

WALL OF ME:
FACEBOOK SELF-DISCLOSURE AND PARTNER RESPONSIVENESS
RESULTING IN CONFIRMATION OR VIOLATION OF EXPECTATIONS AND
CONSEQUENCES FOR INTIMACY AND RELATIONSHIPS

A DISSERTATION
SUBMITTED TO THE FACULTY OF THE GRADUATE SCHOOL
OF THE UNIVERSITY OF MINNESOTA
BY

LINDA KRAMER FREEMAN

IN PARTIAL FULFILLMENT OF THE REQUIREMENTS
FOR THE DEGREE OF
DOCTOR OF PHILOSOPHY

ASCAN KOERNER, PH.D.

NOVEMBER 2011

©Linda K. Freeman 2011

Acknowledgements

This dissertation could not have been achieved without the guidance of my advisor, Professor Ascan Koerner. I was fortunate to have Dr. Koerner's helpful criticism, endless patience and generous encouragement. His countless suggestions and keen eye for detail greatly improved this work, and I am very much indebted to him for his tutelage on how to synthesize research findings into coherent arguments and on how to meet the stringent requirements of academic scholarship. I would also like to thank the other professors on my committee, Dean Hewes, Susanne Jones, and Paul Rosenblatt. Dr. Rosenblatt's research on intimacy sparked my interest in the subject of my dissertation. My work with him on his intimacy interviews and our discussions about new media and Facebook, in particular, led me to wonder about how relationships are conducted online.

Dedication

This dissertation is dedicated to my husband, Rich Freeman, and our sons, Ben and Matthew. Rich has always been unfailingly supportive of my intellectual goals and achievements. Whether it was my time away from home acquiring my Master's degree at Harvard, or my frequent weekends spent at the local library studying for my doctorate and writing my dissertation, he never complained and instead offered love and understanding. I have tried to be a role model for Ben and Matthew, and they also made sacrifices for my studies, encouraging me and only wishing for my success. I am so proud of them, and I hope they are proud of me. Many others have also helped me, and although they cannot be named individually, they have my undying gratitude. I couldn't have come this far without their humor, advice, and love.

Abstract

In a study of self-disclosure and intimacy on Facebook, research in a survey of 274 undergraduates found interaction processes generally conformed to those found in face-to-face interactions. However, four findings from this study, in particular, elaborate how self-disclosure operates in a Facebook social media context. First, as in the face-to-face context, self-disclosure and partner disclosure were directly related to greater feelings of intimacy. But in contrast to face-to-face communication, in a test of the interpersonal process model of intimacy (Reis & Shaver, 1988), perceived partner responsiveness fully mediated the effect of self-disclosure on intimacy for a self-disclosure Facebook status update. Second, those who self-disclose on Facebook tend to expect and receive positive responses from Facebook friends, and self-disclosers generally classify this positive feedback as an expression of emotionally supportive caring, respect, and/or liking. Third, when participants receive unexpected responses to status updates, these surprise responses (expectancy violations) are generally viewed as positive. Expectancy violations to a self-disclosure status update on Facebook were significantly positively correlated with perceived partner responsiveness and greater change in intimacy toward those who responded unexpectedly. Fourth, in contrast to face-to-face communication, no gender differences were found in self-disclosure behavior, closeness with Facebook partners, or change in intimacy on Facebook as a result of a self-disclosure status update. Additionally, associations between attachment, frequent Facebook participation, relationship type, self-monitoring, and intimacy in Facebook interactions involving participant self-disclosures and responses from Facebook friends resulted in weak or inconsistent findings. The survey also explored

participants' motivations for posting a status update, finding that sharing news, posting humorous information, and seeking emotional support were common reasons to post a status update. Motivations for responding to someone else's status update included sharing close feelings and humor.

Table of Contents

Acknowledgements.....	i
Dedication.....	ii
Abstract.....	iii
List of Tables.....	vi
List of Figures.....	ix
Introduction.....	1
Review of the Literature.....	7
List of Hypotheses.....	54
Method.....	61
Participants.....	62
Procedures.....	65
Independent Variables.....	66
Dependent Variable.....	86
Data Analysis.....	87
Summary Tables.....	87
Results.....	98
Discussion.....	166
References.....	216
Appendix A: Models and Figures.....	239
Appendix B: Consent Form.....	244
Appendix C: Facebook Self-Disclosure Survey.....	247

List of Tables

Method Section

1. Expectancy Confirmation: Response List, Type, Frequencies	75
2. Relationship Type Frequency and Percentage by Respondent	80
3. Response Type Frequency and Percentage by Respondent.....	81
4. Responses to Status Updates per Week.....	83
5. Motivations to Post a Status Update, Frequency and Percentage.....	85
6. Table of Variables and Measurement Details.....	88
7. Scale Properties of Predictor and Outcome Variables.....	94
8. Analysis of Variance for Phase 1 and Phase 2 Variables.....	96

Results Section

9. Correlation of Self-Disclosure and Change in Intimacy.....	102
10. Response Type Mean and Standard Deviation on Change in Intimacy	104
11. Correlation of Self-Disclosure and PPR.....	106
12. Response Type Mean and Standard Deviation on PPR.....	107
13. Mean Differences for Response Type on Change in Intimacy and PPR.....	109
14. Correlation of Perceived Partner Responsiveness and Change in Intimacy.....	111
15. PPR Means and Standard Deviations for Respondents.....	111
16. Regression of Ten Predictor Variables on Change in Intimacy.....	113
17. Multiple Regression Predicting Change in Intimacy with Responders.....	116
18. Gender Means and Standard Deviations on PPR for R1, R2, and R3.....	118
19. Gender Means and Standard Deviations on Closeness for R1, R2, and R3.....	119

20. Gender Means on Change in Intimacy.....	120
21. Correlation of Attachment, Change in Intimacy and PPR.....	123
22. Correlation of Self-Monitoring and Change in Intimacy.....	125
23. Self-Monitoring (Percentage) by Relationship Type.....	128
24. Correlation of Frequent Facebook and Change in Intimacy.....	129
25. Correlation of Closeness and Change in Intimacy.....	131
26. Mean of Relationship Type on Change in Intimacy and PPR.....	134
27. Correlation for Positive Expectancy Confirmation on Change in Intimacy.....	136
28. Significant Mean Differences Between Expectancy Violation Conditions.....	140
29. Comparison of EV, +V+B Mean and Scale Mean on ΔI	141
30. R1 Means for Expectancy Violation Groups on Change in Intimacy.....	144
31. ANOVA for 4 Expectancy Violation Groups on R1 Change in Intimacy.....	145
32. R1 Means for Change in Intimacy, 9 Expectancy Violation Groups.....	146
33. R2 Means for Expectancy Violation Groups on Change in Intimacy.....	147
34. ANOVA for 4 Expectancy Violation Groups on R2 Change in Intimacy.....	148
35. R2 Means for Change in Intimacy, 9 Expectancy Violation Groups.....	149
36. R3 Means for Expectancy Violation Groups on Change in Intimacy.....	150
37. ANOVA for 4 Expectancy Violation Groups on R3 Change in Intimacy.....	151
38. R3 Means for Change in Intimacy, 9 Expectancy Violation Groups.....	152
39. Target of Self-Disclosure Status Update.....	154
40. Differences by Gender in Responsiveness to Status Updates per Week.....	156
41. Gender of Self-Discloser by Gender of Respondent.....	157
42. Appropriateness.....	161

43. Predictor Variables of Response Confidence.....163

44. Frequency Analysis of Highest and Lowest Motivations to Respond
to Status Update.....164

List of Figures

A1. Self-Disclosure Basic Model.....	239
A2. Interpersonal Process Model of Intimacy.....	240
A3. Change in Intimacy (Respondent 1).....	241
A4. Change in Intimacy (Respondent 2).....	242
A5. Change in Intimacy (Respondent 3).....	243

Relationship science research illuminates the intricacies of human interaction based on the perspectives of social science disciplines such as communication studies, social psychology, family social science and child development. Practical applications to common problems in human communication include how to maintain relationships, how to encourage others to express thoughts and feelings, and how to listen effectively and empathetically. People need people, and intimacy is a basic human need (Baumeister & Leary, 1995; McAdams, 1983). Knowledge of how people achieve and maintain intimacy can help individuals learn how to enhance their relationships and their sense of belonging, in romantic relationships, with friends and with family. Empirical models and theories of self-disclosure, attachment, self-monitoring and expectancy have aided in the observation and analysis of components and processes which lead to successful relationship outcomes including intimacy.

The components and processes of interpersonal communication that predict intimacy during face-to-face interactions have been identified in numerous theoretical papers and research studies (Reis, Clark & Holmes, 2004; Reis & Patrick, 1996; Reis & Shaver, 1988). Intimacy research studies typically have been designed to measure face-to-face interactions between two individuals (Laurenceau, Barrett, & Pietromonaco, 1998). Social media research can use this theoretical and methodological background to frame new research studies to advance knowledge of intimacy in online social networking situations. Within the last several years, computer mediated communication (CMC) has become a popular mode of communication and interest in research about CMC is high. *The New York Times*, for example, reported almost 4,000 articles about Facebook in the past year alone (New York Times, June 24, 2011).

Communication on Facebook

The social network site “Facebook” (www.facebook.com) is used for relating with others. For example, Facebook may be used to acquire, maintain, strengthen, reestablish or loosen ties between people (Bryant & Marmo, 2010). Facebook is the second most visited website, after Google, with more than half of its members checking it at least once a day (Gilsdorf, 2010). The purpose of social networking sites is to connect people to other people, and Facebook is used primarily to stay socially connected with friends (Baym, Zhang, & Lin, 2004). With currently more than 750 million active users (www.facebook.com), Facebook is clearly meeting needs of individuals. While individuals in the real world have on average 10-20 close friends and a social network of about 150 individuals, on Facebook the average person has from 246 to 272 friends (Walther & Ramirez, 2010). Communication processes and expectations that apply to one-on-one interaction in a face-to-face context may be different when the audience for one’s self-disclosures is so dramatically increased and when the mode of communication involves conducting relationships in the plain sight of a large group. Facebook may be merely another mode of communication in addition to face-to-face, phone, text messaging, chat and email, or Facebook may also be changing the very nature of communication, affecting the essence of relationships.

Facebook communication can be one person to another individual, one to a few, or one person to the larger network. Communication may be asynchronous or synchronous depending on the features used and whether friends are online simultaneously. While Facebook users can restrict who receives their messages through various privacy options, the Facebook Wall facilitates all levels of communication and

is convenient. Users who post status updates may be communicating interpersonally and also to a mass audience at the same time, blurring traditional boundaries of the private and public self because status updates can be viewed by friends and friends of friends. Perhaps no one is paying attention to an individual's status update, or perhaps many people are reading the status update.

One of the primary activities of Facebook is acquiring Facebook "friends." Individuals link to other individuals through an automated request to have "friend" status. One person in the dyad requests friend status with the other person. Once the request is accepted, the two are Facebook friends, and the profile photo and the name of the friend appears on each person's profile page, serving as hyperlinks to the friends' profiles.

The predominant way individuals may communicate with each other once they are Facebook friends is to leave messages by posting statements to each others' profile Walls as well as to their own profile Wall in "status updates". Facebook automatically identifies people who comment on others' status updates by including their name accompanied by a tiny replica ("thumbnail") of their personal photo. It is interesting to study status updates because Facebook relating takes place largely within the discourse of the status update, and embedded within these messages is the ephemera of everyday interactions in the public realm of the social network. It is worthwhile to examine how face-to-face processes operate similarly or differently in online status updates and resulting responses as relationships that are at least partially conducted via Facebook become increasingly prevalent. Whether feelings of intimacy with others can be improved through these interactions should be researched, discussed and added to the

body of communication scholarship as technology continues to advance and CMC becomes an integral component of most relationships.

On Facebook, finding communication interaction is easy because not only is there access to an almost unlimited number of conversations, but also the “Newsfeed” feature brings automatic notification when a Facebook friend posts on a Wall or updates a status. By clicking on a Facebook friend’s photo, the user is linked to the friend’s profile page where various status updates and interactions may be occurring. The individual may choose which conversations to attend to and which to ignore. The individual also may respond to any of these conversations, or to none of them. What is unique about Facebook Wall conversation as opposed to face-to-face conversation is that the Wall does not engage with any individual directly, thus no individual is obligated to respond to a status update as politeness conventions may require and render nearly unavoidable in face-to-face interactions. In face-to-face encounters it is assumed partners are communicating even if no response is uttered (Watzlawick, Beavin, & Jackson, 1967), but no such assumption is made in Facebook interaction. On the contrary, when a status update is posted, it may be merely an interaction “attempt” because there may be no apparent interaction until a response is posted and received.

Goals and Advances of the Current Study

While Facebook can be used to post photos, invite people to events, post videos or copy and paste articles and news items of interest, often individuals post text-based self-disclosures to their own profile Walls as status updates. A self-disclosure presents personal emotions and information that others would not have known from other sources (Prager, 1995). The objective of this study is to investigate whether text-based

self-disclosure on Facebook promotes intimacy, exploring whether, and how, processes of intimate communication on Facebook differ from processes identified in offline communication.

For more than 50 years self-disclosure has been studied for its effects on relationships, and self-disclosure has been found to be important for relationship intimacy in face-to-face interactions (Jourard, 1958; Altman & Taylor, 1973; Prager, 1995). Partners' mutual self-disclosures and perceptions that are associated with relationship intimacy have been elucidated in the interpersonal process model of intimacy (Reis & Shaver, 1988; Reis, Clark & Holmes, 2004). A response is expected in face-to-face interaction after a self-disclosure, but on Facebook the expectations for response are less clear. A Facebook self-disclosure may lack situational cues and an obvious target individual who would be expected to respond to a self-disclosure. Yet people do conduct close relationships on Facebook. Self-disclosure on Facebook is used for personal emotional expression and also to elicit responses from others (Westerman, Van der Heide, Kline & Walther, 2008; Walther, 1992).

Because contextual cues are lacking in online communication, for some, self-disclosure may be encouraged and for others, self-disclosure may be inhibited. Perhaps some individuals feel freer to express their emotions online where they are afforded the freedom to post a status update at any time of the day or night, for example. For others, concerns about the lack of privacy online, for example, may be a reason for their reluctance to post any self-disclosure status updates. Facebook self-disclosure may also be used as a tool for learning about different interaction targets in the friend list, from the best friend to the acquaintance. By self-disclosing, individuals may deliberately

seek to elicit information from friends who, by responding to the self-disclosure, may provide their own personal information and emotions. Self-disclosure on a status update may thus be seen as a form of strategic communication, as an interrogation in an effort to learn about friends in the network.

In this project self-disclosure research is extended to the Facebook context. In an online survey, participants self-reported an actual self-disclosure status update and actual responses to the status update. Participants answered questions about their personal characteristics, their motivations for interacting on Facebook, and their evaluations of their self-disclosure status update. Participants also answered questions about the responses they received to the status update and confirmation or disconfirmation of their expectations, exploring the Facebook context of components that may affect intimacy. In addition, participants were asked about their own communicative responsiveness when they may be the interaction target of someone's self-disclosure on Facebook.

With a busy global community invested in online social networking, knowledge of processes of Facebook interaction may assist individuals in efforts to improve how they connect with others in different types of relationships. For those interested in enhancing their intimate and close relationships through the technology of Facebook, important components of the processes of intimacy on Facebook are described in this study. The social importance of understanding this context is compelling and dynamic. Findings from this study, although tentative and partial, are intended to contribute to the growing body of research examining the impact of social media on the widening boundaries of communication.

Review of the Literature

Overview

In this section I will highlight the theories and research that have informed my study of intimate communication on Facebook. The format of this section is to elucidate the reasoning behind hypotheses related to a self-disclosure basic model and an interpersonal process model of intimacy. I will also explore literature regarding other variables related to intimacy, expectancy confirmation, and expectancy violation. I will then consider the role of the target in Facebook communication, with reasoning from the literature and hypotheses for this study. Finally, I will discuss the research questions that will be investigated in the study. Following each section of the literature review is a list of the applicable hypotheses. At the end of the literature review I will recap with a list of all hypotheses and research questions posed for this dissertation.

Hypotheses: SELF-DISCLOSER Point of View

Self-disclosure is defined as the process of making the self known to other persons (Jourard & Lasakow, 1958). By self-disclosing individuals provide private information about the self to persons that the others could not have known, including personally meaningful emotions, thoughts, facts and feelings. Social attraction is associated with self-disclosure, such that the more the discloser likes the target, the more likely the self-discloser is to self-disclose to that target (Jourard & Lasakow). Jourard's research on communication between two individuals revealed a dyadic effect between the discloser and the target with the more information received by the discloser, the greater the willingness for the target to disclose in return (Jourard, 1959).

Studies have shown the social attraction felt to another individual influences the amount of self-disclosure to that person, with greater attraction leading to greater frequency and depth of self-disclosure.

The information conveyed through the self-disclosure is rewarding to the target as well as personally cathartic and rewarding to the self-discloser (Altman & Taylor, 1973). Consistent with a social exchange theory perspective (Homans, 1961; Thibaut & Kelly, 1959), the target is likely to return the favor and reciprocate with a self-disclosure (Altman & Taylor; Jourard; Tidwell & Walther, 2002). When the process of mutual self-disclosure is satisfactory and the rewards of disclosing to each other outweigh the costs, people gradually learn to trust each other and begin to reveal deeper aspects of their personalities, including their vulnerabilities (Altman & Taylor). The rewards of self-disclosure occur when the recipient of the self-disclosure responds with a similarly deep self-disclosure, also revealing inner layers of the self (Altman & Taylor). The cost of revealing vulnerabilities is the opportunity for the receiver of the message to use knowledge of the self-discloser to potentially cause the self-discloser embarrassment, shame, or exposure, for example. Thus the partners in the self-disclosure process develop, maintain or lessen ties with one another through increasing or decreasing the amount of mutual self-disclosure (Altman & Taylor).

