phase 2 was conducted online and at two universities, and the procedures were approved by the IRBs at both universities. In both phases, participation occurred online, with participants completing a survey presented to them via Qualtrics (see Appendix H). Each participant began by reading information about the survey and then were instructed that by beginning the survey, they agreed to participate in this research. In Phase 1, participants indicated if their friends ever commented on their Facebook posts before proceeding to survey questions. If they answered "no," they were screened out and sent to the end of the survey. If they said "yes," they proceeded to the next sections. Participants then answered questions regarding demographic information (i.e., age, gender, student status, profession, income level, Facebook use, and personal post frequency). The survey then prompted participants to open their Facebook accounts and locate a status update from the past two months in which they disclosed a real problem or issue and received several pieces of advice from their Facebook friends. Once this status update with comments was located, the participants were prompted to paste the text of the status update replacing proper names with "XXXX" and to answer questions about the seriousness of the problem reported in the status. Participants were also asked to report on their general need to conform to social pressure; this measure was not tied specifically to the given status update.

After this, participants were prompted to cut and paste the text of each comment without the commenter's name. Participants were then asked whether the comment was text, picture, link, or video, and if it was not text, they were asked to describe the content. Following this, participants were asked to answer items assessing message content, advisor characteristics, consensus, tailoring, and intention to implement with regard to that comment (advice) and advisor. The presentation of these items was randomized. This procedure was repeated for up to the next ten comments on their status update. After the survey was completed, the procedure for obtaining their credit or compensation was explained. Participants were instructed to email a separate email account with a specific phrase including the terms "Advice Credit" or "Advice Redbox". After running the survey for three months, 686 participants had initiated the survey, but only 232 had provided responses. Of the 232 responses, 40% reported on two comments, 19% responded on three comments, 9% responded on four comments, and the percentages continued descending. This made it impossible to assess order effects (originally part of the rationale for the project) or, more generally, to employ a repeated measures design. Phase 2 was initiated to obtain more data, while accommodating to these developments.

Comments 2 through 9 from Phase 1 were eliminated in Phase 2, thus limiting the survey to one comment for the status update. Thus, the primary difference between Phase 1 and Phase 2 was that people were asked to report on the first piece of advice they received, and not on any others. This had the advantage for participants of reducing the time required for participation to 10 minutes, while allowing the data from the two phases to be combined.

In addition, Phase 2 participants were asked three screening questions at the beginning of the survey to narrow the participant field. The three questions were "Do you have a Facebook account?", "Do you ever post about problems, stresses, hassles, or decisions you need to make?", and "When you post a status update about a problem, stress, hassle, or decision you need to make, do any of your Facebook friends ever respond with advice?" If participants answered no to any of these questions, they were screened out of the study and directed to the end of the survey.

The procedure for the remainder of the survey was the same as Phase 1. Compensation was also the same, except for the addition of the Amazon option. Amazon credit was added because few participants were choosing the Redbox gift code option.
Data Cleaning Procedures

The entire data set included 1567 total responses from two phases: 686 from Phase 1, and 781 from Phase 2 including 100 from the Eastern university. Screening was handled somewhat differently at the two universities. At the Midwestern university, participants began the survey and then were asked screening questions at outset. At the Eastern university, screening questions for this study and studies conducted by other researchers were presented to potential student participants as a set, so an unknown number of students were screened during this process and were never given access to the survey link. Of the 1567 total responses across the two phases and two universities, 269 were retained as legitimate and viable for analysis. Others were excluded for the following reasons.

Participants who did not use Facebook, update statuses, or have friends comment on their page were initially screened from the survey. Responses were coded for missing data, comments, or status updates, nonsensical or illegitimate comments or statuses, and outliers and dropped. Status updates that were obviously not regarding problems or issues were removed (e.g., "For this survey, open Facebook in a new tab so that you can search through your personal Facebook homepage", or "An Alternative To Your Cup of Coffee. www.getupandgobaked.com"). Responses with comments that were not legitimate advice including jokes, nonsense, or non-advice were also removed (e.g., "Happy Birthday!!", "She dies. Haaa spoiler xD"). Missing data refers to questions that were skipped or not answered with values; missing response means the participant pasted a status update, but they did not paste the comment for which they were answering the remainder of the survey questions. Of the 490 people with "missing data", 170 responded to questions about contextual issues related to their status update (i.e., conformity and problem seriousness), and 320 participants left this information blank. After this, participants were prompted to paste the comments to their status update and respond to questions about the perceptions of the comment and commenter (i.e, advisor characteristics, message content, tailoring, consensus, and intention to implement). Of the 490 participants with missing data, 478 left this entire section blank, and 12 of them gave incomplete responses. Although these 12 participants completed the intention to implement items, none completed the advisor characteristics, six completed the consensus items, and two responded with "3" to every single item. Consequently, the data from these 12 participants was not retained for analysis.

Responses that had one value for all or most responses were removed. One respondent indicated that he or she was under 18, and two other respondents of the remaining participants did not provide their age. Data from the first participant was deleted in accordance with the IRB-approved protocol. Data from the other two were omitted because they cannot be included in any analysis that requires age, and age is used as a control variable in the regression analysis. An exploratory descriptive analysis of the variables indicated that a few responses were outliers overall or in a single category; these were also removed. Table 1 presents the frequencies of these different types of reasons for dropping participants' data.

	Frequency	Percent
Usable Response	269	17.2
Missing Data	490	31.3
Missing Response	25	1.6
Junk Comment	72	4.6
Junk Status	3	.2
No Personal Statuses	398	25.4
No Comments from Friends	302	19.3
Outlier/single number response	4	.3
Outlier/single for category	1	.1
Age below 18 or not stated	3	.2
Total	1567	100.0

Table 1: Data Cleaning Frequencies

Measures

Most scales used 5-point Likert-style items (1 = strongly agree, 5 = strongly disagree), except the advisor characteristic of trustworthiness which used a 7-point semantic differential scale. Internal reliability (Cronbach α s) for all variables exceeded .75, except for conformity (α = .72). Means, standard deviations, reliabilities, and bivariate correlations of all the variables included in the primary analyses for the 269 survey respondents are recorded in Table 1.

Message Content. Advice message content was assessed with measures of efficacy, feasibility, absence of limitations, and confirmation (see Appendix A). These

four variables were then subjected to principal components factor analysis to produce a single component score representing evaluation of message content for each participant. This "secondary factor analysis" procedure is identical to the one employed by Feng and MacGeorge (2010) to produce message content scores, and related, though not identical, to the confirmatory factor analyses employed to produce factor scores in MacGeorge et al (2013).