Mutual self-disclosures lead to increased trust between the individuals, and the self-disclosures reveal increasingly greater breadth and depth of personal meaning for the relational partners (Altman & Taylor, 1973). Breadth refers to the number of topics discussed, and depth of self-disclosure is defined as intimate information: personal, meaningful, important, honest and unlikely to be found from other sources (Prager,

1995). Depth can also be described as an increasingly profound expression of one's inner self, revealing personal emotions and vulnerabilities. Thus the greater the extent of the expression of private information and emotional messages conveying feelings such as happiness, jealousy, anxiety, anger or fear, the greater the depth of a self-disclosed message (Snell, Miller, & Belk, 1988; Lippert & Prager, 2001).

Partners in self-disclosure are thought to use awareness of norms of appropriateness to adapt the depth of self-disclosure for any given relationship, disclosing more to some individuals than to others, based on the closeness of the relationship, the stage of relationship development, the amount of liking the partner in the relationship and other factors (Altman & Taylor). This process of self-disclosure is how intimate relationships are thought to develop, as one individual self-discloses and the target responds with a self-disclosure, mutually revealing increasingly deeper layers of the self, and is the basic tenet of social penetration theory (Altman & Taylor).

Social penetration theory (Altman & Taylor, 1973) suggests that self-disclosing by each of the individuals in an interaction leads to the development of increasingly more intimate relationships. Reis and Shaver's (1988) interpersonal process model of intimacy expands on the importance of self-disclosure to include the entire process of an intimate interaction. For Reis and Shaver, the expression of the core self through the verbal communication of personally relevant thoughts and feelings invites the listener to respond to and confirm these important facets of the self, leading to the anticipation of further validation of the self-discloser's feelings and an increased experience of intimacy. The key contribution of the interpersonal process model of intimacy is the focus on the process of interaction. In the interpersonal process model of intimacy, the

combination of self-presentation in a self-disclosure and interpretation and perception of the response from the recipient of the self-disclosure work together to produce intimacy (Reis & Shaver).

The interaction-by-interaction process described in the interpersonal process model of intimacy is possible in Facebook status updates. But characteristics of Facebook may promote or inhibit the amount of information about personal thoughts and feelings that an individual expresses through posting status updates to his or her profile Wall, affecting the level of responsiveness that any Facebook friend can provide. The status update process on Facebook provides opportunities for openness and transparency, and the intent is to encourage familiarity and intimacy between individuals (Kirkpatrick, 2010).

There is a dialectical tension present in Facebook self-disclosure status updates. People vary in their willingness to openly disclose on Facebook contrasted with their desire for privacy in a social network setting. If the individual has a higher level of comfort with computers and computer mediated communication, or believes Facebook is beneficial, then self-disclosure on Facebook may be more likely. But if the individual is less comfortable with computers and computer mediated communication or believes Facebook is not beneficial, then self-disclosure may be less likely. The depth of personal, vulnerable self-disclosure will impact the level of partner responsiveness that is possible in the interaction. Perhaps benefits of Facebook can only be maximized by those who openly self-disclose on the site.

“Perceived Partner Responsiveness” is defined as the extent to which the self-discloser feels understood, validated and cared for by the responder in an interaction

(Reis, Clark & Holmes, 2004; Reis & Shaver, 1988). Perceived Partner Responsiveness (PPR) is a facet of the interpersonal process model of intimacy (Reis & Shaver). Self-disclosure is related to partner response and Perceived Partner Responsiveness. Together the self-disclosure and partner response reflexively evoke emotional rapport, social support, empathic understanding, emotional acceptance, responsive communication, trust, attachment security and sense of belonging that lead to intimacy (Reis & Shaver). Perceived Partner Responsiveness depends on the self-discloser's perception that the partner in the interaction shares the same meaning system as the discloser and accepts and welcomes the discloser's further elaboration of perspective (Reis & Shaver). The partner must understand the content of the self-disclosure and convey that understanding to the self-discloser along with positive feeling toward the self-discloser. The self-discloser's interpretation of the partner's response is thus crucial to the development of intimacy.

In the current study, three measures of self-disclosure were taken. The Self-Disclosure Attitude Index (SD Attitude) asks participants to indicate what they would feel comfortable disclosing on Facebook rather than what they have actually disclosed. The Self-Disclosure of Positive Affect and the Self-Disclosure of Negative Affect address the extent of positive and negative emotional content in the actual self-selected status update. Thus it would be possible to compare the general propensity to disclose with immediate perceptions of disclosure for the same sample.

When interaction participants reveal deeper, more personal aspects of themselves through self-disclosure, and when they express feelings and vulnerabilities, they perceive their interactions to be more intimate (Lippert & Prager 2001). In a daily

diary study of married couples, self-disclosure significantly and uniquely contributed to the contemporaneous prediction of intimacy (Laurenceau, Barrett & Rovine, 2005). Thus intimacy is conceptualized as the outcome of interactions involving self-disclosure (Lippert & Prager, 2001; Marston, et al., 1998; Parks & Floyd, 1996; Waring, Tillman, Frelick et al, 1980). Because a status update potentially has a mass audience, it suggests the discloser will perceive more intimacy with friends who are perceived to have paid attention to the message, not necessarily everyone who is part of the network of friends (Davis, Conklin, Smith & Luce, 1996). Casual acquaintances may even be excluded from understanding the message through relationship-specific words and mutually understood motives that code communication between close friends.

Based on theories of self-disclosure in the face-to-face context, a basic model of intimacy would consist of a positive change in intimacy as a result of a self-disclosure and a partner response (Jourard, 1959; Altman & Taylor, 1973). Conceptual models are displayed in Appendix A. The following hypotheses are proposed for testing the basic Self-Disclosure model in the Facebook context:

H1: On Facebook, self-disclosure, in general, is positively correlated with Change in Intimacy.

H1a: On Facebook, Self-Disclosure Attitude is positively correlated with Change in Intimacy.

H1b: Self-disclosure of Positive Affect is positively correlated with Change in Intimacy.

H1c: Self-disclosure of Negative Affect is positively correlated with Change in Intimacy.

H2: A partner's response in the form of a self-disclosure will predict higher level of Change in Intimacy than a trivial response (i.e. "like") or a non-self-disclosing comment.

Perceived Partner Responsiveness. Intimacy is a process that builds over time as partners develop connection, mutual responsiveness and mutual dependency resulting in a close relationship based on the components of understanding, validation and caring (Reis, Clark & Holmes, 2004). Partner responsiveness is a necessary component of the intimacy process (Sullivan, 1953). There may be two components of intimate interactions, a behavioral component and an experiential component (Prager, 1995). The behavioral component includes the sharing of private and personal messages between two people with mutual self-disclosure, while the experiential component includes the feelings of intimacy between the two people (Prager). Davis, Conklin, Smith & Luce (1996) suggested determinants of responsive behavior include perspective taking, attending to the self-discloser, accurately understanding the self-discloser's intent in terms of underlying motives, and using communication skills to respond to the self-disclosure that are relationship specific. Unresponsive behavior, by contrast, includes behavior that indicates the goals of the responder are, for example, to discourage interest, to end the interaction, to change the topic or to redirect the focus of the conversation to the responder (Davis, et al., 1996).

The experience of intimacy may be influenced by perceptions of partner responsiveness to the extent that the self-discloser feels understood, validated and cared for by the partner (Reis, Clark & Holmes, 2004). The self-discloser must interpret the responder's behavior as responsive. "Understanding" is the cognitive component of the

process of responsiveness. Understanding is the feeling that the partner (responder) has perceived one's inner self, comprehends the facts, and is appropriately cognizant of one's beliefs, needs, goals and circumstances. Understanding implies a degree of trust in the responder that one's vulnerabilities will not be exploited. Understanding does not necessarily imply agreement. "Validation" is the feeling that the responder accepts the discloser. Validation implies respect and valuing the individual, and is communicated with paraphrasing, positive feedback and open-ended questions. Feeling "cared for" implies that the self-discloser experiences a sense of liking, warmth, affection, and support from the responder (Reis & Patrick, 1996).

Research in offline settings on Perceived Partner Responsiveness has suggested that the responsiveness of the partner to one's self-disclosure is an important component of intimacy. The self-discloser must appraise and interpret the responder's statements as positive and responsive (Reis & Patrick, 1996; Reis & Shaver, 1988). In an unpublished 1992 study, Lin (as cited in Laurenceau, Barrett, & Rovine, 2005) found that Perceived Partner Responsiveness was a more important predictor of intimacy ratings than was self-disclosure in a daily experience sampling of social interactions over a 10-day period. In Laurenceau, Barrett, and Pietromonaco's (1998) studies of college undergraduate interactions using event-contingent and daily diary reports, Perceived Partner Responsiveness had the effect of partially mediating the relationship between self-disclosure and intimacy. Self-disclosures and Perceived Partner Responsiveness had effects on intimacy for a variety of social relationships (Laurenceau, Barrett & Pietromonaco). In a study of married couples, Laurenceau, Barrett, and Rovine (2005) found similar results; Perceived Partner Responsiveness had

the effect of partially mediating the relationship between self-disclosure and intimacy. Self-disclosure and partner disclosure uniquely predicted intimacy in a study of the interpersonal process model of intimacy among married couples (Laurenceau, Barrett and Rovine).

In a study of breast cancer patients and their significant others (married or live-in partners), Perceived Partner Responsiveness also had a mediating effect on self-disclosure and intimacy, and Perceived Partner Responsiveness had a very strong relationship with intimacy (Manne, Ostroff, Rini, Goldstein, & Grana, 2004).

Correlations between Perceived Partner Responsiveness were in the high range of $r = .72$ to $r = .88$ (Manne, et al.). The authors posited that in long-term relationships Perceived Partner Responsiveness is more important than self-disclosure for intimacy, and in short-term or developing relationships, self-disclosure may be more important for intimacy than Perceived Partner Responsiveness (Manne, et al.).

When a self-discloser on Facebook perceives that the partner's reactions and feedback to the self-disclosure are characterized by the components of understanding, validation and caring (Perceived Partner Responsiveness), I predict the self-discloser will experience an increase in intimacy with the partner. Whether communication of the components of intimacy is enacted on Facebook is critical. For some acquaintances, a status update may be little more than an anonymous and disembodied transfer of raw data. With closer friends there may be more inherent understanding possible because offline knowledge of the self discloser may cognitively "fill in the white space" between the words in the status update. If intimacy is constructed on an interaction-by-interaction basis, to the extent that the responder conveys the necessary components of

responsiveness, there should be a corresponding increase in intimacy (Reis & Shaver, 1988). It is unknown how much dyadic interaction must be present on Facebook before a perception of partner responsiveness occurs. It is predicted that there will be a direct effect between Perceived Partner Responsiveness and Change in Intimacy on Facebook because the partner is not, generally, directly identified as the target and may not be obligated to respond at all in an online setting. Thus any attempt by a friend to respond with understanding, validation and caring is likely to be perceived as responsive and to be associated with increased intimacy.

On Facebook, responses can take many forms. A responder can simply click the “like” button to acknowledge a post. The name of the person who clicked “like” is then displayed on the self-discloser’s Wall. Because status updates are not conveyed to any specific respondent, a click of the “like” button indicates to the self-discloser that the post was read, and may also be a sign of support or approval. A more active response is a “comment” in which a responder may post a text-based message that appears in a box underneath the initial self-disclosure. For example, the comment may be relevant or irrelevant, it may simply acknowledge the original post, add humor, or just be a one-word response. Consistent with theories of self-disclosure and partner responsiveness, reciprocity of self-disclosure or sensitive response comments that indicate understanding, validation, and caring are predicted to increase intimacy more than “like” or other comments (Jourard, 1959; Taylor & Altman, 1973; Davis, et al., 1996; Prager, 1995; Reis & Shaver, 1988).

Based on the interpersonal process model of intimacy in the face-to-face context, a mediator model of intimacy would subsume the basic self-disclosure model

elucidated above, but in addition, it would add a mediator component to the model to reflect the perception of understanding, validation and caring experienced by the self-discloser as a result of the partner's response. Thus the interpersonal process model of intimacy consists of a positive change in intimacy as a result of a self-disclosure and a partner response mediated by Perceived Partner Responsiveness (Reis & Shaver, 1988; Reis & Patrick, 1996). Therefore, the following additional hypotheses are proposed for testing the interpersonal process model of intimacy in the Facebook context:

H3: Self-disclosure, in general, is positively correlated with Perceived Partner Responsiveness toward those who respond.

H3a: Self-disclosure Attitude is positively correlated with Perceived Partner Responsiveness toward those who respond.

H3b: Self-disclosure of Positive Affect is positively correlated with Perceived Partner Responsiveness toward those who respond.

H3c: Self-disclosure of Negative Affect is positively correlated with Perceived Partner Responsiveness toward those who respond.

H4: Partner's self-disclosure response will predict greater Perceived Partner Responsiveness to the self-discloser than a trivial response (i.e. "like") or a non-self-disclosing comment.

H5: Perceived Partner Responsiveness is positively correlated with Change in Intimacy.

H6: Among the variables tested, Perceived Partner Responsiveness is the most important predictor of Change in Intimacy.

H7: Perceived Partner Responsiveness mediates the relationship between self-disclosure and Change in Intimacy.

Overview of individual differences that may affect intimacy on Facebook.

Individual differences and dispositional characteristics have been studied previously in terms of self-disclosure in face-to-face relationships. Gender, personality and disposition, interpersonal characteristics, background, life stage, and relationship type are factors influencing intimate interactions (Prager, 1995). In this study, I will explore gender, attachment orientation and self-monitoring in terms of self-disclosure and intimacy on Facebook.

Extensive research has shown gender differences in the level of self-disclosure with women tending to be higher in self-disclosure than men (Jourard & Lasakow, 1958; Reisman, 1990). Thus I would expect to find these differences evident in the self-disclosure status updates and in measures of Change in Intimacy in the context of Facebook.

Attachment theory regards the emotional bonding with specific individuals as important for the establishment of a secure base and a safe haven for exploration (Bowlby 1969/1982, 1973). Attachment security may affect the level of self-disclosure an individual would be comfortable expressing along with varying levels of perceptions of responsiveness of friends (Bowlby, 1973; Grabill & Kerns, 2000). Thus attachment orientation may be an appropriate factor to consider in understanding processes of intimacy on Facebook.

Self-monitoring is a concept that is based on how much individuals observe and control their expressive behavior and self-presentation (Snyder, 1974; 1986), and may also affect how individuals self-disclose and how they perceive intimacy on Facebook. Individual differences in the level of comfort with Facebook indicating the amount of positive attitude about using Facebook for social interaction is another factor worth considering because individuals may be more willing to explore Facebook as a mode of communication if they see it as a positive channel for self-expression and the attainment of intimacy.

Gender. Gender differences in the intimacy of adolescent and adult friendships with women tending to experience greater intimacy than men have also been found (Berndt, 1982; Reisman, 1990; Senchak & Leonard, 1992; Sherrod, 1989; Youniss & Haynie, 1992). Dindia and Allen (1992) researched sex differences in self-disclosure in a meta-analysis of 205 studies involving more than 20,000 participants, finding that women disclose more than men, and sex differences in self-disclosure were significantly greater to female and same sex partners than to opposite sex or male partners. When the target was someone with whom women shared a close relationship (for example, a friend, parent, or spouse), women disclosed more than men (Dindia & Allen, 1992). Men disclosed similarly to women when the target was a stranger (Dindia & Allen, 1992).

Other studies have found that women discuss intimate topics more frequently and in greater depth than men (Aries & Johnson, 1983; Buhrke & Fuqua, 1987; Caldwell & Peplau, 1982; Dolgin & Minowa, 1997; Petronio, 2002). When conversing with others women may be seeking emotional, expressive talk to create or maintain

intimacy, while men may be more likely to be conversing for functional, instrumental, or task oriented reasons (Wood, 2000), but these gender differences may be quite small (Burleson, 2003). McAdams (1983) found that women manifested higher levels of communal behavior which is associated with cooperative, relational activities, and with more frequent thoughts of interpersonal, relational communication than did men, one explanation for the higher level of self-disclosure found in women.

Also, sex role socialization may impact the likelihood and depth of self-disclosure. The feminine communication style (Stephen & Harrison, 1985) consists of greater emotional sensitivity, sympathy, and consideration than the masculine communication style, which tends to show more restraint and less expressiveness and openness (Rubin & Shenker, 1978). Petronio (2002) found that women and men may have different criteria in defining and controlling private information, which may also inhibit or promote self-disclosure on Facebook. Women had greater concern about receiver characteristics than men (Petronio, 1984). Women showed a stronger preference than men that receivers of their self-disclosures were warm, trustworthy and open as a prerequisite for self-disclosure (Petronio). Furthermore, women also showed a stronger preference than men that as senders of self-disclosures, it was important that they felt accepted and not anxious or coerced to self-disclose by their partners (Petronio). These prerequisites are related to the perceived partner responsiveness construct. The female self-disclosers' need to feel understood, accepted and cared for was greater than male self-disclosers, reflecting a greater focus on sender feelings of acceptance and receiver characteristics. The association between self-disclosure and intimacy is stronger for women than for men (Lippert & Prager, 2001; Canary &

Emmers-Sommer, 1997; Parks & Floyd, 1996). In addition, research found gender to be more important than attachment in determining intimacy in a single 15-minute face-to-face interaction (Grabill & Kerns, 2000).

I will examine whether these trends, which were assessed in face-to-face contexts, hold true for Facebook self-disclosures. One argument would predict a lesser female presence on Facebook. If the superior offline communication is sufficient to meet intimacy needs (McAdams, 1983), then Facebook would not be needed for the purpose of increasing feelings of intimacy and self-disclosure status updates could be less frequent and have less depth for women than for men. Years of successful experience in having needs for intimacy and closeness met in the traditional face-to-face context may make Facebook seem awkward in comparison. Friends may be more accustomed to responding through richer contexts (Daft & Lengel, 1984) such as face-to-face or by phone, and thus women would be less likely to self-disclose, less responsive and have less need for the leaner context of Facebook.

The opposite argument can also be made, that women's advantage in communicating offline would be naturally extended to the context of Facebook. In recent studies of online relationships, women had more Facebook friends and spent more time interacting with their Facebook friends than men (Acar, 2008; Sheldon, 2008). On the Internet, women's self-disclosures were more intimate than men's self-disclosures (Peter, Valkenburg & Schouten, 2005). Because of the verbal nature of female relationships as compared to male relationships, and the other trends regarding sex differences in self-disclosure that hold in face-to-face communication, and consistent with Walther's social information processing theory (1992) which suggests

that people adapt media to suit their needs, it is hypothesized that women will adapt the capabilities of Facebook to meet their need for intimacy. Thus women should show greater depth of disclosure on Facebook than men, eliciting higher levels of Perceived Partner Responsiveness than men, and achieve greater increases in intimacy than men. The following set of hypotheses predicts gender differences in Facebook self-disclosure and intimacy:

H8a: Women will report greater self-disclosure than men.

H8b: Women will report greater Perceived Partner Responsiveness than men.

H8c: Women will report more closeness with their respondents than men will report with their respondents.

H8d: Women will report greater Change in Intimacy as a result of self-disclosure than men.

Attachment orientation. One of the characteristics that may be associated with intimacy in friendships is a secure attachment style (Grabill & Kerns, 2000). Bowlby's attachment theory is fundamental to understanding the basic human need for attachment between the infant and the caregiver, and patterns that are established in infancy influence the individual's attachment style throughout the life span (Bowlby, 1973). As the pattern of attachment develops throughout infancy and childhood, the child develops a cognitive representation of a working model of attachment that carries forward throughout the individual's life. The theory reflects the importance of the mother and child bond. Attachment theory was further elaborated by Ainsworth, Waters and Wall (1978), especially in empirical studies of the Strange Situation, experiments in which

infants were left alone in a room for a time with the caregiver absent and with a stranger present. The infants showed distinct patterns of secure and insecure attachment upon the mother's return. Those who were securely attached were comfortable when the mothers left and comfortable when they returned indicating they had internalized the concept that mother will leave and trust that she will always return. Anxious-resistant children displayed anxiety when mother was gone and showed intense clinginess or irritability upon mother's return indicating insecure attachment evidenced by a lack of trust that mother will return. Avoidant children rejected their mothers, displaying indifference upon her return, and this indifference indicated insecure attachment to a disinterested mother. Ainsworth also noted the similarity between the infant/caregiver relationship and later romantic attachments (Ainsworth, Bell & Stayton, 1974).

Attachment theory suggests that humans have an evolutionarily based need for proximity to the caregiver, because babies need care and protection from the unsafe outside environment (Bowlby, 1973). The caregiver provides a secure base from which the infant feels comfortable reaching out and exploring the environment, as well as a safe haven to which the infant can return for warmth and reassurance. Infants also know that they can summon the caregiver and the person will return and meet the infant's needs. When these conditions are met, the infant becomes securely attached to the caregiver.

In cases where the infant's cries are ignored or responded to intermittently and inconsistently, and the caregiver is not reliably present when necessary, the infant becomes insecurely attached. Insecure attachment can take the form of anxious-resistant or avoidant. If the infant's caregiver is unreliable, sometimes responding and

sometimes not responding to the infant's cries, the infant may become anxious-resistant and may be clingy and difficult for the caregiver to comfort. Avoidant insecurely attached infants seem unconcerned about the caregiver's failure to respond and function independently of the caregiver.

Researchers such as Hazan and Shaver (1987) studied adult attachment styles, focusing on attachment with romantic partners in adulthood based on working models of attachment. The working models of attachment begin to develop in infancy as internal schemas and then are thought to carry over into childhood, and later, adulthood influencing how the individual interprets and predicts the behavior of relationally-close others. Hazan and Shaver (1987) found that attachment working models affect both romantic and friendship relationships in adulthood. However, attachment relationships may be stronger with romantic partners who are thought to have gradually replaced the caregiver as the attachment figure for adults (Hazan & Shaver). Hazan and Shaver (1987) followed the three category style of Bowlby (1973) and Ainsworth, et al. (1978), renaming the categories secure, anxious-ambivalent, and avoidant. Secure attachment is associated with trust, interdependence, comfort with closeness and confidence in others' love (Hazan & Shaver; Mikulincer, 1998). Securely attached individuals seek intimacy in their close relationships (Mikulincer). Avoidant attachment is associated with fear of intimacy, lack of reliance on others and preference for distance from others. Anxious-ambivalent attachment is associated with insecurity about others, passionate love, and fear of abandonment by loved others (Hazan & Shaver). Anxious-ambivalent individuals lack trust in others and worry about their relationships, but also seek security in their close relationships (Mikulincer). Furthermore, anxious-ambivalent

individuals have a negative self-image and a positive, supportive view of others (Bartholomew & Horowitz, 1991; Bowlby, 1973). An interaction goal for those with attachment ambivalence is the acceptance and approval of others, to aid in developing the self-acceptance those with attachment ambivalence lack. Thus ambivalent individuals reach out to others with emotional expressiveness because they are dependent on the acceptance by others to improve their low self-esteem (Bartholomew & Horowitz). Mikulincer and Nachshon (1991) found that secure and ambivalent attachment, characterized by a positive working model of others, was associated with higher levels of self-disclosure than avoidant attachment.

Friends rise in importance throughout the adolescent years. Growing cognitive maturity and critical thinking skills leads to a sense of independence, autonomy and identity. As the child realizes that the caregiver is flawed, peers become the focus of attachment. Attachment is salient because the behavioral systems operating in adolescence among friends and later, romantic partners are concerned with intimacy and closeness, similar to infant/caregiver attachment systems (Furman, Simon, Shaffer & Bouchey, 2002). Collins and Steinberg (2006) found that secure attachment in adolescence was associated with strong peer relationships. A difference between the relationship of the infant/caregiver and the peer/peer attachment relationship is that the peer relationship is reciprocal. Not only is the adolescent looking for comfort, caring and understanding from peers, but the peers are demanding the same from the adolescent. The teen learns to not only receive comfort but also to give comfort. Later, as sexuality increases motivation to meet a person with whom to have a deeper relationship, the adolescent looks (usually) to the opposite sex for romantic attachment.

The participants in the current study are university undergraduates who are in the stages of late adolescence and young adulthood. Collins and Steinberg (2006) suggested that one of the outcomes of adolescence is a more stable attachment working model. The individual has separated from the childhood attachment figure and has a stable autonomous identity and a mental representation of attachment.

Just who is seeing and paying attention to any message or status update is unknown to the sender of a Facebook status update. The ambient nature of Facebook and the uncertainty of who is seeing any given status update may make secure people less likely to rely on Facebook for meeting intimacy needs. Instead, it could be argued that secure individuals would be more likely to rely on richer connections with others than those that are available on Facebook, including more shared activities and more fulfilling experiences with friends on a face-to-face basis because relationships without face-to-face interaction are less satisfactory (Baumeister & Leary, 1995). Secure individuals are comfortable with self-disclosure and responding to others' self-disclosures and expect to give and receive trust, understanding and validation in such interactions. Persons with attachment security are characterized by high disclosure to a few significant others and medium disclosure to others in the social environment, while those who are poorly adjusted or insecurely attached do not differentiate between close and non-close relationship partners (Tidwell, Reis & Shaver, 1996; Mikulincer & Nachshon, 1991; Reis & Patrick, 1996; Cozby, 1973).

Secure individuals may have close relationships that take place, for the most part, offline. At the same time, secure individuals may interact intimately with others on Facebook. Because secure individuals know how to give and receive comfort and

intimate communication, it is likely they will experience perceptions of partner responsiveness and feelings of intimacy from friends as they post status updates. Following the social information processing model (Walther, 1996), secure individuals will adapt the capabilities of Facebook to suit their communication goals, thus using the site to satisfactorily conduct relationships, whether partially or exclusively online or as an augmentation to their face-to-face relationships. In this regard, Facebook self-disclosure in status updates could extend the reach of the securely attached individual to achieve intimacy beyond the confines of the face-to-face one to another context, to the social network, where users may confidently access many others. Thus it would be expected that secure attachment orientation is positively associated with Change in Intimacy.

Insecure individuals, because they have a working model of attachment that precludes trust in others, may find the experience of posting status updates more or less likely to provide perceptions of partner responsiveness and feelings of intimacy. Insecure individuals who have ambivalent attachment orientation may have less self-esteem than secure individuals (Brennan & Morris, 1997). Ambivalent individuals are also characterized by preoccupation with their attachment figures (Hazan & Shaver, 1987). However, attachment ambivalence is also characterized by the seeking of reassurance from others (Bartholomew & Horowitz, 1991), thus those with attachment ambivalence may be more likely to frequently post self-disclosure status updates and to use Facebook's asynchronous characteristics and wide net to conduct intimate interactions. By actively seeking assurance from friends through status updates, ambivalent individuals should perceive high levels of partner responsiveness from

others. On Facebook, ambivalent attachment orientation should be associated with higher levels of Change in Intimacy.

Insecure attachment in the case of avoidant attachment orientation is associated with a positive self-image (Brennan & Morris, 1997) and a belief that others are untrustworthy or rejecting (Bartholomew & Horowitz, 1991). Those with avoidant attachment tend to cut off their emotions in stressful situations (Hazan & Shaver, 1987). It is likely that individuals with attachment avoidance would use Facebook for purposes other than seeking and receiving intimate interaction, thus avoidant individuals would be more likely to ignore this social networking aspect of Facebook. If they self-disclose it would be for internal reasons, not to reach out to friends for intimacy. Avoidant attachment orientation would thus be expected to have a negative association with Change in Intimacy. Similarly, their communication in status updates would not evoke high levels of Perceived Partner Responsiveness.

Simpson, Rholes, and Nelligan's (1992) Adult Attachment Questionnaire (AAQ) is used in the current study. The AAQ includes questions from Hazan and Shaver's (1987) three categories of attachment, which were originally assessed in three vignettes. The three categories of attachment were based on Ainsworth's (1985) three attachment categories of secure, avoidant or anxious-ambivalent. The AAQ measures two dimensions of attachment, avoidance and ambivalence. The first dimension is assessed in the Avoidance scale. This scale measures the tendency to withdraw from closeness and intimacy in relationships, thus higher scores on the scale reflect higher levels of avoidant attachment orientation. The second dimension is assessed in the Ambivalence scale. This scale measures the tendency to have conflicting thoughts

about whether others can be depended on in relationships, thus higher scores on the scale reflect higher levels of ambivalent attachment orientation. Secure attachment is reflected in low scores on both scales; low on avoidance and/or low on ambivalence. The attachment dimensions assessed in the AAQ include 17 self-report items and are a continuous measure that, while described by authors of the measure as “orientations”, are orientations that correspond with and are also discussed interchangeably in the literature as attachment “styles” (Simpson, Rholes & Phillips, 1996). The AAQ scales relate to Bartholomew’s attachment styles in the following manner: AAQ Avoidance dimension is anchored by secure on the low end and fearful-avoidant on the high end (dismissive-avoidant is also present to a lesser amount). AAQ Ambivalence is anchored by secure on the low end and anxious-ambivalent on the high end (fearful-avoidant is also associated with Ambivalent dimension). The Avoidance dimension primarily measures the individual’s views about others. The Ambivalent dimension primarily measures the individual’s views about the self. A research question is posed to find out if Change in Intimacy is predicted by an interaction between the two dimensions.

H9a: There is a positive correlation between secure attachment orientation and Perceived Partner Responsiveness as a result of self-disclosure.

H9b: There is a positive correlation between secure attachment orientation and Change in Intimacy as a result of self-disclosure.

H9c: There is a negative correlation between avoidant attachment orientation and Perceived Partner Responsiveness as a result of self-disclosure.

H9d: There is a negative correlation between avoidant attachment orientation and Change in Intimacy as a result of self-disclosure.

H9e: There is a positive correlation between ambivalent attachment orientation and Perceived Partner Responsiveness as a result of self-disclosure.

H9f: There is a positive correlation between ambivalent attachment orientation and Change in Intimacy as a result of self-disclosure.

Self-Monitoring. This study will explore the effects of self-monitoring on self-disclosure and intimacy with relationships on Facebook. High self-monitors respond to cues from social and interpersonal interactions as to which behaviors are appropriate for a given situation (Snyder, 1974). In contrast to high self-monitors, Snyder suggested individuals low in self-monitoring may not have the ability and/or the motivation to regulate their expressive self-presentation and react based on their inner states and enduring personal characteristics without adapting their expressions to the situation.

Face-to-face studies of self-monitoring have shown that high self-monitors are attuned to situational cues to appropriate behavior (Gangestad & Snyder, 1985b; Snyder, 1974). In the Facebook environment, high self-monitors would be expected to be aware of and to adhere to social norms of their particular group of friends. If it is appropriate within the group to self-disclose one's true emotional state, the high self-monitor would be likely to be emotionally expressive and accurate about certain thoughts and feelings. If the individual's friends commonly respond to Facebook posts, the high self-monitor will respond in kind, using others as guides for his or her own behavior. Similarly, if the peer group posts only humor in their status updates, or only

responds to their friends' posts with humorous comments, the high self-monitor will follow the peer group posting style and will avoid emotional, serious or personal self-disclosures and comments.

The high self-monitoring individual may self-disclose with a specific audience in mind, and tailor messages to be appropriate for this specific audience, designed to elicit specific responses. The high self-monitor shows a variety of attitudes, feelings and emotions across a spectrum of situations based on sensitivity to the environment's standards for appropriate behavior. Thus it would be expected that the high self-monitor would be aware of the broad audience for Facebook status updates and would be cognizant of the public aspect of Facebook when posting.

In contrast, the low self-monitor is more likely to express feelings as they are felt internally with less concern for what is socially appropriate (Gangestad & Snyder, 1985b; Snyder, 1974). Due to either a lack of ability or a lack of motivation, low self-monitors do not regulate their self-expressiveness, and their behavior consistently expresses their own attitudes, emotions and inner feelings (Gangestad & Snyder).

Lacking an awareness of social appropriateness, the low self monitor would be expected to use the Facebook status update as a vehicle to express thoughts and feelings without regard for norms within a particular group of friends. Thus low self-monitors would be less likely to have a specific audience in mind when posting a status update.

The 18-Item Self-Monitoring Scale has been found to be generally reliable at an internal consistency $\alpha = .70$ (Snyder & Gangestad, 1986). However, the construct of self-monitoring is not uncontroversial. There have been theoretical and methodological criticisms of Gangestad and Snyder's Self-Monitoring scale (Lennox & Wolfe, 1984;

Gangestad & Snyder, 1985b; Snyder & Gangestad, 1986). For example, Lennox and Wolfe (1984) have questioned the validity of the Self-Monitoring Scale arguing there may be at least two distinct factors related to impression management in self-monitoring. They created two separate scales to measure these two separate aspects of self-monitoring, arguing that high self-monitoring is a combination of an active factor and a passive factor (Lennox & Wolfe). One of the underlying factors is associated with a “concern with getting ahead” in an active approach to self-presentation, described by Lennox and Wolfe as acquisitive, and this factor is correlated with self-esteem. This factor is assessed in their *Revised Self-Monitoring Scale (RSMS)*. The other factor is associated with a passive approach to self-presentation in which the individual aims for acceptance, and this factor is correlated with harm avoidance. This factor is assessed with Lennox and Wolfe’s (1984) *Concern for Appropriateness Scale (CAS)*.

Despite these criticisms, Gangestad and Snyder’s (1985b) investigations determined that one single person variable underlies a substantial portion of the variance in the measure, demonstrating that Lennox and Wolfe’s revised scales may not be necessary for measuring self-monitoring (Snyder & Gangestad, 1986). Snyder and Gangestad’s argument criticizes Lennox and Wolfe (1984) on both methodological and theoretical grounds. Snyder and Gangestad (1986) explored the unrotated factor structure of their own scale and noted most of the 18-Item Self-Monitoring Scale items loaded onto one factor (correlation approximately $r = .65$) indicating the items may be measuring one overarching construct. Furthermore, they disputed the Lennox and Wolfe (1984) scales suggesting some of the items in the scales merely restate previous

items. In addition, the variance may be due to response bias because items are keyed in the same direction, and the language of the items is ambiguous (Snyder & Gangestad).