The 3-item scale for efficacy (e.g., "I thought the advised action could solve my difficulties") and 3-item scale for confirmation (e.g., "The advised action is something I had already planned to do") were developed by Feng and MacGeorge (2010). The 5-item scale for feasibility (e.g., "The advice given was something I could do") and 3-item scale for absence of limitations ("I can see that the advised action has significant disadvantages" were developed by MacGeorge et al. (2004). Item reliabilities for each of these scales are reported in Appendix A; all exceeded .84.

A principal components analysis on these four variables extracted a single component with an eigenvalue of 2.17, incorporating 54% of inter-item variance. Content scores for each participant were generated in SPSS based on the component score coefficient matrix reported in Table 2. As shown in Table 3, these scores derived from the principal component analysis have a mean of 0 and standard deviation of 1.

Table 2. Component Score Coefficient Mat	rices
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	Message Content		Advisor Characteristics		
Efficacy	.360	Liking	.403		
Feasibility	.368	Expertise	.263		
Confirmation	.272	Trustworthiness	.346		
Absence	.348	Similarity	.338		

Advisor characteristics. The measures for advisor characteristics includes assessments of advisor expertise, trustworthiness, similarity, and likeability (see Appendix B). These four variables were subjected to principal components factor analysis to produce a single component score representing evaluation of advisor characteristics for each participant. This "secondary factor analysis" procedure for advisor characteristics is the same as previously described for message content.

The 4-item scale for expertise (e.g., "My friend has a lot of expertise with this kind of problem") was developed by Feng and MacGeorge (2010). The 10-item semantic differential scale for trustworthiness (e.g., "My friend is honest/dishonest) was developed by Wheeless and Grotz (1977). The 6-item semantic differential scale for similarity (e.g., "My friend is like me/not like me") was developed by McCroskey, Richmond, and Daly (1975). The 5-item scale for liking ("My friend is one of the most likeable people I know") was developed by Rubin (1970). Item reliabilities for each of these scales are reported in Appendix B; all exceeded .79. A principal components analysis on these four variables extracted a single component with an eigenvalue of 2.15, incorporating 54% of inter-item variance. Advisor characteristics scores for each participant were generated in SPSS based on the component score coefficient matrix reported in Table 2. As shown in Table 3, these scores derived from the principal component analysis have a mean of 0 and standard deviation of 1.

Problem seriousness. The three-item scale (see Appendix C) to assess advice recipients' perception of problem seriousness (e.g., "This is a serious problem") was developed by Feng and MacGeorge (2010). One item was reverse coded. The mean score for participants was 2.82 (SD = 1.09). The reliability of the three items was acceptable ($\alpha = .86$).

Implementation intention. The three-item scale (see Appendix D) to assess implementation intention (e.g., "I plan to follow the advice I was given") was developed by MacGeorge et al. (2004). The mean score for participants was 3.63 (SD = 0.93). The scale was extremely reliable ($\alpha = .95$).

Consensus. The perception of consensus (see Appendix E) for each comment was assessed by a 3-item scale ("This comment gave similar advice to other comments on this status update."). The mean score for participants was 3.47 (SD = 0.85). Cronbach's alpha was satisfactory ($\alpha = .80$).

Conformity. Conformity (see Appendix F) was assessed with the public domain "Conformity" scale from International Personality Item Pool, which is based on the Jackson Personality Inventory-Revised (JPI-R) Cooperativeness 10-item scale (Jackson, 1997). The questions begin with the prompt "When I am on Facebook" and then provide items measuring conformity ("Worry about what people think of me", "Conform to others' opinions", "Need the approval of others"). , "Each item was assessed using a 5-point Likert-type scale (1 = strongly disagree, 5 = strongly agree). Five items were reverse coded. The mean score for participants was 2.71 (SD = 0.51). While less than the others, the internal consistency of the scale was still acceptable ($\alpha = .72$).

Tailoring. The assessment of tailoring included items from a 2-item scale developed by Jensen et al. (2012) to measure tailoring. These two items ("This comment seemed to be written personally for me" and "This comment was very relevant to my situation") are shown in Appendix G, along with four additional items I created. All were assessed on a 5-point Likert-type scale (1=strongly disagree, 5 strongly agree). The mean score for participants was 3.83 (*SD* = 0.66). The six items exhibited a satisfactory level of internal consistency (α = .78).

CHAPTER 3: RESULTS

Preliminary Analyses

Bivariate correlations between all variables are shown in Table 3. There was a sample size of 269 for these and the subsequent primary analyses. These correlations suggest support for hypothesized effects of tailoring and consensus, though not conformity, because of the FB context. Assuming that these variables are operating simultaneously to influence intention to implement and there is shared variance between them to influence that DV, a regression analysis was conducted to identify the significant, independent effects.

		М	SD	α	1	2	3	4	5	6
1.	Problem	2.82	1.09	.86						
2.	Conformity	2.71	0.51	.72	015					
3.	Advisor	0.00	1.00	_	062	026				
4.	Message	0.00	1.00	_	.018	001	.291**			
5.	Tailoring	3.83	0.66	.78	041	.000	.334**	.359**		
6.	Consensus	3.47	0.85	.80	.150*	.083	.080	.276**	.015	
7.	Implementation	3.63	0.93	.95	.183**	.014	.248**	.613**	.190**	.350**

Table 3. Correlations of Predictor Variables

* p < .05. ** p < .01.

Power. With a sample of 269, the power for observing a significant two-tail Pearson correlation was .37 for small effects (r = .10), greater than .99 for medium effects (r = .30), and greater than .99 for large effects (r = .50). In regression analyses involving all 6 predictor variables on intention to implement, the power for detecting a significant independent effect for predictor variables was .25 for small effects ($f^2 = .02$), greater than .99 for medium effects ($f^2 = .15$), and greater than .99 for large effects ($f^2 = .35$).

Hierarchical Multiple Regression

To examine the predictors and their relationships, a hierarchical multiple regression was performed to predict scores on intention to implement advice from the following: gender (coded 1 = male, 0 = female), age, problem seriousness, conformity, advisor characteristics (including liking, expertise, trustworthiness, and similarity), message content features (including efficacy, feasibility, absence of limitations, and confirmation), consensus, tailoring, and various interactions.

Hierarchical multiple regression was performed following the logical progression of the ART model and the order in which a person would encounter each factor when experiencing advice on Facebook. The first two steps controlled for recipient characteristics and recipient interpretation of the situation that most likely precede posting the problem on FB. Thus, these influences were controlled before examining additional factors identified by ART or interactions between problem seriousness and other factors. Step 3 contained advisor characteristics because awareness of the advisor logically precedes evaluation of the message content; this is consistent with ART. Step 4 introduced the message characteristics identified by ART, whereas Step 5 examined whether the proposed message characteristics associated with Facebook channel effects had effects beyond those already identified in ART. This resulted in the following order of entry: Step 1, gender and age; Step 2, problem seriousness and conformity; Step 3, advisor characteristics; Step 4, message content features; Step 5, tailoring and consensus; and Step 6, interactions of conformity by consensus, message by tailoring, problem by consensus, problem by tailoring, conformity by tailoring, message by consensus, message by conformity, and message by problem. Results of this hierarchical regression for the model are summarized in Table 3, and the individual coefficients at each step in Table 5.