Along with methodological arguments in favor of the 18-item Self-Monitoring Scale, Gangestad and Snyder offered theoretical justification for using the categorical classification as either high- or low-self-monitoring, arguing that the construct of self-monitoring is guided by a latent meta-control of behavior in social contexts (Gangestad & Snyder, 1985b, p. 323). The organizing structures are either pragmatic, in the case of high self-monitors, or principled, in the case of low self-monitors. These organizing structures are thought to influence the strategic awareness of social norms and constraints evidenced in the behavior of high self-monitors, while consistency with an internal belief system is of paramount concern in the behavior of low self-monitors (Gangestad & Snyder). Rather than progressively higher amounts of self-monitoring existing within individuals, people are thought to possess high or low self-monitoring either in one category or the other with distinct features. Gangestad and Snyder (1985b, p. 340) speculate that there may be a biological determinant and/or a behavioral strategy acquired at a critical stage of development that may determine class of self-monitoring. Thus there may be one discrete class variable that distinguishes high self-monitors from low self-monitors. Based on these arguments, the current study utilized the Snyder and Gangestad (1986) 18-item measure of self-monitoring, a measure that yields increased parsimony and reliability over their earlier 25-item version of the self-monitoring assessment (Snyder, 1974). The scale assigns participants into one of two categories, either high self-monitoring or low self-monitoring, based on answers to the 18-item measure.

In summary, high self-monitors are predicted to have higher scores on Change in Intimacy because they are more attuned to their audience and more able to elicit intimacy enhancing responses from their respondents. High self-monitors, understanding current social norms, are also expected to have a positive attitude toward Facebook evidenced by Frequent Facebook participation, and comfort with posting self-disclosing status updates (SD Attitude). High self-monitors should feel closer to their respondents and experience higher levels of Perceived Partner Responsiveness.

Also, high self-monitors are predicted to post status updates thinking of an audience of “everyone” because they are more aware of their environment in terms of social norms, thus they would be more aware of the public audience of Facebook and the corresponding ramifications of a large social network viewing a posting of a status update. Yet because of their highly interactive characteristics, and awareness of group norms, they would be expected to interact with closer friends on Facebook than low self-monitors in terms of the relationship type of the person responding to a self-disclosure status update.

H10a: High self-monitors self-disclose at higher levels than low self-monitors.

H10b: High self-monitors report higher levels of Perceived Partner Responsiveness than low self-monitors.

H10c: High self-monitors report higher levels of Change in Intimacy as a result of self-disclosure than low self-monitors.

H10d: High self-monitors report more Frequent Facebook participation than low self-monitors.

H10e: High self-monitors report higher levels of Closeness to their responders.

H10f: High self-monitoring is positively correlated with an intended audience of “everyone” and negatively correlated with an intended audience of “no one”.

H10g: High and low self-monitors differ in their relationship with the responder to a self-disclosure status update, with closer friends responding to High self-monitors than to Low self-monitors.

Frequent Facebook Participation. Relevant background characteristics of young people using self-disclosure status updates on Facebook include the level of comfort with computers and the Internet. One way of measuring comfort with computers is to examine the proportion of time spent communicating in the various modes of communication including face-to-face, text, email, phone, Internet chat, and Facebook. Other background characteristics include assessing the space where the individual sits when they are posting to Facebook relative to privacy, perceptions of public/private exposure of Wall postings on Facebook, and the individual’s motivations and goals for posting a self-disclosure online. Those who are at ease with using computers and trust the privacy controls provided for the Facebook social networking site, or are comfortable with the level of exposure to the risks of posting, may be more likely to post self-disclosures to the site. Conversely, there may be a reluctance to post self-disclosures if there is distrust about the privacy of information on Facebook or distrust of online communication, or a disliking of CMC in general. Thus the likelihood

to self-disclose or attempt to meet intimacy goals on Facebook may be related to the belief in the technological efficacy, determined by judgments on the efficiency, effectiveness and ease of use of Facebook for meeting such goals (Ramirez, Walther, Burgoon & Sunnafrank, 2002).

From the perspective of the interpersonal process model of intimacy (Reis & Shaver, 1988), Internet use could undermine or increase well being, depending on whether it supplants or boosts opportunities for meaningful contact with close peers. Two conflicting approaches in understanding relationships in CMC are intimacy liberated and intimacy lost (Heim, 1992; Walther & Burgoon, 1992). The “liberated” approach finds online relationships potentially more meaningful than face-to-face relationships. Social information processing theory (Walther, 1996) suggests that CMC offers individuals liberation from the confines of the immediate environment and allows them to create and sustain relationships regardless of the physical location of the individuals. Robinson et al. (2002) examined diaries and found Internet users attended more social events and had more conversations with others than non-users. Furthermore, Walther suggested that individuals can adapt text to any function required to communicate, including emotional communication. Although there may be a lag in feedback time between one message and a response, partners adapt to the lag and even use it to more carefully construct messages, to aid in self-presentation, and to attain the interpersonal knowledge they require through interrogation and self-disclosure (Walther, 1996). Facebook would presumably be integrated in the lives of people rather than a separate space (Haythornthwaite & Wellman, 2002). Individuals who tend to

agree with this approach to understanding online communication will be more likely to have a positive attitude and see benefits in self-disclosure on Facebook.

The “lost” approach finds online relationships less meaningful than face-to-face relationships because of the lack of nonverbal communication and situational, contextual cues. It takes more time to get feedback from others online than face-to-face, which is thought to constrain relationships (Heim, 1992; Daft & Lengel, 1984). Without nonverbal and contextual cues, the “lost” approach regards online relationships as shallow, not relational, impersonal, less meaningful and even hostile (Heim, 1992). Interaction on Facebook takes place between an individual and a computer, thus it is a solitary activity. Some argue that time spent communicating online takes time away from being with friends and family interacting in face-to-face social relationships, increasing loneliness, and thus is unhealthy (Haythornthwaite & Wellman, 2002). Facebook could be characterized as part of a cyberspace that is not a part of real life. Individuals who share these views would be less likely to self-disclose on Facebook because of the seemingly impersonal or unreal environment and would instead use more media rich outlets such as face-to-face (Daft & Lengel, 1984) for relationally intimate communication.

Additionally, the degree to which individuals feel their postings on Facebook constitute private interpersonal communication versus public, large audience mass communication may bias individuals’ likelihood to post self-disclose status updates. Whether individuals feel Facebook is private and safe for self-disclosure or public and risky may be based on experiences with Facebook and other experiences with CMC, interest and knowledge of how to maintain privacy settings, and level of trust in

Facebook friends (Walther, 1996). The environment in which an individual uses the computer for communication with others has also been shown to influence interpersonal communication (Fitzpatrick, 1988). If Facebook communication occurs at home in private and late at night, similar to when instant messaging has been shown to occur (Hu, 2004), this private setting may lead to more self-disclosure (Fitzpatrick, 1988). Ultimately, use of Facebook is a choice, and users may decide if and how they wish to engage Facebook depending on their personalities, circumstances, geographical constraints and other needs.

H11a: Frequent Facebook participation is positively correlated with Self-Disclosure on Facebook.

H11b: Frequent Facebook participation is positively correlated with Change in Intimacy.

Closeness with respondent and relationship type. Relationship type is an important factor in intimate interactions, and in the study I will assess whether the individual who self-discloses has a particular friend in mind while posting the self-disclosure, and what type of relationship the partners share. The relationship history of the participant with the person who responded to the self-disclosure status update may impact the level of self-disclosure and perceptions of the response. For example, the target may be a romantic partner, best friend, friend, acquaintance, parent, sibling or other family member. It is also possible that the self-disclosure is conveyed to the entire network or to no one individual in particular. It may be that individuals can more accurately predict responses from partners who are closer to them emotionally, such

that expectations are more likely to be met by those who have enduring, deep ties to one another and are in an intimate relationship with one another.

When individuals interact with each other, part of the interaction is defined by the type of relationship the two partners share. Whether it is a romantic partner, a close friend, an acquaintance or a family member does matter in the level of responsiveness to a self-disclosure (Reis & Shaver, 1988). According to the interpersonal process model of intimacy, a self disclosure and a partner's reciprocal self disclosure may lead to perceptions by the original communicator that the partner is expressing understanding, accepting and caring (Reis & Shaver). These components of partner responsiveness lead to greater feelings of intimacy with the partner (Reis & Shaver). Research has suggested that close relationships involve deeper levels of mutual self-disclosure and partner responsiveness (Prager, 1999; Laurenceau, et al, 1998; Laurenceau, et al, 2005). A tenet of self-disclosure is the correlation of self-disclosure with liking. Researchers Jourard and Lasakow (1958) found that liking a parent influenced how much an individual disclosed to the parent. It is likely that a parent or romantic partner would respond with a greater depth of disclosure because of the communal bond and resultant attunement with the needs of the self-discloser (Clark, Mills & Powell, 1986).

Verbal content can express emotional meaning (Walther, 1996). Therefore, in the context of Facebook, the depth of the respondent's response to a self-disclosure status update is predicted to be related to the type of relationship shared with the discloser. When the relationship partner is emotionally close to the self-discloser, the

response will be associated with greater increases in intimacy than those who are more distant to the self-discloser. Closeness may be evidenced by relationship type, which takes into account the relationship history of the interaction partners, thus a similar result would be expected from a parent, romantic partner or best friend: higher levels of increased intimacy than more distant responders such as acquaintances.

H12: Closeness with the respondent will be positively correlated with Change in Intimacy as a result of self-disclosure.

H13a: Perceived Partner Responsiveness is greater when responder is a parent or romantic partner, followed by best friend, followed by acquaintance or other family member.

H13b: Change in Intimacy is greater when responder is a parent or romantic partner, followed by best friend, followed by acquaintance or other family member.

Expectation confirmation on Facebook. Interpersonal characteristics include expectations associated with self-disclosing on Facebook. Expectations are defined as cognitions about the anticipated communication behavior of specific others (Burgoon & Walther, 1990). Preexisting beliefs and expectations about partners may affect the interpretation and perception of respondent messages. Expectations are influenced by individual, relational and cultural norms. When an individual self-discloses in a status update, there may be a specific person or persons in mind with whom they are mentally communicating. Individuals hold expectations for their own and for others' behaviors in interactions, and as relationships develop, generalized expectations become specific

to the communicators (Burgoon & Hale, 1988). If there is a specific person or persons in mind, the self-discloser would likely have expectations that could be either met or violated by each specific partner. Based on a combination of their previous knowledge of this partner or partners including the partner's individual characteristics and idiosyncrasies, the relevant cultural norms for responses, and the characteristics of the relationship in terms of relationship type and level of closeness, the self-discloser is presumed to have developed patterns of interaction with the partner (Burgoon & LePoire, 1993). These patterns lead to anticipation of the behavior the partner should express in reaction to the self-disclosure. These enduring patterns of anticipated behavior are expectations (Burgoon & LePoire, 1993), and expectations provide the cognitive structure for interpreting and understanding a partner's behavior. Thus expectation confirmation means the receiver of the self-disclosure responded according to the expectations of the sender.

If the partner's behavior confirms expectations of a positive response to a self-disclosure, there will be an increase in feelings of intimacy. This is consistent with Prager's (1997) definition of intimate responsiveness: expressions of positive feelings and emotions by the respondent enable the self-discloser to feel supported (Prager, 1997; Lippert & Prager, 2001). Studies of positive emotional exchanges have shown a relationship between positive expectation confirmation and personal growth, goal achievement, and the building of relationship resources (Feeney, 2004; Gable, Gonzaga & Strachman, 2006). Relationship resources include feelings that another person appreciates, cares and understands the individual's goals and needs, important for relationship well-being (Gable, et al., 2006).

H14: Partner's response confirming the self-discloser's expectation of a positive response will be positively associated with Change in Intimacy.

The theory of optimal matching (Cutrona, 1990) suggests that supportive behavior should accurately assess and provide the needed type of caring behavior based on the contingencies of the situation. Thus, if the self-disclosure indicates a need for emotional support, the response should provide caring, understanding support. If the self disclosure indicates a need for instrumental support, the response should provide advice or other instrumental support accordingly.

H14a: Partner's response confirming the self-discloser's expectation of a positive, emotionally supportive response will be positively associated with Change in Intimacy.

H14b: Partner's response confirming the self-discloser's expectation of a positive, instrumental response will be positively associated with Change in Intimacy.

Expectation violations on Facebook. Expectancy violations theory (EVT) suggests that when behavior is inconsistent with expectations, a reorientation and reinterpretation by the receiver occurs in an attempt to understand and explain the behavior (Burgoon & Hale, 1988; Burgoon & LePoire, 1993). An expectancy violation is defined as behavior that deviates from or is inconsistent with currently held expectations, which triggers a chain of events directed at explaining why the behavior occurred (Burgoon, 1993; Burgoon & Hale, 1988). There are different degrees of expectancy violation, and if the violation falls within an acceptable range of behavior, it

is discounted or ignored. But if the violation is significantly different from expectations above a certain threshold, it may affect the relationship (Burgoon, 1993). If there is a violation of expectations, then individuals feel heightened arousal that initiates a series of cognitive appraisals. There is assumed to be a range of discrepancy that is tolerable, in which case the discrepant behavior is overlooked or forgiven. If there is a large discrepancy between the expected behavior and the actual behavior, then the recipient must assign meaning to the behavior. If there is a consensually shared meaning to the behavior, then a positive or negative valence is assigned. But if the behavior is ambiguous, then the recipient considers the violator's reward level and assigns a corresponding valence. The violator's reward level is positive if the violator is physically attractive, credible, famous, powerful, or if there is a close relationship between the recipient of the expectancy violation and the violator. The violator's reward level is negative if the violator is not attractive, not credible, not famous or powerful and if the violator and the recipient are not in a close relationship.

Combined with the reward level of the violator is the positive or negative valence of the behavior itself. The outcome for the relationship of the reinterpretation is a combination of expectations and the valence of the behavior (Burgoon & LePoire, 1993; Floyd & Voloudakis, 1999). For purposes of this study, the behavior itself is the response message post. According to uncertainty reduction theory combined with expectancy violation theory, violations vary in their impact on uncertainty levels, such that violations that provide information congruent with past knowledge of the partner decrease uncertainty and violations that provide information incongruent with past

knowledge of the partner should increase uncertainty (Afifi & Burgoon, 2000; Afifi & Metts, 1998).

This study will examine the impact of expectancy confirmation and expectancy violations on intimacy experienced by individuals as a result of a self-disclosure status update. One of the unique deviations from expectations on Facebook may be the identity of the responder. Surprises may occur when the person responding to a self-disclosure is not the intended target, which may result in either a positive or negative expectancy violation. Unlike in a face-to-face environment where friends are generally assumed to be rewarding communicators with a positive valence and any unexpected response from one of these friends on Facebook may be a welcome increase in engagement with the self-discloser, on Facebook friends may vary widely in their relationship with the self-discloser. Casual friends, acquaintances and distant family members may be in the mix of recipients to a self-disclosure status update. In the Facebook setting, when individuals respond unexpectedly to self-disclosures, it may be more difficult to assign meaning to responses, rendering the messages ambiguous. This ambiguity is likely to trigger the evaluation of the violator's reward level along with additional appraisal of the valence of the response itself.

A positive expectancy violation in EVT means that the discrepancy or violation of predictions for behavior is labeled positive by the recipient. A large change in behavior will be more positive than a small change (Burgoon & Hale, 1988). Thus a surprise response from a Facebook friend may be seen as a positive violation of prediction if the friend who seemed uninvolved has changed to very involved by posting a comment, and this is predicted to increase feelings of intimacy. Also, friends

are sensitive to communication violations among their friends, including close friends (Burgoon & Hale, 1988). For example an exuberant response from a normally reticent close friend may be evaluated as a positive expectancy violation.

Conversely, a negative expectancy violation in EVT means the behavior is discrepant and is labeled negative by the recipient (Burgoon & Hale, 1988). A large violation in a negative direction is predicted to decrease intimacy. Thus, for example, a close friend who unexpectedly either does not respond to a self-disclosure or whose response is inappropriate may trigger an appraisal by the self-discloser, leading to a negative interpretation and evaluation of the response, and a corresponding decrease in intimacy. Within valence, small discrepancies may be ignored or have less impact on intimacy than larger discrepancies.

H15a: Violation of the self-discloser's expectations after posting to Facebook will be positively correlated with Change in Intimacy if the responder reward valence is positive and the response behavior is positive.

H15b: Violation of the self-discloser's expectations after posting to Facebook will be negatively correlated with Change in Intimacy if the responder reward valence is positive and the response behavior is negative.

H15c: Violation of the self-discloser's expectations after posting to Facebook will be negatively correlated with Change in Intimacy if the responder reward valence is negative and the response behavior is negative.

H15d: Violation of the self-discloser's expectations after posting to Facebook will be positively correlated with Change in Intimacy if the responder reward valence is negative and the response behavior is positive.

Hypotheses: TARGET Point of View

When someone self-discloses, the person or persons to whom they communicate the self-disclosure is the “target”. When the target of a self-disclosure participates by interacting with the self-discloser, the process of intimacy occurs through the discovery and validation of the self-discloser’s inner core (Reis & Shaver, 1988). In this portion of the study, the role of the responder in the Facebook environment is explored. While earlier sections of the study will focus largely on the role of self-discloser by asking participants to react to their own self-disclosure status update on Facebook and then measure the impact of responses in terms of intimacy, it is important to also examine the aspect of the receiver or target of self-disclosed information via someone else’s status update on his/her profile Wall. There may be ambiguity and uncertainty about who the discloser is trying to engage when posting a status update to the profile page. While it is obvious in face-to-face communication, on Facebook, the intended target may be difficult to discern. Although some studies of the interpersonal process of intimacy in face-to-face contexts study dyadic relationships from the point of view of the discloser (Laurenceau, Barrett, & Pietromonaco, 1998), the model applies to the target of the self-disclosure and subsequent responses because mutual disclosure and response is integral to the process.