The overall regression was statistically significant, R = .69, $R^2 = .48$, adjusted $R^2 = .445$, F(16, 252) = 14.43, p < .001. Thus, intention to implement was predicted quite well by this set of X variables and Y interactions, with approximately 50% of the variance in intention to implement advice accounted for by the overall regression.

To assess the statistical significance that each predictor contributed to the overall model, the *F* ratio for R^2 increment was examined for each variable in the step it was entered into the analysis. In Step 1, gender and age was entered and were not significant predictors; they produced an R^2 increment of .02, F(2, 266) = 2.16, p < .18. In Step 2, problem seriousness and conformity were entered; they produced an R^2 increment of .03, F(2, 264) = 3.37, p < .01. In Step 3, advisor characteristics were entered; they produced an R^2 increment of .07, F(1, 263) = 7.24, p < .001. In Step 4, message content features were entered; they produced an R^2 increment of .03, F(1, 262) = 31.66, p < .001. In Step 5, consensus and tailoring were entered; they produced an R^2 increment of .03, F(2, 260) = 26.11, p < .001. In Step 6, interactions of conformity by consensus, message by tailoring, problem by consensus, problem by tailoring, conformity by tailoring, message by

consensus, message by conformity, and message by problem were entered; they produced an R^2 increment of .03, F(8, 252) = 14.43, p < .000.

Overall, intention to implement advice was highly predictable from this set of predictors. Of the two predictors added in at the second step, problem seriousness was the significant predictor (p = .003). Advisor characteristics are significant predictors when added in step 3 (p < .001). The strongest unique predictor in the model was message content features. When added in the fourth model, message content was significant (p < .001). When consensus and tailoring were added to the model in step 5, consensus exhibited as the significant predictor of the two with p < .001. In the final step of the regression, the interactions were added. The only interaction that functioned as a significant predictor was problem seriousness by tailoring (p = .006).

An analysis was performed using the PROCESS plugin for SPSS (Hayes, 2013) to decompose the interaction (see Table 4). The regression coefficients were obtained from 5000 resamples drawn from the sample of 269 (see Table 5). When controlling for age, gender, conformity, consensus, advisor characteristics, and message content, tailoring has a significant effect (p = .046) at lower levels of problem seriousness, but this effect becomes insignificant as problem seriousness increases.

	Problem Seriousness	Effect	Se	Т	р	LLCI	ULCI
Low	-1.0882	2017	.1004	-2.0092	.0456	3993	0040
Medium	.0024	0704	.0737	9553	.3403	2156	.0748
High	1.0930	.0608	.0909	.6694	.5038	1181	.2397

Table 4. Moderation Analysis: Effect of tailoring on intention to implement at low, medium, and high values of problem seriousness.

In the final version of the model, with all variables and interactions included, significant predictors were problem seriousness (p = .003) which accounted for 2% of the variance, consensus (p = .002) which accounted for 2% of the variance, message content features (p < .001) which accounted for an overall 23% of the variance, and problem seriousness by tailoring (p = .006) which accounted for 2% of the variance.

The importance and centrality of message content features as an important predictor of intention to implement advice is consistent with the claims of ART. For the main effects of message content, advisor characteristics, and consensus, H_1 , H_2 , and H_5 were supported.

For H_{12} , there was a significant interaction between problem seriousness and tailoring, but the interaction was not as predicted. Instead of tailoring decreasing in influence as problem seriousness increased on the intention to implement, tailoring had a negative effect at low levels of problem seriousness and no effect at medium or high levels of problem seriousness. H12 was not supported. All of the remaining interaction effects predicted by H_4 , H_6 , H_7 , H_8 , H_9 , and H_{10} were not supported; R_1 and R_2 were negative.

from Fredictor Variables and filter	Intention to Implement	
	Intention to Implement	
Predictor	ΔR^2	В
Step 1	0.02	
Control Variable: Age		-0.094
Control Variable: Gender		-0.092
Step 2	0.03***	
Conformity		0.015
Problem Seriousness		0.181**
Step 3	0.07**	
Advisor Characteristics		0.27***
Step 4	0.30***	
Message Content		0.578***
Step 5	0.03**	
Consensus		0.163***
Tailoring		-0.038
Step 6	0.03*	
Message X Problem		-0.08
Message X Conformity		0.076
Message X Consensus		-0.03
Message X Tailoring		-0.035
Problem X Tailoring		0.139**
Problem X Consensus		-0.01
Conformity X Tailoring		0.069
Conformity X Consensus		-0.039
Total R^2	0.48***	
Ν	269	

Hierarchical Multiple Regression Analyses Predicting Intention to Implement from Predictor Variables and Interactions

Table 5. Hierarchical Multiple Regression Analyses

* p < .05. ** p < .01. *** p < .001.

Mediation Analyses

All mediation analyses were performed using the PROCESS plugin for SPSS (Hayes, 2013). In each case, regression coefficients were obtained from 5000 resamples drawn from the sample of 269 (see Table 5).

Hypothesis 3 indicated that the influence of advisor characteristics on intention to implement would be mediated by message content. As shown in Table 6, and consistent with the regression analysis, the total effect of advisor characteristics on intention to implement (controlling for gender and age) was significant. The indirect effect through the mediator of message content was significant, whereas the direct effect was not. Hypothesis 3 was supported.

 R_3 explored whether the influence of message content features on intention to implement would be mediated by tailoring. Controlling for gender and age, the indirect effect was not significant, but the direct effect was significant (see Table 6). Tailoring did not mediate the influence of message features on intention to implement advice. The answer to R_3 is "no."

	Predictor	Mediator	Direct	95% CI	Indirect	95% CI
H3	Advisor	Message	0.08	0129 to .1717	0.16	.0866 to .2450
R3	Message	Tailoring	0.58	.4838 to .6735	-0.12	0535 to .0216

Table 6. Tests of Mediation Analyses for H₃ and R₃

Note: In each case the DV is intention to implement. All entries in the table are unstandardized regression coefficients.

 R_4 explored whether the influence of tailoring on intention to implement would be mediated by message content features. R_5 explored whether the influence of tailoring on intention to implement would be mediated by advisor characteristics. Both of these research questions were addressed with a single mediation analysis in which content and advisor were treated as simultaneous mediators. Controlling for gender and age, the indirect effect was significant, but the direct effect was not (see Table 7). The influence of tailoring on intention to implement advice was fully mediated by message and advisor characteristics. The answer to both R_4 and R_5 is "yes".