Target: Gender. A target may determine the appropriate response to a Facebook status update based on knowledge of patterns that already exist in the relationship. For example, there may be distinct patterns of communication due to gender. Women in the Facebook environment may be more likely than men to be the target of Facebook self-disclosures due to the feminine communication style (Stephen & Harrison, 1985). The conversation patterns that have been found in face-to-face and CMC contexts suggest women are more likely to seek relational and interpersonal dialogue than men (Dindia & Allen, 1992; Kleman, 2007; Fleuriet, Estrada & Houser, 2009). Women may convey more information when they post status updates and when they respond to status updates. This is consistent with early self-disclosure research which found that the more information received by the discloser, the greater the willingness for the target to disclose in return (Jourard, 1959).

H16: Women are more often the intended target of self-disclosures than are men.

H17: Women are more likely than men to respond to status updates.

Target: High Self-Monitoring, confidence, appropriateness. High self-monitors may find it easier to know when they are the targets of self-disclosures based on their attunement to their social environment (Snyder, 1974). Thus they may be more certain when they are the target and also more aware of how and when to respond on Facebook. Because the rules of engagement for social networking sites may still be in the process of being continuously negotiated, high self-monitors may be particularly attuned to the changing social norms, consistent with their high interest in self-

presentation and awareness of norms of social expression (Snyder, 1973). It is therefore hypothesized that individuals who know the rules will be more likely to interact with others, and will more comfortably participate in Facebook interaction.

H18a: High self-monitors more likely to believe they are the target of others' self-disclosures than low self-monitors (confidence).

H18b: High self-monitors show a greater concern for appropriateness in their Target Responsiveness than low self-monitors.

H18c: High self-monitors respond to others more frequently than low self-monitors on Facebook.

H19: Confidence that one is the target is positively correlated with Target Responsiveness.

H20: Appropriateness is positively correlated with Target Responsiveness.

Research Questions

The possibility of attachment orientation interaction, variables affecting individuals' knowledge of when they are the target, reasons or motivations for responding to someone's self-disclosure on Facebook, and when multiple modes of communication are used for interaction will be explored as research questions. By asking the participant to switch roles for a portion of the survey, it is possible to measure interpersonal responses in the Facebook world where an individual may be one of hundreds or even thousands of "friends" for any self-discloser.

Interaction between attachment dimensions. The two dimensions of attachment, Avoidance and Ambivalence, may interact, which would have implications because the value of either dimension on Change in Intimacy may change depending on the other dimension. Thus it will be important to investigate whether the effect of an individual's score on Avoidance on Change in Intimacy would change depending on the value of the score on Ambivalence and vice versa.

RQ1: Is Change in Intimacy predicted by an interaction between Avoidance and Ambivalence?

Target variables for responding. A high score on the Frequent Facebook Participation scale would indicate experience with Facebook norms of interaction and a positive attitude toward Facebook. Frequent Facebook participation should impact responsiveness as a target because of established patterns of interaction online. The SD Attitude reflects the willingness of the participant to self-disclose on Facebook. Higher scores on the SD Attitude may indicate greater trust and understanding of Facebook partners, and this deeper knowledge of partners would indicate a higher level of confidence that one is the target when a friend posts a self-disclosure.

Attachment ambivalence is associated with attunement with and esteem for others and low feelings for the self (Hazan & Shaver, 1987). High scores on attachment ambivalence may indicate high sensitivity to others, thus a person with higher attachment ambivalence may be highly reactive to friends' self-disclosing status updates. Also insecure attachment is related to a lack of differentiation between close friends and acquaintances (Baumeister & Leary, 1995), so those scoring high in

attachment ambivalence may feel called upon to respond to others' self-disclosures regardless of the level of intimacy.

The Expected Gender Difference Response (EGDR) variable reflects the finding in offline settings that females are, on average, more verbally interactive, conversational and relational in their communication than are males. Thus, mirroring face-to-face interactions, high scorers on EGDR would be more likely to be certain when they are the target of a self-disclosure status update.

RQ2: When do individuals believe they are the target of a Facebook self-disclosure?

Motivations for responding to a self-disclosure status update. There are many possible motivations for responding to someone's self-disclosure. Possible motivations may be to deliver instrumental or emotional social support to the person, to provide humor, to flirt, or to participate in an ongoing discussion or shared memory (Bryant & Marmo, 2009). Other possible motivations include encouragement or offers of congratulation (Bryant & Marmo, 2009). Responses may be motivated, for example, by politeness rules, reciprocation, or responding to the self-discloser's apparent needs. Because Facebook is a social networking site, responses may be deliberately constructed for others in the network besides the self-discloser or sender of the original post to see and to create an impression for the mass audience.

RQ3: What motivates individuals to respond to someone else's Facebook post?

Multiple modes of communication. With many modes of communication available at low cost, it may be that Facebook is one of many communication media used to interact with friends. Various communication media may be selected based on criteria that are important for communicating for a particular goal. The “cues filtered out” (for a review, see Walther & Ramirez, 2010) approach suggests that some modes of communication, such as online media, filter out nonverbal cues and contextual cues. That Facebook lacks these cues may mean that close friends must augment their Facebook communication with other, richer media and face-to-face interaction, depending on their needs. Furthermore, the frequency and processes of communication may change based on the level of intimacy with a particular partner, with more channels of communication chosen for use with closer friends (Haythornthwaite & Wellman, 1998). Close relationships are characterized by more self-disclosure, higher levels of intimacy, frequent interaction and greater emotional expression (Jourard & Lasakow, 1958; Prager, 1995). A variety of modes of communication can be adapted to express the emotions of close friends who may be separated, for example, by work schedules or physical location and time zones. A study of college students’ use of Facebook found participants expected their close friends to use additional modes of communication to maintain the relationship, including face-to-face, but Facebook alone was adequate to maintain less close relationships with acquaintances and casual friends (Bryant & Marmo, 2009).

The speed and synchronicity of communication varies between the different modes of communication. For example, the Internet chat feature is synchronous and email may be synchronous or asynchronous depending on whether both partners are

online and responding to each other immediately or if there is a delayed response. The social information processing theory (Walther, 1992) suggests that communicators will use whatever resources are available to interact with each other. Thus, if face-to-face is impossible, other means of communication will be adapted to facilitate interaction and support the relationship. Furthermore, the frequency and processes of communication may change based on the level of intimacy with a particular partner, with more channels of communication chosen for use with closer friends (Haythornthwaite & Wellman, 1998). If the response time associated with online communication is too slow, additional channels of communication may be sought for satisfying urgent communication goals. Thus computer mediated communication, including Facebook, complements face-to-face and other modes of communication for relationships depending on the needs of the partners and the closeness of the relationship.

Close friends may interact with status updates on Facebook, through Internet chat features, by phone and face-to-face, while acquaintances may use only one mode of communication. For example, high school acquaintances, many years subsequent to graduation, may use Facebook alone for interaction with each other. Online communication may serve to connect these individuals, increasing their involvement with each other, activating an acquaintanceship that may otherwise have deteriorated to latency (Haythornthwaite, 2002). The relatively impersonal contact provided by Facebook may be sufficient for maintaining a relationship when there is low motivation to communicate. Thus Facebook may function as the sole means for acquaintances to maintain weak ties in the social network.

RQ4: When are individuals more likely to communicate through multiple modes of communication?

Summary

This review of the literature sets forth the reasoning behind the data that I will gather and the hypotheses that I will test in this Facebook study. I will expect to find support for previous theories that have been developed and tested in a face-to-face context. I will also expect to find areas in which Facebook communication differs from face-to-face communication. My hope is to better understand the processes of intimate communication that are occurring online.

List of Hypotheses

Self-Discloser.

Basic model of self-disclosure.

H1: On Facebook, self-disclosure, in general, is positively correlated with Change in Intimacy.

H1a: On Facebook, Self-Disclosure Attitude is positively correlated with Change in Intimacy.

H1b: Self-disclosure of Positive Affect is positively correlated with Change in Intimacy.

H1c: Self-disclosure of Negative Affect is positively correlated with Change in Intimacy.

H2: A partner's response in the form of a self-disclosure will predict higher level of Change in Intimacy than a trivial response (i.e. "like") or a non-self-disclosing comment.

Additional hypotheses for the interpersonal process model of intimacy.

H3: Self-disclosure, in general, is positively correlated with Perceived Partner Responsiveness toward those who respond

H3a: Self-disclosure Attitude is positively correlated with Perceived Partner Responsiveness toward those who respond.

H3b: Self-disclosure of Positive Affect is positively correlated with Perceived Partner Responsiveness toward those who respond.

H3c: Self-disclosure of Negative Affect is positively correlated with Perceived Partner Responsiveness toward those who respond.

H4: Partner's self-disclosure response will predict greater Perceived Partner Responsiveness to the self-discloser than a trivial response (i.e. "like") or a non-self-disclosing comment.

H5: Perceived Partner Responsiveness is positively correlated with Change in Intimacy.

H6: Among the variables tested, Perceived Partner Responsiveness is the most important predictor of Change in Intimacy.

H7: Perceived Partner Responsiveness mediates the relationship between self-disclosure and Change in Intimacy.

Gender.

H8a: Women will report greater self-disclosure than men.

H8b: Women will report greater Perceived Partner Responsiveness than men.

H8c: Women will report more closeness with their respondents than men will report with their respondents.

H8d: Women will report greater Change in Intimacy as a result of self-disclosure than men.

Attachment orientation.

H9a: There is a positive correlation between secure attachment orientation and Perceived Partner Responsiveness as a result of self-disclosure.

H9b: There is a positive correlation between secure attachment orientation and Change in Intimacy as a result of self-disclosure.

H9c: There is a negative correlation between avoidant attachment orientation and Perceived Partner Responsiveness as a result of self-disclosure.

H9d: There is a negative correlation between avoidant attachment orientation and Change in Intimacy as a result of self-disclosure.

H9e: There is a positive correlation between ambivalent attachment orientation and Perceived Partner Responsiveness as a result of self-disclosure.

H9f: There is a positive correlation between ambivalent attachment orientation and Change in Intimacy as a result of self-disclosure.

Self-Monitoring.

H10a: High self-monitors self-disclose at higher levels than low self-monitors.

H10b: High self-monitors report higher levels of Perceived Partner Responsiveness than low self-monitors.

H10c: High self-monitors report higher levels of Change in Intimacy as a result of self-disclosure than low self-monitors.

H10d: High self-monitors report more Frequent Facebook participation than low self-monitors.

H10e: High self-monitors report higher levels of Closeness to their responders.

H10f: High self-monitoring is positively correlated with an intended audience of “everyone” and negatively correlated with an intended audience of “no one”.

H10g: High and low self-monitors differ in their relationship with the responder to a self-disclosure status update, with closer friends responding to High self-monitors than to Low self-monitors.

Frequent Facebook Participation.

H11a: Frequent Facebook participation is positively correlated with Self-Disclosure on Facebook.

H11b: Frequent Facebook participation is positively correlated with Change in Intimacy.

Closeness.

H12: Closeness with the respondent will be positively correlated with Change in Intimacy as a result of self-disclosure.

Partner Relationship Type.

H13a: Perceived Partner Responsiveness is greater when responder is a parent or romantic partner, followed by best friend, followed by acquaintance or other family member.

H13b: Change in Intimacy is greater when responder is a parent or romantic partner, followed by best friend, followed by acquaintance or other family member.

Expectation - Confirmation.

H14: Partner's response confirming the self-discloser's expectation of a positive response will be positively associated with Change in Intimacy.

H14a: Partner's response confirming the self-discloser's expectation of a positive, emotionally supportive response will be positively associated with Change in Intimacy.

H14b: Partner's response confirming the self-discloser's expectation of a positive, instrumental response will be positively associated with Change in Intimacy.

Expectation - Violation.

H15a: Violation of the self-discloser's expectations after posting to Facebook will be positively correlated with Change in Intimacy if the responder reward valence is positive and the response behavior is positive.

H15b: Violation of the self-discloser's expectations after posting to Facebook will be negatively correlated with Change in Intimacy if the responder reward valence is positive and the response behavior is negative.

H15c: Violation of the self-discloser's expectations after posting to Facebook will be negatively correlated with Change in Intimacy if the responder reward valence is negative and the response behavior is negative.

H15d: Violation of the self-discloser's expectations after posting to Facebook will be positively correlated with Change in Intimacy if the responder reward valence is negative and the response behavior is positive.

Target .

H16: Women are more often the intended target of self-disclosures than are men.

H17: Women are more likely than men to respond to status updates.

H18a: High self-monitors more likely to believe they are the target of others' self-disclosures than low self-monitors (confidence).

H18b: High self-monitors show a greater concern for appropriateness in their Target Responsiveness than low self-monitors.

H18c: High self-monitors respond to others more frequently than low self-monitors on Facebook.

H19: Confidence that one is the target is positively correlated with Target Responsiveness.

H20: Appropriateness is positively correlated with Target Responsiveness.

Research questions.

RQ1: Is Change in Intimacy predicted by an interaction between Avoidance and Ambivalence?

RQ2: When do individuals believe they are the target of a Facebook self-disclosure?

RQ3: What motivates individuals to respond to someone else's Facebook post?

RQ4: When are individuals more likely to communicate through multiple modes of communication?

Method

Overview

The model in Appendix A represents the design for the study. In this retrospective design, participants first answered questions in an online survey about individual differences in dispositions, typical behaviors on Facebook and attitudes about Facebook. Next participants were asked to analyze a past experience in which they posted a self-disclosure as a status update on the personal Facebook profile page, along with the responses of up to three friends. Participants were then asked to respond to questions concerning the specific self-disclosure on Facebook and subsequent feelings about respondents.

Retrospective data is often criticized for being subject to the vagaries of human memory. But because participants were asked to access data from their own Facebook profile Wall, they reviewed actual posted status update messages and the actual responses. This should have facilitated more accurate memory recall than relying on memory alone. Furthermore, it may be ethically more responsible to rely on actual experiences of past Facebook communication than to set up a fake situation in the laboratory designed to elicit responses from an unknowing audience. Finally, to choose a real world, actual self-disclosure that elicited natural responses from friends is more ecologically valid than to manufacture a self-disclosure through a laboratory design.

The study utilized a multiple predictor model which was analyzed using regressions. The model examined the relationship between an individual's self-

disclosure posted to the Facebook profile Wall as a status update and any resulting perception of change in intimacy with a responder. Individual and dispositional characteristics may influence when and how much an individual is likely to self-disclose, thus impacting change in intimacy. In the study, these variables included *gender* (Dindia & Allen, 1992), *attachment* (Simpson, Rholes & Phillips, 1996; Grabill & Kerns, 2000), *self-monitoring* (Snyder, 1974) and frequent Facebook posting (*Frequent Facebook participation*). Predictors of intimacy with the partner also included the variables *perceived partner responsiveness* (Reis & Shaver, 1988), *relationship type* and *response type*. Expectancy violation theory (Burgoon, 1993) was tested in the study through analysis of expectations about response confirmation or, in the case of unexpected responses, the violator's reward valence and response behavior and the resulting impact on change in intimacy.

Participants

This study was conducted in two phases with the first phase intended to test the reliability of scales, the completion rate of the survey, and the accuracy of the items in the survey. Phase 1 consisted of 69 undergraduate students who volunteered to participate in the online study offered in classes in the Department of Communication Studies at a large Midwestern university. Scales generally had acceptable reliability as measured by the internal consistency Cronbach's alpha of .70 or better. Scales derived from sample data exhibited generally normal distribution without excessive skew or kurtosis. The scales were thus deemed adequate for use in the testing of the data and in the accumulation of meaningful results. With minor necessary modifications to the Phase 1 survey, Phase 2 data was collected two months later. From the same university

a sample of an additional 205 undergraduates volunteered to participate in the Phase 2 online survey. A *t*-test (Table 8) of the data collected in Phase 1 and Phase 2 found no significant differences between the two groups. Reliability, skew and kurtosis tests revealed results similar to those of Phase 1 data. Therefore the samples were combined for most hypothesis tests. Exceptions to the combining of the data collected in the two phases of the study include tests of additional variables that were added to Phase 2. Analyses of exclusively Phase 2 study data are identified in reported results.

The combined data included a sample size of 274 undergraduate participants who completed the survey and were enrolled in communication classes at the University of Minnesota, Twin Cities. All participants were at least age 18 and owned a Facebook profile. The age of participants in this study ranged from 18 to 45, with a mean age of 22.18 (SD = 4.05). Current Facebook demographic statistics shows that 35% of Facebook users in the US are between the ages of 18-25 and the young adult population constitutes the largest proportion of the US Facebook population (<http://www.kenburbary.com/2011/03/facebook-demographics-revisited-2011-statistics-2/>). The sample consisted of 167 females (61% of sample), 104 males (38% of sample), and 3 (1%) individuals who did not respond to the gender question. The gender balance on Facebook is 54% female and 46% male (<http://www.kenburbary.com/2011/03/facebook-demographics-revisited-2011-statistics-2/>). Therefore the sample in the current study reasonably reflects the age and gender distribution of the younger US Facebook population.

Ethnicities included 232 Caucasian (84%), 32 Asian (12%), 10 African American (4%). Other ethnicities represented included: 6 Hispanic, 3 American Indian, one Egyptian, four African, one Arab, and one individual who chose not to answer the question. United States census population analysis of the proportion of ethnicities in the United States is 72.4% Caucasian, 12.6% black, and 4.8% Asian, according to 2010 census information (<http://quickfacts.census.gov/qfd/states/27000.html>). The proportion of Caucasian and Asian participants in the current study is higher than the overall national average, and the proportion of black participants in the study is lower than the overall national average. However, the ethnicity proportions in the study reflect the population of the Midwestern state in which the sample was taken (<http://quickfacts.census.gov/qfd/states/27000.html>).

Participants on average had 502 (SD = 307.78) Facebook friends. Quartiles were as follows: 25% = 272 friends, 50% = 463 friends, 75% = 656 friends. The average number of Facebook friends is 246 to 272 friends (Walther & Ramirez, 2010) while the average number of Facebook friends in this study is 502 friends, thus the study participants have more Facebook friends than average. However, statistics for friend averages are based on the entire population of Facebook while this study is focused exclusively on college students, who may be more active on Facebook than the population as a whole. In Phase 2 a question was added to assess whether participants were in a romantic relationship. The sample was almost equally divided by those who were in a romantic relationship (106 participants, 51.7%) and those who were not in a romantic relationship (99 participants, 48.3%).

Procedures

Selection criteria for participation. A copy of the consent form and the questionnaire may be found in Appendix B. Participants were invited to complete an online survey and were provided with a link to the survey website. After agreeing to the terms of the consent form, they identified their sex, age, ethnicity and whether or not they had a Facebook profile. Participants who were under age 18 or who did not have a Facebook profile were informed they did not meet the survey requirements and were exited from the survey.

Survey Format. Eligible participants completed a series of scales and questions in approximately the first half of the online survey. The second half of the survey required the participant to review his or her Facebook profile page and find a recent example of a self-disclosure status update with at least three responses. The participant was then asked to copy and paste the self-disclosure and the accompanying responses to the survey, and to answer a series of questions.

Instruments

In general, scales had acceptable levels of validity, reliability, normal shape and normal distribution thus ensuring that measurements relate as closely as possible to the constructs under analysis and thus meet the assumptions that data are normally distributed and are thus suitable for further parametric testing. In the following explanation of the variables, it should be assumed that independent variables are normally distributed, symmetric without excessive skew (defined as less than -1 or greater than +1), and without excessive kurtosis (defined as less than -3 or greater than +3), unless specifically addressed. Full disclosure of the properties of the variables can

be found in Table 7 where independent and dependent variables are listed with details of their respective scale and item properties and statistics. The number of sample participants who completed the scale, number of items in the scale, potential values, actual minimum and maximum values selected by participants, mean, standard deviation, Cronbach's alpha, skewness and kurtosis values are presented for each scale.

Independent Variables for Self-Discloser. Self-disclosure is an independent variable that predicts feelings of intimacy between an individual and a partner (Reis & Shaver, 1988). Other independent variables include perceived partner responsiveness, partner response type, gender, attachment, self-monitoring, frequent Facebook participation, and perceived relationship type. Perceived expectancy confirmation or violation are also variables hypothesized to affect intimacy in Facebook relationships.

Self-Disclosure Index. The level of self-disclosure in which participants engage with their friends on Facebook was measured by an adaptation of the Self-Disclosure Index (Miller, Berg, & Archer, 1983), which consisted of 10 items adapted for this study. This index measured the participant's attitude about and comfort with self-disclosing on Facebook. For the *Self-Disclosure Index (SD Attitude)* participants selected from a 5-point Likert scale ranging from 1 (*not at all comfortable*) to 5 (*extremely comfortable*). Examples from the SD Attitude: "*Please rate your level of comfort with posting the following information on Facebook*":

"what I like and dislike about myself"

"things I have done which I am proud of"

"things I have done which I feel guilty about."

Cronbach's alpha for the 10-item scale was a satisfactory .85. This scale was normally distributed around the mean of 2.48 ($SD = 0.72$). The mean for the sample, 2.48, was slightly below the scale average, 3.0, indicating participants, on average, were slightly reticent in their attitude about self-disclosing in a Facebook status update. Items were averaged and combined into a composite variable, *SD Attitude*.

Self-Disclosure of Positive Affect and Self-Disclosure of Negative Affect.

After selecting their self-disclosure status update to include in the study, participants were instructed to self-report their depth of self-disclosure expressed in the status update by responding to the following items that measure emotional content, adapted from Snell, Miller, & Belk (1988): "*To what extent did you self-disclose*": *private information; happiness; jealousy; anxiety; anger; fear*. A 10-point Likert scale (1 = *not at all*, 10 = *a great deal*) was attached to each item. Each of these descriptive words indicated emotional content.

Self-disclosure of Positive Affect. Happiness is distinctly different from private information and the other emotions in this list because, of the items listed above, happiness alone may be indicative of energy, cheerfulness, or enthusiasm. *Self-disclosure of positive affect* was thus measured by the "*happiness*" item. The mean for the single-item measure was 6.28 ($SD = 3.34$), with normal distribution. The mean was higher than the scale mean of 5.0 on the 10-point Likert scale indicating participants, on average, tend to post self-disclosure status updates on Facebook that express positive affect, indicating their status updates include a greater than average expression of happiness.

Self-disclosure of Negative Affect. The scale for self-disclosure of negative affect contained ratings of *private information, jealousy, anxiety, anger* and *fear*, measuring the degree to which the self-disclosure status update revealed facts, vulnerabilities and emotions indicative of negative affectivity. A 10-point Likert scale (1 = *not at all*, 10 = *a great deal*) was attached to each item. These five items were averaged into the self-disclosure of negative affect scale (*SD Negative Affect*). This scale had a mean of 2.65 ($SD = 1.55$) and demonstrated a right skew of 1.36 indicating participants were more likely to select low ratings on the items. The 5-item *Self-Disclosure of Negative Affect* scale achieved an acceptable Cronbach's alpha of .71. The mean of 2.64 is lower than the average possible scale rating of 5.0 indicating participants, on average, self-disclosed a low level of emotions related to negative affectivity in their self-disclosure status update.

Perceived Partner Responsiveness. Measures of perceived partner responsiveness were adapted from studies of the interpersonal process model of intimacy (Laurenceau, Barrett, & Pietromonaco, 1998; Reis & Shaver, 1988). The "*Perceived Partner Responsiveness (PPR)*" variable is a combination of the three components of Reis and Shaver's (1988) definition of Perceived Partner Responsiveness from their interpersonal process model of intimacy: understanding, validation and caring. From the self-discloser's point of view, understanding is defined as the cognitive component indicating the perception that the partner comprehends the meaning of the self-discloser's message. Validation is defined as the perception that the partner accepts the discloser as a worthwhile person. Caring is defined as the perception that supportive warmth is communicated by the partner leading the self-

discloser to feel “cared for”. Responses were assessed for three items, *understanding*, *validation* and *caring*, by a 5-point Likert scale, with 1 (*not much*) and 5 (*a great deal*). Principal components factor analysis indicated the three items were explained by one underlying latent variable. The three items had an acceptable Cronbach’s alpha of .89 for Respondent 1 and thus were averaged and combined into a composite variable, *Perceived Partner Responsiveness (PPR)*. The scale for Respondent 1 ($M = 3.84$, $SD = 1.04$) was normally distributed. The sample mean, 3.84, is greater than the Likert scale mean of 3.0, indicating participants perceived their partners, on average, as responsive. See Table 7 for *Perceived Partner Responsiveness* scale analysis for Respondent 2 and Respondent 3.

Attachment. Attachment orientation was measured by the *Adult Attachment Questionnaire (AAQ)* (Simpson, Rholes, & Phillips, 1996). Instructions: “*Indicate how you typically feel toward romantic (dating) partners in general.*” The *AAQ* utilizes a 7-point Likert scale with 1 indicating “*I strongly disagree*” and 7 indicating “*I strongly agree.*” The *AAQ* consists of 17 items in which eight items measure the attachment dimension of Avoidance and nine items measure the attachment dimension of Ambivalence. Higher scores on both scales reflect higher avoidance and/or higher ambivalence. Lower scores on both scales reflect higher levels of attachment security. Examples of statements from the scale that measures avoidance: “*I find it difficult to trust others completely*”, “*I’m nervous whenever anyone gets too close to me*”, and “*Others often want me to be more intimate than I feel comfortable being.*” For the 8-item Avoidant attachment scale, there was an acceptable alpha of .80, thus items were averaged into a composite variable, *Avoidance*. This scale had a mean of 3.43 ($SD =$

1.00) and was normally distributed. The mean, 3.43, is somewhat below the Likert scale mean of 3.5 indicating participants were unlikely, on average, to have an avoidant attachment orientation.

Examples of statements from the scale that measures Ambivalence: “*I often worry that my partner(s) don’t really love me*”, “*I often want to merge completely with others, and this desire sometimes scares them away*”, and “*I usually want more closeness and intimacy than others do.*” Reliability testing for the 9-item ambivalent attachment scale indicated an acceptable Cronbach’s alpha of .81, thus items were averaged into a composite variable, *Ambivalence*. This scale had a mean of 3.46 ($SD = 1.04$) and was normally distributed. The mean, 3.46, is close to the Likert scale mean of 3.5 indicating participants were unlikely, on average, to have an ambivalent attachment orientation.

Self-Monitoring. The *18-Item Measure of Self-Monitoring* (Gangestad & Snyder, 1985b) measures the participant’s classification as either high self-monitor or low self-monitor. Participants indicate “*true*” or “*false*” to each item in the scale which is keyed for high self-monitoring. Higher scores on the *18-Item Measure of Self-Monitoring* indicate higher probabilities of belonging to the high self-monitoring class (Gangestad & Snyder). Consistent with the scoring key provided by Gangestad and Snyder and consistent with scale classification procedures (Gangestad & Snyder, p. 339), participants were classified as high self-monitors if they scored 11 or greater on the scale, indicating more than 50% probability of belonging to the high self-monitor class. Examples of items that indicated high self-monitoring: “*I guess I put on a show to impress or entertain others*”, “*I may deceive people by being friendly when I really*

dislike them”, and *“I have considered being an entertainer.”* Examples of items that indicated low self-monitoring: *“I find it hard to imitate the behavior of other people”*, *“I have trouble changing my behavior to suit different people and different situations”*, and *“I feel a bit awkward in public and do not show up quite as well as I should.”*

For the current sample, the 18-item scale achieved an internal consistency Cronbach’s alpha of .73 with normal distribution. The mean of .51 ($SD = 0.50$) indicated almost an equal number of participants were classified as high self-monitors as low self-monitors.

Closeness. Survey items measuring closeness were adapted from the *Miller Social Intimacy Scale (MSIS)* (Miller & Lefcourt, 1982). Six items were selected from the original scale which measure the level of intimacy currently experienced with a partner, through questions about the intensity of the relationship. Examples:

“How close do you feel to him/her most of the time?”

“How important is it to you that he/she understands your feelings?”

“How important is it to you that he/she be encouraging and supportive to you when you are unhappy?”

Responses were indicated on a 10-point Likert scale, with values between 1 (*not much*) and 10 (*a great deal*). The adapted six item measure had Cronbach’s alpha of .97 for Respondent 1, and were averaged and combined into the composite variable, *Closeness*. The scale mean was, $R1, M = 5.86$ ($SD = 2.70$). The scale was normally distributed. The mean was greater than the Likert scale mean of 5.0 indicating participants tended, on average, to feel they had a somewhat close relationship with

those who responded to the self-disclosure status update. See Table 7 for *Closeness* scale analysis for Respondent 2 and Respondent 3.

Frequent Facebook Participation. Frequent Facebook participation was measured by assessing the participant's degree of positive attitude toward Facebook. Participants were asked to respond, on a 5-point Likert scale from 1 (*strongly disagree*) to 5 (*strongly agree*) to a list of items concerned with the risks and gratifications of Facebook participation. The original scale included 17 items. Using internal consistency Cronbach's alpha, items were deleted, and principal components factor analysis indicated the five remaining items were explained by one underlying latent variable. A composite scale was developed with the five items:

1. *I am comfortable expressing my personal thoughts and feelings on Facebook.*
2. *Updating my status on my Facebook profile Wall is important to me.*
3. *I post status updates more frequently than most of my friends.*
4. *I post on a wide variety of topics in my status updates.*
5. *I typically post status updates more than once a week.*

The five-item measure had Cronbach's alpha of an acceptable .85, and the averaged composite variable, *Frequent Facebook Participation (FF)*, was created. This scale had a mean of 2.51 ($SD = 0.99$) and the scores were normally distributed. The mean, 2.51, is less than the Likert scale mean of 3.0 indicating the participants, on average, indicated they were consider themselves somewhat less frequent participators on Facebook than the average person.

Expectancy Confirmation. Participants may have had certain expectations when they posted their message and the questions gathered data on these expectations

and received responses by first asking, “*What type of message were you expecting from this friend?*” Participants selected from a list of possible responses. Then another question asked, “*How did this person respond to you?*” The list was repeated, except for the item, “*I did not expect this person to respond*”, and participants could select the description of the response received. Expectation choice was coded as one of the following: *emotional support, instrumental support, neutral response, unsupportive response* (negative) or *other response*. Selection of any of the following was coded as positive expectation:

1. *expression of caring, encouragement or empathy*
2. *advice*
3. *expression of confidence or respect*
4. *friendship and liking*
5. *offers of help, assistance or resources*

Each of these expressions is evidence of support, either emotional (items 1, 3, and 4) or instrumental (2, 5). A positive emotionally supportive expectation and response was reflected by the participant’s selection of any of the following in response to the questions, “*What type of message were you expecting from this friend?*” and “*How did this person respond to you?*” Both questions were in regards to the participant’s self-selected self-disclosure status update that was analyzed in this survey:

1. *expression of caring, encouragement or empathy*
2. *expression of confidence or respect*
3. *friendship and liking*

Instrumental support expectations and responses included the following in response to the questions, “*What type of message were you expecting from this friend?*” and “*How did this person respond to you?*” Both questions were in regards to the participant’s self-selected self-disclosure status update:

1. *advice*
2. *offers of help, assistance or resources*

Table 1 summarizes the frequency and percentage of each possible response along with an indication of how the response was categorized. (Survey participants were not given Type of Response classification information).

Table 1

Expectancy Confirmation: Response List, Type, Frequencies

Item	R1	R1	R2	R2	R3	R3
Response	<i>n</i> (%)					
	expect	receiv	expect	receiv	expect	receiv
1. <i>expression of caring, sympathy or empathy (ES)</i>	54 (21%)	87 (34%)	54 (22%)	76 (31%)	45 (22%)	65 (31%)
2. <i>advice (IS)</i>	6 (2%)	8 (3%)	6 (3%)	10 (4%)	3 (1%)	6 (3%)
3. <i>expression of confidence or respect (ES)</i>	6 (2%)	9 (4%)	9 (4%)	9 (4%)	9 (4%)	12 (6%)
4. <i>negative reaction such as criticism or sarcasm (negative)</i>	12 (5%)	17 (7%)	8 (3%)	14 (6%)	7 (3%)	12 (6%)
5. <i>friendship and liking (ES)</i>	55 (21%)	75 (29%)	56 (23%)	72 (30%)	47 (23%)	50 (24%)
6. <i>offers of help, assistance or resources (IS)</i>	9 (3%)	4 (2%)	3 (1%)	3 (1%)	3 (2%)	4 (2%)
7. <i>neutral or unemotional (neutral)</i>	14 (5%)	38 (15%)	13 (5%)	32 (13%)	22 (11%)	42 (20%)
8. <i>Other</i>	11	21	5	27	6	17

	(4%)	(8%)	(2%)	(11%)	(3%)	76 (8%)
9. <i>I did not expect this person to respond</i>	97 (37%)		87 (36%)		62 (30%)	
<i>TOTALS</i>	264	259	241	243	204	208

Note. Percentages are rounded up to the nearest whole number. ES = emotional support; IS = instrumental support. Expect = participant expectation; receive = the response the participant received.

Expectation. As shown in Table 1, participants indicated, in a forced choice list, which item they expected from the list of possible responses. Participants also indicated, again in a forced choice list, which item from the list of possible responses they received from the responder, regardless of whether it was expected or unexpected. Frequency analysis shows that the highest percentage of responses expected and received were positive, emotionally supportive responses. At least 30% of the responses were unexpected.

Received response. Frequencies reported in the “Received” column in Table 1 report both expected and unexpected responses received. Therefore, when the indicated expectation identically matched the received response for the individual participant, this was considered an expectancy confirmation. For purposes of analysis, positive expectancy confirmations were coded “1” and all other responses that did not match positive expectations were coded “0”.

Expectancy Violations. A participant may have had an intended target of the message. But any Facebook friend may have seen the status update and opted to respond. If the response was unexpected, it was defined as an expectancy violation. One aspect in which Facebook is different from face-to-face encounters is that even with privacy controls in place, it is still unknown exactly who is receiving or paying attention to any message. Intended recipients may not read a particular status update, and unintended recipients may read a particular status update. This survey was designed to assess participants' feelings about receiving responses from unintended recipients. Participants were instructed to answer a specific list of questions when they reported unexpected responses. Groups were subsequently created based on the combined results to questions regarding the evaluation of the response in terms of positive or negative reward valence of the responder and the positive or negative valence of the response (behavior) itself.

According to expectancy violation theory (Burgoon & Hale, 1988) there are two components to expectancy violation. The positive or negative reward valence of the responder is the first component. Reward valence is the degree to which the participant finds interacting with the respondent to be positive greater than the degree to which the participant finds interacting with the respondent to be negative. Personal characteristics of the responder are judged by the participant and are assessed in the survey with two positive valence and two negative valence items ranked by the participant on 5-point Likert scales (1 = *strongly disagree* and 5 = *strongly agree*). A positive reward valence item is, "*He/she is a rewarding person to interact with.*" These item rankings were scored as positive integers with scores ranging from 1 to 5. A negative reward valence

item is, “*I don’t really enjoy my relationship with this person.*” Negative reward valence item rankings were scored as negative integers with scores ranging from -1 to -5. The participant’s assessment of *Valence* was then calculated by summing the positive valence answers and the negative valence answers, creating a new 11-point scale which ranged from -10 to +10 representing expectancy violation reward valence for unexpected response for each of the three respondents.