	Predictor	Mediator	Direct	95% CI	Indirect	95% CI
R ₄	Tailoring	Message	05	1977 to .0934	0.31	.2052 to .4244
R ₅	Tailoring	Advisor	0.15	0268 to .3255	0.11	.0430 to .1980
R_4 and R_5	Tailoring	Both	-0.09	2415 to .0586	0.35	.2386 to .4713

Table 7. Tests of Mediation Analyses for R4 and R5

Note: In each case the DV is intention to implement. All entries in the table are unstandardized regression coefficients.

CHAPTER 4: DISCUSSION

When I started this endeavor, I asked my Facebook friends why they used Facebook to solicit advice. While many simply said "I don't", the ones who did respond collectively replied, "Because it's a quick way to get a lot of responses from my friends." The purpose of this study was to test the predictive power of advice response theory for advice received on Facebook, and to extend the theory by exploring effects not previously identified by the theory, but relevant in the Facebook context. In particular, the masspersonal context of Facebook introduces the potential for multiple advisors and an audience to advice encounters, neither of which have been addressed within the ART framework to date. Consistent with ART, the study examined how message content features (i.e., efficacy, feasibility, absence of limitations, and confirmation), advisor characteristics (i.e., liking, expertise, trustworthiness, and similarity), and contextual factors (i.e., problem seriousness) affected the outcome of intention to implement the advice. However, considering the potential effects of the masspersonal context on advice, this study also examined additional features of messages, consensus and tailoring, and the recipient characteristic of conformity. This discussion will examine what this study found while testing ART in a new context, then address how the findings of this study extend ART, reflect on the study's strengths and weakness, and finally conclude with some general reflections and advice of my own.

Testing ART

This study tested many of the key claims of ART. For example, the study tested the claim that message content and advisor characteristics both affect intention to implement, that message content is the strongest predictor of intention to implement advice, and that the influence of advisor characteristics is weaker and mediated by message content. Finally, the study examined whether the contextual feature of problem seriousness influenced people's intention to implement advice.

Message content. Consistent with ART, message content was found to be the strongest predictor of intention to implement advice on Facebook. In the final step of the hierarchical multiple regression analyses, message content uniquely explained 23% of the variance in intention to implement, whereas advisor characteristics uniquely explained 1%, problem seriousness 2%, consensus 2%, and the interaction between problem seriousness and tailoring, 2%. Message content is definitely the strongest predictor in this model. The current finding is completely consistent with prior studies in which the influence of message content has been shown to exceed the influence of message style (facework or politeness) and advisor characteristics (MacGeorge et al., 2004; MacGeorge et al., 2013). MacGeorge et al. (2004) found that message content features like absence of limitations, confirmation, and feasibility were all significant predictors of intention to implement. Similarly, MacGeorge et al. (2013) found that message content was the only direct influence on intention to implement.

Advisor characteristics. Also consistent with ART, this study found that advisor characteristics influence intention to implement, but this influence is small, and mediated

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through message content. For example, Feng and MacGeorge (2010) found that only two of the four advisor characteristics (expertise and liking) had significant effects on intention to implement, and overall advisor characteristics affected recipients' perception of message quality or the ability to cope better than it convinced them to implement the advised action. Further, the regression analysis and mediation analyses in this study show that the influence of advisor characteristics is mediated through message content. Specifically, in step three of the hierarchical multiple regression analyses, when advisor characteristics was added before message content, advisor characteristics accounted for 7% of the variance. When message content is added in the next step, variance explained by advisor characteristics falls to less than 1%. The effect is "disappearing" because it's being channeled through message content, which is more directly verified by the mediation analysis in which only the indirect effect of advisor characteristics is significant. That said, advisor characteristics do not simply "disappear", but rather they have an effect on implementation intention because they affect evaluations of message content.

There was one interesting contradiction between the current findings and the most recent published test of ART. MacGeorge et al. (2013) did not actually find *any* influence of advisor characteristics on intention to implement; in their study, advisor characteristics did affect evaluations of message content and politeness, but the indirect effects of advisor characteristics through content and politeness were not significant for intention to implement; they were only significant for the outcomes of advice quality and coping facilitation. This minor contradiction can be interpreted as resulting from the fact that this study did not assess politeness or any dependent variables other than intention to implement.

Both this and prior studies (e.g., Feng & MacGeorge, 2010; MacGeorge et al., 2013) have examined whether advisor characteristics were mediated by message characteristics and found support for this claim. Thus, the current work extends support for ART by replicating the finding with regard to advice received on Facebook. This study also provides one more piece of evidence in accordance with previous research (e.g., Feng & MacGeorge, 2010; MacGeorge et al., 2013) indicating that messages matter than more than advisors. Studies that look exclusively at advisor characteristics and report big effects for these variables (e.g., Dalal & Bonaccio, 2010; Van Swol, 2011) miss a substantial piece of how advice succeeds or fails.

Problem seriousness. In this study, problem seriousness had a direct effect on implementation intention. This is in contradiction to three prior studies. Feng and MacGeorge (2010) found that problem seriousness interacts with message content to influence intention to implement, specifically message content had more influence on intention to implement as the problem became more serious. As reported earlier, Feng and MacGeorge (2006) and MacGeorge et al. (2013) did not replicate these results. On the basis of Feng and MacGeorge (2010), ART is currently presented as claiming that situational or contextual factors like problem seriousness act as moderators of message content effects (Bodie & MacGeorge, 2014), but this contention may need to be revised. Problem seriousness seems to have inconsistent effects, suggesting that something about the method could contribute to whether direct, interactive, or no effects at all are observed. In all prior studies, participants filled out questionnaires regarding advice they

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remembered. In this study, participants directly interacted with written artifacts of their stated problem and the advice they received. This methodological difference might make the direct effect of problem seriousness emerge because problem serious may be more salient to individuals directly interacting with textual artifacts of their problem rather than merely reflecting on it.

Extending ART

In the masspersonal context of Facebook, people weigh multiple pieces of advice with regard to features like content, advisor characteristics, and problem seriousness. As a masspersonal context, Facebook allows for audiences and multiple advisors to be present and part of advice encounters. This element potentially changes the process of how people evaluate advice as opposed to dyadic, face-to-face encounters.

First, since people receive advice in a public setting on Facebook, social pressure (i.e., conformity) may influence decisions. Second, since people receive advice from multiple advisors at the same time on Facebook, people's processing of these multiple messages may influence their decisions. The current study accounts for advice from multiple advisors that may be consonant, dissonant, resonant, or just unconnected.

Exploring the masspersonal context advances ART beyond two-person, in-person encounters. The three variables added to the model to extend ART were tailoring, consensus, and conformity. While tailoring, consensus, and conformity are not unique to Facebook, Facebook does provide a natural laboratory for examine these factors as influences on advice encounters.