The positive or negative behavior interpretation and evaluation is the second component. For purposes of this study the behavior is defined as the response to the status update. Behavior interpretation and evaluation is the degree to which the participant finds the response itself to be positive greater than the degree to which the participant finds the response itself to be negative. The response is interpreted and evaluated based on social norms and personal preferences by the participant (Burgoon & Hale, 1988) and is assessed in the survey with two positive behavior and two negative behavior statements ranked by the participant on 5-point Likert scales (1 = *strongly disagree* and 5 = *strongly agree*). A positive behavior item is, “*This person’s response was something I would rate very favorable*”. Positive behavior item rankings were scored as positive integers with scores ranging from 1 to 5. A negative behavior item is, “*This response was something I would rate very unfavorable*”. The negative expectancy violation scale also included items such as: “*I don’t really enjoy my relationship with this person*”; and “*I don’t care about this person very much*”. When a respondent sends an unexpected negative message and when the respondent is disliked by the Facebook self-discloser, feelings of intimacy are predicted to decrease.

Negative behavior item rankings were scored as negative integers with scores ranging from -1 to -5. The participant's assessment of *Behavior* was then calculated by summing the positive behavior ratings and the negative behavior ratings, creating a new 11-point scale which ranged from -10 to +10 representing expectancy violation behavior for unexpected response for each of the three respondents.

These summed rankings revealed a positive or negative respondent Valence and a positive or negative respondent Behavior. Four groups were created for further analysis: positive Valence and positive Behavior, positive Valence and negative Behavior, negative Valence and negative Behavior, and negative Valence and positive Behavior. Neutral assessments (0 scores) were classified as positive based on preliminary analysis that found neutral assessments to be similar to positive assessments in terms of increasing feelings of intimacy on Facebook. Further discussion, along with tables elaborating on neutral assessment classification, can be found in the Results section of this dissertation.

Relationship Type. Participants were asked to identify the relationship type shared with each respondent. Categories included: romantic partner, best friend, friend, acquaintance, parent, sibling, other family. Table 2 shows the number of participants and percentage of the sample selecting each relationship type for the three respondents. The three most frequently selected relationship types was "friend", followed by "acquaintance", followed by "best friend".

Table 2

Relationship Type Frequency and Percentage by Respondent

Rel Type	R1 <i>n</i>	R1%	R2 <i>n</i>	R2 %	R3 <i>n</i>	R3 %
R	13	5%	9	4%	8	4%
BF	37	14%	33	14%	31	15%
F	149	58%	122	51%	103	50%
A	35	14%	47	20%	42	20%
P	3	1%	6	3%	2	1%
S	5	2%	9	4%	9	4%
OF	17	7%	14	6%	11	5%
TOTALS	259		240		206	

Note. Percentages were rounded to nearest whole number.

Rel Type = Relationship Type; R = romantic partner; BF = best friend; F = friend; A = acquaintance; P = parent; S = sibling; OF = other family; R1 = Respondent 1; R2 = Respondent 2; R3 = Respondent 3.

Response Type. Participants were asked to describe the response received by selecting one of the following three categories: self-disclosure, “like”, other comment.

Table 3 shows the number of participants and percentage of the sample selecting each response type for the three respondents. The most frequent selected response type was “other comment”. Approximately 20%-25% of the responses to participants’ status updates were self-disclosures.

Table 3

Response Type Frequency and Percentage by Respondent

Response	R1 <i>n</i>	R1 %	R2 <i>n</i>	R2 %	R3 <i>n</i>	R3 %
SD	65	25%	52	22%	42	20%
“Like”	47	18%	36	15%	45	22%
Comment	149	57%	153	64%	120	58%
TOTALS	261		241		207	

Note. Response = response type; SD = self-disclosure; Comment = other comment.

Independent Variables for Target.

In addition to studying the self-discloser role, participants were also asked to assume one of their Facebook friends is the self-discloser.

Confidence. Participants were asked questions regarding their confidence that they were the target:

“When a friend posts a personal, self-disclosing status update, I know if I am one of the people specifically intended to comment on that update.”

“When a friend posts a personal, self-disclosing status update, I know if I am one of the people specifically intended to comment on that update.”

“When a friend posts a personal, self-disclosing status update, I know if I am one of the people specifically intended to press the “like” button on that update.”

These three items assessing confidence were measured by a Likert scale, with values between 1 (*not at all sure*) and 5 (*absolutely certain*). These items were averaged into a composite variable, *Confidence*. The 3-item scale had Cronbach’s alpha of .86. The scale mean was 2.87 ($SD = 1.04$) and scores were normally distributed around the mean. The mean, 2.87, is slightly less than the Likert scale mean of 3.0 indicating participants were, on average, slightly unsure that they are the intended target of any particular Facebook self-disclosure.

Responsiveness. Responsiveness to the status updates of others was assessed by asking participants to respond to a series of statements such as, *“I respond more often than most people”*, *“I enjoy responding to others’ status updates”*, and *“I typically respond to acquaintances’ status updates.”* Ratings were selected from a 5-point Likert scale with range from 1 (*strongly disagree*) to 5 (*strongly agree*). Questions regarding responsiveness were added to the questionnaire after Phase 1 data were collected, thus only Phase 2 participants who indicated they respond to others’ personal status updates ($n = 160$) are used in the analysis. Another question in this scale focused on the number of status updates responded to each week, and Table 4 displays the frequencies and percentages. For participants who respond to others’ personal status updates on

Facebook, the largest percentage of participants (32%) reported that they respond to four or more status updates each week, on average. Items were averaged and combined into a composite responsiveness scale consisting of five items. The 5-item scale had an alpha of .72, mean of 3.09 ($SD = 0.60$) and with normal distribution. The sample mean, 3.09, is slightly above the Likert scale mean of 3.0 indicating participants, on average, tend to respond when others update their status on Facebook.

Table 4

Responses to Status Updates per Week

SU/week	<i>n</i>	Percentage
0	9	6%
1	19	12%
2	42	26%
3	39	24%
4 or more	51	32%
Total	160	

Note. SU/week = personal status updates per week.

Expected Gender Difference Response (EGDR). Gender may be associated with responsiveness and interaction on Facebook. Questions in the survey that pertain to EGDR include, “*I respond more often to females’ status updates than to males’ status updates*”, “*I receive more comments to my status updates from women than men*”, and “*I prefer to connect with my female friends on Facebook than with my male*

friends". Participants were asked to rate these statements on a 5-point Likert scale with range from 1 (*strongly disagree*) to 5 (*strongly agree*). Reliability analysis for the 3-item scale indicated an alpha of .71. Items were averaged into the composite variable, "EGDR". This 3 item scale had a mean of 3.05 ($SD = 0.89$) and was normally distributed. The sample mean of 3.05 was slightly greater than the Likert scale mean of 3.0 indicating a slight tendency for participants to interact with women rather than men on Facebook.

Motivation. Motivation for self-disclosure on Facebook was assessed by asking participants to indicate their three strongest motivations, in order, from a list generated from a study of college students (Bryant & Marmo, 2009). Examples from the list of motivations include: "*to amuse myself*", "*to vent when I am frustrated*", and "*to make friends laugh by joking and posting funny comments*". Frequencies for each item and percentage rank for first choice items are displayed in Table 5.

Table 5

Motivations to Post a Status Update, Frequency and Percentage

Frequency for <i>n</i> =	Motivation
270 responses / %	
88 / 33%	To make friends laugh by posting jokes and funny comments
31 / 12%	To amuse myself
5 / 2%	To vent when my day isn't going well or I'm frustrated
16 / 6%	To see who responds
2 / 1%	To provoke friends into talking to me
44 / 16%	To share good or bad news with friends
33 / 12%	Posting my news so friends stay up-to-date on my life
14 / 5%	To keep in touch with friends who live far away
2 / 1%	Posting that I am sad or worried to seek social support
19 / 7%	Posting a status update because I want my thoughts to be public
5 / 2%	Posting poetry or personal notes
11 / 4%	Other

Note. Other responses included: no status updates; event promoter; random stuff (sic); sports; to say happy holidays or thank you for birthday wishes (sic); work; when I'm with friends, to be funny; when I'm doing something and it brings something to mind.

Dependent Variable

Change in Intimacy. Facebook is a social networking site where interacting with friends is of primary importance. This interaction may be an important aspect of maintaining and enhancing relationships. “*Change in Intimacy*” is thus the dependent variable of interest. Participants were asked to assess their feelings about each respondent after receiving each of up to three responses to the self-disclosing status update. Participants were asked to rate their change in feelings, “*What is your feeling about the quality of your relationship with Person (A, B or C, respectively) after receiving this response?*” By evaluating their relationship after the interaction, participants were asked to estimate the change in intimacy, trust, closeness and reliance in the relationship with implications for how they will relate to this partner in the future.

A 5-point Likert scale ranging from 1 (*less*) to 5 (*more*) was then displayed with these four items: “*intimacy*”, “*trust*”, “*closeness*”, and “*reliance*”. These items were chosen based on Reis, Clark and Holmes’ (2004) definition of intimacy as consisting of connection, responsiveness and dependency. Items were combined into a *Change in Intimacy* scale by averaging item scores for each case based on the participant ratings of the three respondents. Table 5 shows acceptable alpha levels were achieved for the scale for all three respondents. For Respondent 1, the 4-item scale achieved Cronbach’s alpha of .84. The scale mean for R1 was 3.09 ($SD = 0.56$). Similarly, for R2, the scale achieved Cronbach’s alpha of .90. The scale mean for R2 was 3.13 ($SD = 0.68$). For R3, the scale achieved alpha of .93. The scale mean for R3 was 3.03 ($SD = 0.66$). There was kurtosis with a large number of scores peaked at the center of the scale for

each of the three respondents. The histogram graphs, found in Appendix A (Figure A3, Figure A4, and Figure A5, for R1, R2, and R3 respectively) indicated that most participants did not experience a change in their level of intimacy with their Facebook respondent after receiving a response to their self-disclosure. The sample means, 3.09, 3.13, and 3.03 for R1, R2, and R3 respectively were greater than the Likert scale mean of 3.0. This indicates participants, on average, had a slight positive change in intimacy toward those who responded to the participants' self-disclosure status updates.

Data Analysis

Descriptive statistics, frequency analysis, scale statistics and graphing were used to understand the data, order and rank items and create scales. Univariate ANOVA, *F*-tests and one-tailed a priori *t*-tests were used to check for hypothesized mean differences. Post facto analyses used Tukey's HSD or Least Significant Difference (LSD) analysis on one-way ANOVA's. Correlation analysis and regression analysis were used to understand the relationships between and among the independent variables and the dependent variable. An alpha level of .05 was used for all statistical tests.

Summary Tables

In Table 6, each variable studied in this dissertation is listed along with citation details for previously developed and validated measurement instruments, or new questionnaire items that correspond with the variable are listed. Further details can be obtained from the questionnaire itself, found in Appendix C.

Table 6

Table of Variables and Measurement Details

Variable	Measurement/Instrument
Gender	Survey question #1, male/female
Attachment	Adult Attachment Questionnaire (AAQ) (Simpson, Rholes & Phillips, 1996), Likert scale 1 (strongly disagree)-7 (strongly agree) Measures avoidance and ambivalence. Greater attachment security = Lower on both scales. Entire scale in survey in Appendix.
Self-Monitoring	18-Item Measure of Self-Monitoring (Snyder & Gangestad, 1986). Entire scale in survey in Appendix.
Frequent Facebook participation (FF)	Survey questions, section b. Likert scale 1(<i>strongly disagree</i>)-5 (<i>strongly agree</i>) <ol style="list-style-type: none"> 1. I am comfortable expressing my personal thoughts and feelings on Facebook. 2. Updating my status on my Facebook profile Wall is important to me. 3. I post status updates more frequently than most of my friends. 4. I post on a wide variety of topics in my status updates. 5. I typically post status updates more than once a week.
Self-disclosure	<p>A. Self-Disclosure- Motivations to post on one's own Facebook Wall (adapted from Bryant & Marmo, 2009): Select 3 most common motivations, ranking 1 to 3, with 1 being the most likely reason.</p> <ol style="list-style-type: none"> 1. To make friends laugh by joking and posting funny comments 2. To amuse myself 3. To vent when my day isn't going well or I'm frustrated 4. To see who responds 5. To provoke friends into talking to me 6. To share good or bad news with friends 7. Posting my news so friends stay up-to-date on my life 8. Sharing poetry or personal notes I wrote 9. To keep in touch with friends who live far away 10. Posting that I am sad or worried to seek social support 11. Posting to my Wall because I want my comment to be public 12. To start drama or cause problems 13. To seek revenge o someone who I am mad at 14. Other (Explain _____) <p>B. Self-Disclosure Index (adapted from Miller, Berg & Archer, 1983) measures level of comfort with posting on Facebook,</p>

Likert scale 1 (*not at all comfortable*) to 5 (*extremely comfortable*)

1. My personal habits
 2. Things I have done which I feel guilty about
 3. Things I wouldn't do in public
 4. My deepest feelings
 5. What I like and dislike about myself
 6. What is important to me in life
 7. What makes me the person I am
 8. My worst fears
 9. Things I have done which I am proud of
 10. My close relationships with other people
- C. Participant's perceived depth of self-disclosure, including Self-Disclosure-Positive Affect and Self-Disclosure-Negative Affect, based on extent of private information and emotion disclosed (adapted from Snell, Miller, & Belk, 1988) Likert scale (1-10), 1 (*not at all*) to 10 (*a great deal*)
1. Private information (SD-Negative Affect)
 2. Happiness (SD-Positive Affect)
 3. Jealousy (SD-Negative Affect)
 4. Anxiety (SD-Negative Affect)
 5. Anger (SD-Negative Affect)
 6. Fear (SD-Negative Affect)

Expectancy
confirmation

Same questions for each of 3 responses. Survey question:
How did this person respond to you?

1. Expression of caring, encouragement or empathy
2. Advice
3. Expression of confidence or respect
4. Negative reaction such as criticism or sarcasm
5. Friendship and liking
6. Offers of help, assistance or resources
7. Neutral, unemotional
8. Other _____

	9. I did not expect this person to respond
Perceived positive expectancy violation	<p>Same questions for each of R1, R2, R3 responses.</p> <p>Behavior evaluation adapted from Afifi & Burgoon, 2000:</p> <ol style="list-style-type: none"> 1. This person's response was something I would rate very favorable. 2. I was happy to receive this response. <p>Rewardingness of responder adapted from Floyd & Voloudakis, 1999:</p> <ol style="list-style-type: none"> 1. He/she is a rewarding person to interact with. 2. I like this person.
Perceived negative expectancy violation	<p>Same questions for each of R1, R2, R3 responses.</p> <p>Behavior evaluation adapted from Afifi & Burgoon, 2000:</p> <ol style="list-style-type: none"> 1. This person's response was more negative than expected. 2. This person's response was something I would rate very unfavorable. <p>Rewardingness of responder adapted from Floyd & Voloudakis, 1999:</p> <ol style="list-style-type: none"> 1. I don't care about this person very much. 2. I don't really enjoy my relationship with this person.
Perceived Partner Responsiveness	<p>Same questions for each of R1, R2, R3 responses (Laurenceau, Barrett & Pietromonaco, 1998; Reis & Shaver, 1988).</p> <ol style="list-style-type: none"> 1. I feel understood by this person 2. I feel accepted by this person 3. This person cares for me.
Relationship Type	<p>Same questions for each of R1, R2, R3 responses.</p> <p>Survey question: My relationship with this Facebook friend (circle one):</p> <ol style="list-style-type: none"> 1. Romantic partner 2. Best friend 3. Friend 4. Acquaintance 5. Parent 6. Sibling 7. Other family
Partner Response Type	<p>Same questions for each of R1, R2, R3 responses.</p> <p>Survey question: Indicate the type of Facebook response you received from this friend (for the R1, R2, R3 responses):</p>

	<ol style="list-style-type: none"> 1. Self-disclosure 2. "Like" 3. Other comment
Closeness	<p>Same questions for each of R1, R2, R3 responses</p> <p>Survey questions on social intimacy derived from MSIS (Miller & Lefcourt, 1982) asking for feelings previous to interaction:</p> <ol style="list-style-type: none"> 1. How close do you feel to him/her most of the time? 2. How important is it to you to listen to his/her very personal disclosures? 3. How satisfying is your relationship with him/her? 4. How important is it to you that he/she understands your feelings? 5. How important is it to you that he/she be encouraging and supportive to you when you are unhappy? 6. How important is your relationship with him/her in your life?
Change in Intimacy	<p>What is your feeling about the quality of your relationship with R1, R2, R3 (respectively) after receiving this response? Likert scale 1(<i>less</i>) to 5(<i>more</i>)</p> <ul style="list-style-type: none"> • Intimacy • Trust • Closeness • Reliance
Responsiveness (T)	<p>Indicate degree of agreement with the following (Likert scale 1-5):</p> <ul style="list-style-type: none"> • I respond more often than most people. • I enjoy responding to others' status updates. • I typically respond to close friends' status updates. • I typically respond to acquaintances' status updates. • How many status updates do you respond to each week, on average? (choose one answer) <ol style="list-style-type: none"> 1. 0 2. 1 3. 2

	<p>4. 3</p> <p>5. 4 or more</p>
Appropriateness (T)	<p>Reasons for responding that indicate a concern for appropriateness. “I respond to a friend’s status update on their Facebook Wall if I...” (<i>Select all answers that apply</i>)</p> <ul style="list-style-type: none"> • feel it is appropriate for me to respond • know my friend would expect me to respond • feel obliged to comment on my friend’s status update because he/she commented on my status update
Confidence (T)	<p>Imagine that you are the person commenting or pressing the “like” button in response to a friend’s personal status update. This post may have appeared when you opened Facebook through the Newsfeed function linked to your Facebook profile, or you may have seen the post by directly accessing your friend’s profile page. Please answer the following questions. 5-point Likert scale, 1 (<i>not at all sure</i>) to 5 (<i>absolutely certain</i>).</p> <ol style="list-style-type: none"> 1. When a friend posts a personal self-disclosing status update, I know if I am one of the people specifically intended to read that update. 2. When a friend posts a personal, self-disclosing status update, I know if I am one of the people specifically intended to comment on that update. 3. When a friend posts a personal, self-disclosing status update, I know if I am one of the people specifically intended to press the “like” button on that update.
EGDR (T)	<ol style="list-style-type: none"> 1. I respond more often to females’ status updates than to males’ status updates 2. I receive more comments to my status updates from women than men. 3. I prefer to connect with my female friends on Facebook than with my male friends.