Tailoring. Tailoring was added to the model because the masspersonal context of Facebook creates an opportunity for comments on one person's status update to be written

for the benefit or amusement of another, not the advice seeker in question. With relation to ART variables, tailoring was predicted to influence intention to implement. The bivariate correlation of intention to implement with tailoring alone was significant; however, in the hierarchical linear regression, tailoring was not a significant, independent predictor. An interaction effect between tailoring and message content on the intention to implement advice was predicted, specifically that as perceived tailoring increased, the influence of content on the intention to implement would also increase. This was also not supported. There is a negative effect of tailoring on intention to implement at low levels of problem seriousness (see Table 6). This means that when people view their problem as less serious, tailored messages actually are negatively correlated with intention to implement. This could be because people are not as compelled to solve low level problems and so they see others as taking their problem too seriously, or perhaps the reason they discussed this low-level problem on Facebook was not truly to seek advice, per se, but to vent or simply have a sounding board. Thus highly tailored messages are potentially antithetical to their intention to implement the advice.

Two alternative mediated relationships were proposed. The prediction that the influence of message content on implementation intention would be mediated by tailoring was consistent with ART because it emphasized the role of message content in the interaction and suggested that perceptions of tailoring derive from perceptions of advice content. However, this was not the case. Tailoring does not appear to be a function of efficacy, feasibility, limitations, and confirmation. There was a direct effect of these content variables on the intention to implement, but there was no mediation through tailoring. In other words, recipients are not deciding that a message is tailored based on

their evaluations of message content as measured in this study. Instead, something not assessed in the study is driving the perception of tailoring.

The alternative prediction was that message content and advisor characteristics would mediate the influence of tailoring on intention to implement advice. This prediction was supported: both advisor characteristics and message content mediated the influence of tailoring on intention to implement advice. In other words, this study found that perceptions of tailoring influence perceptions of advisors and messages which in turn influence intention to implement; the more that recipients perceived advice to be tailored, the more positively they evaluated advisors on the dimensions of liking, expertise, trustworthiness, and similarity, and advice content on the dimensions of efficacy, feasibility, absence of limitations, and confirmation.

An interesting avenue for future study is to explore where the perception of tailoring "comes from," if not from message content or the advisor characteristics assessed in the study. One possibility is that relationship type or category drives perceptions of tailoring. Facebook provides a network of potential advisors who were specifically chosen as "friends" by Facebook users. Many of those friends do not comment frequently (Brandtzaeg,2012) found that over half of Facebook users are sporadic or silent users; the remaining people use it in decreasing value as socializers, debaters, or advanced users.) It is my contention that Facebook friends who do comment on posts (as opposed to just "liking" or giving no indication that they have viewed them) tend to be "the usual suspects." Thus, when someone comments, the relationship is already known (e.g., best friend, spouse, drinking buddy, etc.) and operates as a heuristic driving perceptions of

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greater or lesser tailoring. People would just simply know that certain others will give them individualized advice.

In both the case of advisor characteristics and message content, tailoring was mediated by both of them. This indicates that tailoring is something that theoretically happens before any of this other processing. This variable should be explored more, the items could be examined more closely, and the construct could potentially be broken apart further to see what is going on. Figuring out exactly what people are responding to when they perceive messages as tailored should be a high priority for future research on the evaluation of advice. One possibility is that a variable like relationship type is determining perceptions of tailoring; this is an area for future study.

An interaction effect between problem seriousness and tailoring on intention to implement advice was predicted, specifically, that as problem seriousness increased, the influence of tailoring on the intention to implement would also increase. This correlation was found to be significant. This means that people with a serious problem were even more motivated than people with less serious problems to follow a piece of advice if they felt it was particularly tailored to them.

Consensus. Consensus was added to the model because the masspersonal context of Facebook invited other multiple possible advisors into advice encounter. Multiple advisors are both a natural feature of Facebook and something that occurs in off-line advice (i.e., we can go sequentially or even simultaneously to multiple advisors and compare their advice). This phenomenon has been understudied, probably because it is difficult to access multiple "real" advisors, as opposed to hypothetical advisors or confederates. For example, Yaniv & Milyavsky (2007) tested the effect of multiple

advisors by having a computer generate two different pieces of advice. Zafar (2011) tested the effects of consensus by informing participants of averaged responses of a hypothetical group at various stages of the experiment. The current study examined people as they interacted with real multiple advisors in a real world setting.

Consensus was predicted to influence the advice recipient's intention to implement advice, and indeed had this effect. An interaction effect was predicted between consensus and message content features, but was not found, nor was the interaction effect between problem seriousness and consensus on the intention to implement advice. That said, consensus emerged overall as a significant predictor on intention to implement in the hierarchical linear regression, even after allowing message content, advisor characteristics, and problem seriousness assume all the variability they could first in the model.

The findings of this study indicate that consensus (and also dissensus) should be added to ART, extending the theory to address some of the influence that multiple advisors with congruent (or incongruent) opinions may have on advice outcomes. Some research has found that people tend to gravitate toward their initial opinion or course of action when exposed to multiple advisors (Yaniv and Milyavsky, 2007). Future research should explore the effects of consensus on people's courses of action before and after advice encounters with multiple advisors. Future research should also explore how people "liking" particular comment affects consensus. Another area of study, perhaps even an experimental one, may be to examine how people respond to multiple pieces of advice with either consensus or dissensus of opinions. Further research is recommended in this area. **Conformity.** Since Facebook is masspersonal, there is an audience to the advice that is provided, and the possibility that awareness of this audience affects decision making. With this in mind, the variable of conformity, or propensity to conform to social pressure, was added to the model, with the expectation that it would influence the likelihood of implementing advice received via Facebook. However, conformity did not have the expected effect. There were also no significant interactions between conformity and consensus, tailoring, or message content.

Measurement problems may explain these non-significant results. The conformity scale from International Personality Item Pool used for the current study was based on the Jackson Personality Inventory-Revised (JPI-R) Cooperativeness 10-item scale, which was designed originally to assess cooperativeness rather than specifically conformity (Jackson, 1997). Another reason for the lack of findings in this study is a potential mismatch between the study's conceptualization of conformity and the scale used. Conformity is typically defined as a change in behavior or belief in order to align with group standards in psychological studies (e.g., Ajzen, 1991). The current scale may better assess a different construct such as a general predisposition to cooperativeness or evaluation apprehension, which may be less of a concern in the virtual environment. Furthermore, the reliability of the conformity scale for this study is not high ($\alpha = .72$), suggesting that different items could be assessing somewhat different constructs. On their face, some items seem to be about the need to be autonomous (e.g., when I am online, I "conform to others' opinions", "want to be different from others", and "do what others do"; whereas others are concerned with need for approval (e.g., when I am online, I "worry about what people think of me", "need the approval of others", or "care what others think of me"). A possible solution to

this is exploratory or confirmatory factor analysis to identify possible subscales, followed by reanalysis.

It is also possible that conformity was adequately measured, but its effects were reduced by the anonymity and resulting lack of social pressure of the online environment. One of the most famous experiments of social conformity was Solomon Asch's "Line Experiment", in which he had participants correctly rank the size of lines in room full of confederates giving the wrong answer. The effects of peer pressure in the room were striking; however, when Asch (1956) ran a variation of the survey in which participants could write their answer so there was no public response, this simple change made the amount of conformity decrease. Since people are usually reading their Facebook pages in private and are not obliged to give a public response as to what they choose, it is understandable that conformity failed to have an effect in this context.

I believe that a case can still be made that conformity matters for the outcomes of advice. One possibility is that future researchers could assess various contexts and circumstances to see whether conformity does have an effect elsewhere. Conformity may not exist online via Facebook, but conformity may become influential again if physical presence of a group of advisors is added, similar to the findings of Asch's conformity tests (Asch, 1956).

Conformity could potentially be influential if conceptualized differently. One possibility is for conformity to be assessed as a normative beliefs construct from the theory of planned behavior (Azjen, 1991). The theory of planned behavior (Ajzen & Sheikh, 2013; Ajzen, 1991) asserts that subjective norms change behavior based on an anticipation of others' pleasure or displeasure. Subjective norms refer to the "perceived

social pressure to perform or not perform" a behavior (Ajzen, 1991, p. 188). In a social situation, an individual may feel and be more likely to comply to a suggested course of action when he or she perceives that the group desires a certain outcome. The implication is that intention to implement advice may be affected by how much the advice recipient desires to conform to others' opinions. Normative beliefs refer to the perceptions of social pressure or the belief that a relevant other desires a particular course of action. This study did not ask whether respondents thought the other expected them to follow the advice. For example, when an advice recipient is counseled by someone whose expectations matter to them who now knows this person has received their advice, the advice recipient may feel pressure to conform to the advice the other would approve or not approve. This element could be added to the construct of conformity.

One way to explore conformity effects on Facebook from a different angle is to test whether conformity interacts with other variables not tested in this model. Zafar (2011) found that the strength of social ties affects whether people conform to group decisions; Zafar conceptualizes strong social ties as relationships with group members in the "real world". Future studies could measure whether and how much Facebook advice recipients interact with their advice givers offline to see if this interacts with conformity on intention to implement advice.

Implications for ART. This study examined how people evaluate advice they receive from friends via Facebook, a masspersonal context with multiple advisors and potential audiences. Since consensus and tailoring were shown to have an influence distinct from message content and advisor characteristics, these elements need to be incorporated within the ART framework. Having addressed these two variables, two

additional directions for future research are now proposed: primacy and other CMC contexts.

Future Directions

Primacy. The first additional new direction is primacy. Phase 1 of this study was going to address primacy; however, most of the participants in Phase 1 only reported one or two comments. Order effects are possible any time advice is sought or provided by more than one person. Facebook automatically orders the comments chronologically, so the order of comments is highly evident and a feature of Facebook interactions via comments on status updates. Order is relevant to the evaluation of advice, and Facebook provides a natural context for studying these effects. Evaluation of advice on Facebook is potentially affected by order and consequently primacy.

Originally, Ebbinghaus (1885) described a phenomenon in which participants better recalled items at the beginning and the ending of a list. This phenomenon was explored by persuasion scholars who found cognitive biases called 'primacy and recency effects' (e.g. Miller & Campbell, 1957). The law of primacy in persuasion states that people tend to have a cognitive bias toward information they encounter first (Lund, 1925). Beyond the potential influence of this cognitive bias, an advice seeker may need or want to take care of a problem quickly, and thus utilize early advice as it arrives. Both explanations point to a primacy effect, and suggest stronger support for a primary rather than a recency effect.

This research evidence indicates that advice given earlier in response to a Facebook status may be more likely to be implemented. Consequently, a main effect of primacy on the intention to implement advised actions is predicted. One problem with the present study was the difficulty of motivating participants to continue past one or two comments. Future research could explore primacy with a similar design as to Phase 1, but potentially finding a way to motivate participants to stay through better compensation, taking the survey in a supervised and controlled environment to encourage participants to continue taking the survey, or a better selection effort advertising effort for willing participants with multiple comments on their status updates.

Other Computer-Mediated Contexts. Another area for future study is other computer-mediated contexts. In discussing social media recently with my college students, I discovered that Facebook is just one of many options used by them for connecting interpersonally. Facebook was the dominant social network for several years, but it is no longer the only or main avenue for social networking. The sample for this study was dominated by college students, but I believe the trend to newer social media outlets will continue and should be explored.

Other CMC options include Twitter, text, Snapchat, FaceTime, Tumblr, Instagram, or other non-US social networks. Each of these may have their own cultures, rules, and effects on advice encounters. For example, Twitter differs from Facebook in that there is a limitation on message size on Twitter and tweets on people's "walls" have different types of privacy settings (i.e., they are often more publicly available than Facebook); message size and lack of privacy may be additional factors. Non-US social networks like those in China have government censorship; this may affect how social media users from other countries give and receive advice. Instagram and Snapchat are both heavily dependent on pictures; advice recipients and givers may interact differently in a picture-

based environment than a text-based one. Investigating other CMC contexts opens up a number of avenues for future research on advice.

Methodological Strengths and Limitations

Strengths. The primary strength of this study was that Facebook provides a natural laboratory for studying real advising behavior in a relatively direct way. Prior studies of advice typically employ hypothetical messages (e.g., Yaniv & Milyavsky, 2007), ask participants to recall advice that occurred days or weeks ago (Feng and MacGeorge, 2010), or present advice in highly artificial laboratory designs (e.g., Zafar, 2011). This study was able to have people interact with transcripts of their own advice interactions involving their own problems with their own Facebook "friends." This naturalness lends external validity to the findings.

Limitations. The limitations of this study include unforeseen obstacles with Phase 1 and inherent control issues with online surveys. Phase 1 could take participants up to an hour to complete; it became quickly apparent that people were not willing to sit down this long for the level of compensation I had provided. Ultimately, very few participants in Phase 1 provided more than one or two comments. The drop-off between one, two, or more comments was severe. Because of this, one variable (primacy) was abandoned and the survey needed to be retooled in order to get the necessary data.

One big lesson learned from this study was that while the sample used Facebook daily, 25% of the respondents for this current study report not posting status updates at all (see Table 1), and only about 25% write statuses once a week or more. The largest percentage (45%) write statuses less than once a month (see Table 8). As Facebook wanes in popularity, especially among younger people and college students, the question

arises, "Is this context still worth studying, or should focus be placed elsewhere?" I do not have an easy answer for this, but the question remains.

Second, conducting the study online meant that I had little control over who participated in the survey. It is difficult to monitor or check who exactly is taking the survey. As discussed previously, many of the responses needed to be omitted because they were nonsensical or the answers they provided were clearly illegitimate. While people can still cheat and swindle in "real world" studies, controlling for this behavior becomes more complicated in anonymous online environments. A solution to this issue is working with a professional provider of research panels (e.g., Qualtrics.com) and paying for "good" participants.

	Frequency	Percent
Never	12	4.5%
< Once a month	123	45.7%
Once a month	61	22.7%
2-3 times a month	39	14.5%
Once a week	19	17.1%
2-3 times a week	9	3.3%
Daily	6	2.2%
	2(0)	

Table 8. Frequency of Personal Posting

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Conclusion

In conclusion, this study set out to examine how people evaluate the advice they receive from through friends through Facebook, specifically as comments on their status

updates. The study found support for many of the claims and predictions of ART; for example, message content is the most important feature of advice and trumps advisor characteristics. That said, advisor characteristics still matter, but their effect is mediated by message content. Features associated with the masspersonal context of Facebook also influenced the intention to implement advice, specifically consensus and an interaction between tailoring and problem seriousness. In contradiction with previous ART research, problem seriousness was found by this study to increase the intention to implement advice, and even more so when messages were perceived to be tailored specifically for the advice recipient.

The findings of this study have practical applications for online customer service, specifically for customer discussion boards where consensus is possible. Online discussion boards are value-enhancing tools for online customers because people seek social interaction and appreciate peer support and opinions (Gummurus, 2010). Chevalier and Mayzlin (2006) demonstrated this positive relationship between online customer discussions and sales, and Liu and Park (2014) found that active online discussions can even be used for establishing pricing features. Companies could use this knowledge that the perception of consensus influences intention to implement by mobilizing their online service agents and brand communities to discuss important company issues. The catch to this is that online communities are built on trust and swayed by perceived authenticity and trust (Laroche, Habibi, Richard, & Sankaranarayanan, 2012); attempts that are perceived by the online community as underhanded or manipulative will likely backfire (Christou, 2012).

As a final note of advice regarding giving advice on Facebook:

First, if you give advice on Facebook, make sure your friend knows it will solve their problem, it is something they can do, there are relatively few obstacles stopping them from following it, and if it dovetails with a direction they were already considering, all the better.

Second, consensus matters on Facebook, so if you see other people giving a good piece of advice to your friend, chime in with your support. Your friend will be more likely to follow this advice.

Finally, if you give advice on Facebook and your friend is experiencing a relatively serious problem, let your friend knows this message was written specifically for them. It is not exactly clear yet from this study "how" people go about perceiving tailoring, but letting your friends know you care and are thinking about them when they are struggling is going to be good advice nevertheless.

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APPENDICES

Efficacy.

I believed that the advised action could help to improve my situation

I perceived that the advised action could help to fix my problem.

I thought that the advised action could solve my difficulties.

Reliability: $\alpha = .84$

Feasibility.

I was advised to do something I am not capable of accomplishing.

The advice given is something I could do.

The advice recommended an action that is impossible for me to do.

I am capable of accomplishing the advised action.

It is possible for me to do the recommended action.

Reliability: $\alpha = .85$

Confirmation.

The advised action is something I had already planned to do. I had already anticipated doing what the advice told me to do. The advice recommends I do something I had already intended to do. Reliability: $\alpha = .91$

Absence of Limitations.

I predict that the advised action will have serious drawbacks.

I can see that the advised action has significant disadvantages.

I can tell that the advised action would have undesirable effects.

Appendix B: Advisor Characteristics

Expertise.

My friend has a lot of expertise with this kind of problem. My friend really knows about this sort of problem. My friend has experience dealing with problems like this. My friend has little expertise about this type of problem. Reliability: $\alpha = .79$

Trust.

My friend...

Is trustworthy: Is untrustworthy

Can keep secrets: Can't keep secrets

Is a respectful person: is a disrespectful person

Is inconsiderate: Is considerate

Is honest: Is dishonest

Is unreliable: Is reliable

Is faithful: Is unfaithful

Is careful: Is careless

Is not deceitful: Is deceitful

Is a safe person: Is a dangerous person

Similarity.

My friend...

Doesn't think like me: Thinks like me

Is unlike me: Is like me

Has a background similar to mine: Has a background different from mine

Behaves like me: Doesn't behave like me

Is similar to me: Is different from me

Has a status like mine: Has a status different from mine

Reliability: $\alpha = .87$

Liking.

Most people would react very favorably to my friend after a brief acquaintance.

I think that my friend is one of those people who quickly wins respect.

My friend is one of the most likeable people I know.

My friend is the sort of person whom I myself would like to be.

It seems to me that it is very easy for my friend to gain admiration.

Appendix C: Problem Seriousness

This problem is significant.

This is a serious problem.

This is not a major problem.

Appendix D: Implementation Intention

After this conversation, I plan to follow the advice I was given.

After this conversation, I intend to use the advice I have been given.

After this conversation, I intend to do what I was advised.

Appendix E: Consensus

This comment gave similar advice to other comments on this status update

Other people agreed with the advice in this comment

This comment expressed an idea that was a lot like other comments on this status update.

Appendix F: Conformity

When I am on Facebook, I...

Worry about what people think of me.

Conform to others' opinions.

Need the approval of others.

Want to amount to something special in others' eyes.

Do what others do.

Don't care what others think.

Am not concerned with making a good impression.

Feel it's OK that some people don't like me.

Want to form my own opinions.

Want to be different from others.

Appendix G: Tailoring

This comment seemed to be written personally for me.

This comment was very relevant to my situation.

This comment seemed to be written for others.

This comment was not very personal.

I didn't feel this comment was written for me.

This comment was made for the benefit of other readers.

Example screen shots of the survey in Qualtrics.

Participants will be prompted to paste their status update and answer questions about their thoughts and feelings regarding the status update.

Q1 @	Please paste the text of your status update in the box below.	
Q2	Please respond to the following statements about the characteristics of your problem.	
Q4 □	This problem is significant	
	Strongly Disagree	1
	Disagree	2
	Neither Agree nor Disagree	3
	Agree	4
	Strongly Agree	5

Participants will paste the text of each comment (without reference to the commenter's name). When the text of the comment is pasted, Qualtrics skip logic will then prompt the participant to answer a series of questions about their thoughts and feelings about the comment and commenter. When there are no more comments pasted, Qualtrics will direct the participant to the final questions and compensation information.



Appendix I: Pre-Survey Information for Phase 1

ADVICE ON FACEBOOK

PLEASE NOTE: This survey is not optimized for mobile devices, but is best taken on a computer.

Purpose of the Study:

This is a study examining perceptions of advice on Facebook. The research is being conducted by Dr. Erina MacGeorge, Associate Professor and Doug Pruim, Master's student in Interpersonal Communication, both in the Brian Lamb School of Communication at Purdue University. The purpose of this study is to examine advice interactions that occur via Facebook.

Process:

You will complete a survey that takes 20-30 minutes to complete. The survey includes questions about your experience on Facebook and your perceptions of others' comments on your status updates. Demographic information will also be collected so that the general traits of the participants in the study can be accurately described.

Benefits of this Study:

You will be contributing to knowledge about the effects of Facebook on the evaluation of advice, which will help us better understand how people respond to advice.

Compensation:

Participants who complete the full survey will be given a choice to receive a \$2.40 'thank you' gift code for Redbox (worth 2 DVDs) or (for Purdue students in Communication

classes), .5% extra credit through the Communication Department's Research Participation System.

Risks or discomforts:

No risks or discomforts are anticipated from taking part in this study. (If you are uncomfortable with participating, you can exit at any time. Only those who complete the survey will receive credit.)

Confidentiality:

No identifying information will be collected on this survey. Names and relationships will not be collected. Responses from all participants will be compiled and analyzed together.

Decision to quit at any time:

Your participation is voluntary; you are free to withdraw your participation from this study at any time. If you do not want to continue, you can simply leave this website. (Only those who complete the survey will receive credit.)

How the findings will be used:

The results of the study will be used for scholarly purposes, including Doug Pruim's Master's thesis. The results from the study will be presented in educational settings and at professional conferences, and will be published in a professional journal in communication, psychology, or another social science discipline.

Contact information:

If you have concerns or questions about this study, please contact Dr. Erina MacGeorge at emacgeor@purdue.edu or Doug Pruim at dpruim@purdue.edu.

By beginning the survey, you acknowledge that you have read this information and agree to participate in this research.

Appendix J: Pre-Survey Information for Phase 2 at Purdue

Title of Project: Advice on Facebook: Channel Effects on the Evaluation of Advice **Principal Investigator**: Maria K. Venetis (Assistant Professor, Brian Lamb School of Communication, Purdue University)

Co-Investigator: Doug Pruim (MA student, Brian Lamb School of Communication, Purdue University)

Telephone Number: Doug Pruim (765) 426-1669

You are being invited to volunteer to participate in a research study. This summary explains information about this research.

Purpose of the Study: This online study examines how people evaluate advice they receive in comments on Facebook. The purpose is to better understand how people respond to advice, both online and in face-to-face interactions.

Process: You will complete a survey that takes approximately 10 minutes. It includes questions about your experiences on Facebook, and will ask you to share information about one Facebook status update and a comment made by a friend on this status update. The survey will also ask for basic demographic information.

Benefits: You will be contributing to knowledge about the way people respond to advice on Facebook and in other contexts. You may enjoy reflecting on advice you've received. There are no other personal benefits.

Risks: No risks or discomforts are anticipated from taking part in this study. If you feel uncomfortable with a question, you can skip it or withdraw from the study altogether. **Confidentiality:** No identifying information will be collected in the survey. Responses

from all participants will be compiled for analysis, and reports from this data will represent the set of participants, not individuals.

Voluntary Participation: Your participation is voluntary; you are free to withdraw your participation from this study at any time. If you do not want to continue, you can simply leave this website. You may choose to skip any questions that you do not wish to answer. **Compensation:** Purdue University participants through the Research Participation System will earn .5 credits upon completion of the study.

Participants who complete the full survey will be given a choice to receive two gift codes for Redbox movies (worth \$2.40) OR \$2.50 Amazon credit. Compensation is contingent on completion of the study.

Use of Data: Data collected in this study will be used for scholarly purposes, including a Master's thesis. Findings will be presented in educational settings and at professional conferences, and will be published in a professional journal in communication, psychology, or another social science discipline.

Contact : If you have concerns or questions about this study, please contact Dr. Maria Venetis at <u>mvenetis@purdue.edu</u> or Doug Pruim at <u>dpruim@purdue.edu</u>. If you have questions regarding your rights as a research subject or concerns regarding your privacy, you may contact the Human Research Protection Program at (765) 494-5942.

Your participation is voluntary and you may decide to stop at any time. You do not have to answer any questions that you do not want to answer. By clicking to the next screen, you acknowledge that you have read this information and agree to participate in this research.

Appendix K: Pre-Survey Information for Phase 2 at Penn State

SUMMARY EXPLANATION OF RESEARCH

The Pennsylvania State University

Title of Project: Advice on Facebook

Principal Investigator: Erina L. MacGeorge (Associate Professor, Communication Arts and Sciences, Pennsylvania State University)

Co-Investigator: Doug Pruim (MA student, Brian Lamb School of Communication, Purdue University)

Telephone Number: (814) 865-1948

You are being invited to volunteer to participate in a research study. This summary explains information about this research.

Purpose of the Study: This online study examines how people evaluate advice they receive in comments on Facebook. The purpose is to better understand how people respond to advice, both online and in face-to-face interactions.

Process: You will complete a survey that takes approximately 10 minutes. It includes questions about your experiences on Facebook, and will ask you to share information about one Facebook status update and a comment made by a friend on this status update. The survey will also ask for basic demographic information.

Benefits: You will be contributing to knowledge about the way people respond to advice on Facebook and in other contexts. You may enjoy reflecting on advice you've received. There are no other personal benefits.

Risks: No risks or discomforts are anticipated from taking part in this study. If you feel uncomfortable with a question, you can skip it or withdraw from the study altogether.

Confidentiality: No identifying information will be collected in the survey. Responses from all participants will be compiled for analysis, and reports from this data will represent the set of participants, not individuals.

Voluntary Participation: Your participation is voluntary; you are free to withdraw your participation from this study at any time. If you do not want to continue, you can simply leave this website. You may choose to skip any questions that you do not wish to answer. **Compensation:** Participants in the CAS 100 subject pool will receive course credit. Compensation is contingent on completion of the study.

Use of Data: Data collected in this study will be used for scholarly purposes, including a Master's thesis. Findings will be presented in educational settings and at professional conferences, and will be published in a professional journal in communication, psychology, or another social science discipline.

Contact : If you have concerns or questions about this study, please contact Dr. Erina MacGeorge at elm26@psu.edu or (814) 865-1948. If you have questions regarding your rights as a research subject or concerns regarding your privacy, you may contact the Office for Research Protections at 814-865-1775.

Your participation is voluntary and you may decide to stop at any time. You do not have to answer any questions that you do not want to answer. By clicking to the next screen, you acknowledge that you have read this information and agree to participate in this research.