Note. (T)=Target response hypotheses

Table 7 includes a list of predictor and outcome variables and relevant statistics including sample, number of items, potential range, actual minimum and maximum range, mean and standard deviation, Cronbach's alpha, and distribution shape in terms of skew and kurtosis.

Table 7

Scale Properties of Predictor and Outcome Variables

<i>Instrument</i>	<i>N</i>	<i>N</i> <i>Itm</i>	<i>Range</i>	<i>Min</i>	<i>Max</i>	<i>M</i>	<i>SD</i>	<i>α</i>	<i>Skew</i>	<i>Kurto</i> <i>sis</i>
AAQ:Av	259	8	1-7	1.25	6.38	3.43	1.00	.80	0.41	-0.20
AAQ:Amb	259	9	1-7	1.00	6.11	3.47	1.04	.81	-0.02	-0.34
FF	266	5	1-5	1.00	5.00	2.51	0.99	.83	0.15	-0.83
SD Attitude	263	10	1-5	1.00	5.00	2.48	0.72	.85	0.30	0.32
SM	277	18	0/1	0.00	1.00	0.51	0.50	.73	-0.43	0.28
T-Confid	268	3	1-5	1.00	5.00	2.87	1.04	.86	-0.25	-0.67
SD-Pos	270	1	1-10	1.00	10.0	6.28	3.34	n/a	-0.45	-1.26
SD-Neg	266	5	1-10	1.00	10.0	2.65	1.55	.71	1.36	2.09
EGDR	269	3	1-5	1.00	5.00	3.05	0.89	.71	-0.23	0.12
T-Respon (Phase 2)	160	5	1-5	2.12	3.91	3.09	0.60	.72	-0.28	-0.47
<i>R1 Scales</i>										
Close	260	6	1-10	1.00	10.0	5.86	2.70	.97	-0.25	-1.02
PPR	263	3	1-5	1.00	5.00	3.84	1.04	.89	-1.00	0.55
ΔI	255	4	1-5	1.00	5.00	3.09	0.56	.84	-0.35	5.34
<i>R2 Scales</i>										
Close	239	6	1-10	1.00	10.0	5.99	2.77	.98	-0.21	-1.02
PPR	244	3	1-5	1.00	5.00	3.72	1.13	.93	-0.74	-0.10
ΔI	239	4	1-5	1.00	5.00	3.13	0.68	.90	-0.51	3.58
<i>R3 Scales</i>										

Close	201	6	1-10	1.00	10.0	5.99	2.73	.97	-0.23	-0.98
PPR	206	3	1-5	1.00	5.00	3.67	1.13	.91	-0.74	-0.03
ΔI	206	4	1-5	1.00	5.00	3.03	0.66	.93	-0.57	3.74

Note. The variation in sample size is due to the variation in the number of participants completing the scale.

Itm = number of scale items; AAQ = Adult Attachment Questionnaire; Av = Avoidance; Amb = Ambivalence; FF = frequent Facebook participation; SD = self-disclosure; SD- Pos = Self-Disclosure of Positive Affect; SD-Neg = Self-Disclosure of Negative Affect; Confid = response confidence; SM = self-monitoring; R1 = respondent 1; R2 = respondent 2; R3 = respondent 3; PPR = perceived partner responsiveness; Respon = responsiveness; T = Target; ΔI = Change in Intimacy; n/a = not applicable.

Table 8 displays the results of the *t*-test analyzing the differences between Phase 1 and Phase 2 variables that were included in both phases of the study. Phases reflect two different time periods in which data was collected, with Phase 1 data collected first and Phase 2 data collected two months later. No statistically significant differences were found; consequently the data from the two phases were combined into one sample for further testing.

Table 8

Analysis of Variance for Phase 1 and Phase 2 Variables

		Sum of Squares	<i>df</i>	Mean Square	<i>F</i>	<i>p</i>
Avoidance (AAQ)	Between Groups	0.04	1	0.04	0.04	.839
	Within Groups	260.08	257	1.01		
	Total	260.12	258			
Ambivalence (AAQ)	Between Groups	1.44	1	1.44	1.34	.249
	Within Groups	279.30	260	1.07		
	Total	280.73	261			
FF	Between Groups	0.27	1	0.27	0.28	.600
	Within Groups	261.07	264	0.99		
	Total	261.34	265			
SD Attitude	Between Groups	1.39	1	1.39	2.71	.101
	Within Groups	133.90	261	0.51		
	Total	135.29	262			
Confidence	Between Groups	0.61	1	0.61	0.56	.457
	Within Groups	290.86	266	1.09		
	Total	291.46	267			
SD Negative	Between Groups	0.47	1	0.47	0.19	.660
	Within Groups	638.75	264	2.42		
	Total	639.22	265			
R1 Closeness	Between Groups	0.07	1	0.07	0.01	.921
	Within Groups	1892.03	258	7.33		
	Total	1892.10	259			
R1 PPR	Between Groups	2.43	1	2.43	2.27	.133
	Within Groups	279.74	261	1.07		
	Total	282.17	262			
R1 Change in intimacy	Between Groups	0.21	1	0.21	0.66	.419
	Within Groups	80.04	253	0.32		
	Total	80.25	254			
R2 Closeness	Between Groups	0.16	1	0.16	0.02	.884
	Within Groups	1820.00	237	7.68		

	Total	1820.16	238			
R2 PPR	Between Groups	0.17	1	0.17	0.14	.714
	Within Groups	309.02	242	1.28		
	Total	309.19	243			
R2 Change in intimacy	Between Groups	0.51	1	0.51	1.10	.294
	Within Groups	109.10	237	0.46		
	Total	109.61	238			
R3 Closeness	Between Groups	2.62	1	2.62	0.35	.554
	Within Groups	1485.59	199	7.47		
	Total	1488.21	200			
R3 PPR	Between Groups	0.41	1	0.41	0.32	.571
	Within Groups	260.59	204	1.28		
	Total	261.00	205			
R3 Change in intimacy	Between Groups	1.67	1	1.67	3.85	.051
	Within Groups	88.63	204	0.43		
	Total	90.30	205			
Gender resp	Between Groups	0.31	1	0.31	0.39	.534
	Within Groups	211.71	267	0.79		
	Total	212.01	268			
Self-Monitoring	Between Groups	2.75	1	2.75	0.28	.600
	Within Groups	2718.03	272	9.99		
	Total	2720.78	273			

Note. AAQ = Adult Attachment Questionnaire; FF = frequent Facebook participation; SD = self-disclosure; Confidence = response confidence; R1 = respondent 1; R2 = respondent 2; R3 = respondent 3; PPR = perceived partner responsiveness; Gender resp = EGDR.

Results

Self-Discloser's Point of View

Self-Disclosure and Change in Intimacy. Self-disclosure was measured three ways in this study. The SD Attitude measured the participant's general propensity to disclose on Facebook. Self-disclosure behavior was also measured with the participant's self-report of the degree of disclosure in the specifically selected status update reported in the study, reported as SD Positive Affect and SD Negative Affect. Participants reported the level of happiness they had disclosed in their status update, a single item measure of positive affect (SD Positive Affect). SD Negative Affect, a composite scale, was compiled by averaging self-reported degree of self-disclosure of private information, jealousy, anxiety, anger and fear in the specifically selected status update. See Table 9 for correlation analysis details of self-disclosure variables and Change in Intimacy.

H1: On Facebook, self-disclosure, in general, is positively correlated with Change in Intimacy.

I tested the self-disclosure variables together as a set and each component separately, by performing correlation analyses for SD Attitude, SD Positive Affect, and SD Negative Affect with the Change in Intimacy variable for each of the three respondents, anticipating positive correlations. Bivariate correlations are displayed in Table 9. As expected, the regression of self-disclosure variables on Change in Intimacy was significant and *H1* is supported by the data. The omnibus test of the main effect of self-disclosure variables as a set on Change in Intimacy was statistically significant, R^2 :

$F(3,240) = 4.52, p = .004$; R2: $F(3, 221) = 3.44, p = .018$; R3: $F(3, 186) = 4.09, p = .008$. When individuals self-disclose on Facebook, their attitude toward self-disclosure on Facebook and their act of self-disclosure are associated with an increase in intimacy with their responding partners. Hypotheses *H1a*, *H1b*, and *H1c* were tested by regression analysis to examine the unique effects of the self-disclosure variables on Change in Intimacy.

H1a: On Facebook, Self-disclosure Attitude is positively correlated with Change in Intimacy.

H1a is partially supported by the data. For Respondent 2, there was a positive significant correlation between SD Attitude and Change in Intimacy, $r(226) = .27, p < .001, \beta = .219, t(225) = 3.06, p = .002$. For Respondent 2, SD Attitude uniquely accounted for 4% of the variance in Change in Intimacy holding the effects of SD Positive Affect and SD Negative Affect constant. SD Attitude was not significantly correlated with Change in Intimacy for Respondent 1, $r(241) = .106, p = .050, \beta = .009, t(240) = 0.13, p = .900$, part correlation = .008, and SD Attitude was not significantly correlated with Change in Intimacy for Respondent 3, $r(194) = .07, p = .151, \beta = .035, t(193) = 0.45, p = .657$, part correlation = .032. Thus there is moderate support in one of three respondents for a positive relationship between one's attitude about self-disclosure on Facebook in general and one's change in intimacy with responders to a self-disclosure status update.

H1b: Self-disclosure of Positive Affect is positively correlated with Change in Intimacy.

Hypothesis *H1b* is supported. For Respondents 1, 2, and 3, significant positive bivariate correlations were found between SD Positive Affect and Change in Intimacy. Results for Respondent 1, Respondent 2 and Respondent 3 (R1, R2, and R3 respectively) are as follows: R1: $r(241) = .13, p = .026, \beta = .148, t(240) = 2.26, p = .025$. SD Positive Affect uniquely accounted for 2% of the variance in R1 Change in Intimacy, holding the effects of SD Attitude and SD Negative Affect constant. R2: $r(226) = .13, p = .042, \beta = .097, t(224) = 1.45, p = .150, \text{part correlation} = .093$ and R3: $r(194) = .19, p = .004, \beta = .191, t(193) = 2.58, p = .011, \text{part correlation} = .183$.

H1c: Self-disclosure of Negative Affect is positively correlated with Change in Intimacy.

Hypothesis *H1c* is supported for two of three respondents. For Respondents 1 and 2, there was positive significant correlation between SD Negative Affect and Change in Intimacy, R1: $r(241) = .18, p = .003, \beta = .194, t(240) = 2.79, p = .006, \text{part correlation} = .176$ and R2: $r(226) = .15, p = .012, \beta = 0.082, t(225) = 1.16, p = .150, \text{part correlation} = .093$ respectively. The correlation for Respondent 3 was not statistically significant, $r(194) = .01, p = .459, \beta = 0.022, t(193) = 0.28, p = .782$.

In summary, results indicated that each of the three self-disclosure variables was significantly correlated with Change in Intimacy in at least one of the respondents. Furthermore, the actual self-disclosure behaviors expressed in the participants' status updates were statistically significant in at least two of three respondents. Self-disclosure of Positive Affect was significant for all three respondents. Self-disclosure of Negative Affect was moderately significant for two of three respondents.

In addition, correlation analysis showed that Self-disclosure of Negative Affect is associated with Self-Disclosure Attitude, $r(258) = .39, p < .001$, indicating a positive relationship between those who are comfortable with self-disclosure on Facebook and those who self-disclosed information and/or emotions consisting of negative affect. It should also be noted that Change in Intimacy for all three respondents are highly correlated with one another, (see Table 9). This could indicate autocorrelation, or it could reflect a pattern in which the content of a participant's single status update elicits similar responses from all respondents and similar perceptions of Change in Intimacy from the participant.

Because actual behavior on Facebook was more consistently and significantly correlated with Change in Intimacy, regression analysis was performed on these variables anticipating positive effect of enacted self-disclosure on Change in Intimacy. The omnibus test of the main effect of self-disclosure behavior variables, SD Positive Affect and SD Negative Affect, as a set, on Change in Intimacy was statistically significant, R1: $F(2,244) = 7.19, p = .001, R^2 = .06$; R2: $F(2, 230) = 5.12, p = .007, R^2 = .04$; R3: $F(2, 197) = 3.33: p = .038, R^2 = .03$. Indeed, there was a significant positive effect of enacted self-disclosure on Change in Intimacy for all three respondents, with self-disclosure of positive and negative affect explaining 3%-6% of the variance in Change in Intimacy.

Table 9

Correlation of Self-Disclosure and Change in Intimacy

Variable	+Affect	-Affect	SDAtt	R1 ΔI	R2 ΔI	R3 ΔI
+Affect	-	-.10	.17	.15*	.11*	.18**
-Affect		-	.39**	.18**	.15**	.01
SD Att			-	.05	.27**	.07
R1 ΔI				-	.40**	.54**
R2 ΔI					-	.43**
R3 ΔI						-

Note. Correlations based on 1-tail analysis. +Affect = positive affect; -Affect = negative affect; SD Att = self-disclosure attitude; R1 = respondent 1; R2 = respondent 2; R3 = respondent 3; ΔI = Change in Intimacy.

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

H2: A partner's response in the form of a reciprocal self-disclosure will predict higher level of Change in Intimacy than a trivial response (i.e. "like") or a non-self-disclosing comment.

Participants indicated the type of feedback they received from each of the three respondents after posting their self-disclosure status update. There were three possible response types: Respondents may have responded with their own *self-disclosure* of personally meaningful information and emotion. Respondents may have clicked the "like" button located under the status update. Respondents may have responded with a message other than a self-disclosure, "*other comment*". Testing of *H2* consisted of determining if the self-disclosure response type was higher on Change in Intimacy

based than other response types. ANOVA was conducted, finding the response type had a significant effect on Change in Intimacy. Next, post hoc analysis was conducted, anticipating a significant mean difference between self-disclosure and at least one of the other two possible choices, “like”, and/or “other comment” on Change in Intimacy. All analyses were conducted separately on each of the three respondents.

Hypothesis *H2* was supported by the data. For Response Type on Change in Intimacy, self-disclosure had the highest mean, followed by “like” followed by “other comment.” Table 10 displays the means, which indicate self-disclosure responses were higher on Change in Intimacy for all three respondents. The omnibus test of the main effect of response type on Change in Intimacy was statistically significant for all three respondents (R1: $F(2,250) = 5.02, p = .007, \eta^2 = .039$; R2: $F(2, 235) = 5.51, p = .005, \eta^2 = .045$; R3: $F(2,202) = 3.52, p = .032, \eta^2 = .034$). Furthermore, post hoc Tukey HSD analysis indicated a significant mean difference between the self-disclosure response type and the “other comment” response type on Change in Intimacy. Post hoc analysis did not find “like” significantly different from the other two responses. The mean difference between the self-disclosure response and “other comment” response was significant, R1: *mean difference* = .26, $p = .005$; R2: *mean difference* = .36, $p = .003$; R3: *mean difference* = .31, $p = .024$. In summary, the self-disclosure response type, which is significantly different from “other comment” response type, has the highest mean on Change in Intimacy for response type consistently across all three respondents. When participants receive a self-disclosure response to a self-disclosure status update, on average, there is a greater Change in Intimacy.

Table 10

Response Type Mean and Standard Deviation on Change in Intimacy

RType	R1 <i>M</i>	R1 <i>SD</i>	R1 <i>n</i>	R2 <i>M</i>	R2 <i>SD</i>	R2 <i>n</i>	R3 <i>M</i>	R3 <i>SD</i>	R3 <i>n</i>
SDiscl	3.28	0.64	62	3.39	0.56	52	3.25	0.71	42
Like	3.09	0.40	45	3.13	0.76	35	3.03	0.50	44
OC	3.02	0.53	146	3.04	0.68	151	2.94	0.68	119
Totals	3.10	0.55	253	3.13	0.68	238	3.02	0.66	205

Note. RType = response type; SDiscl = self-disclosure; OC = other comment.

H3: Self-disclosure, in general, is positively correlated with Perceived Partner Responsiveness to those who respond.

As expected, the omnibus test of the main effect of self-disclosure variables as a set on Perceived Partner Responsiveness was statistically significant for all three respondents, R1: $F(3, 244) = 4.53, p = .004$; R2: $F(3, 225) = 6.25, p < .001$; R3: $F(3, 190) = 6.78, p < .001$. Bivariate correlations of Self Disclosure and Perceived Partner Responsiveness are displayed in Table 11. To test the unique effects of the self-disclosure variables on Perceived Partner Responsiveness, regression analysis was performed.

H3a: Self-disclosure Attitude is positively correlated with Perceived Partner Responsiveness to those who respond.

SD Attitude measured the participant's likelihood of self-disclosure on Facebook in general. Hypothesis *H3a* is supported by the data for one of three respondents. For Respondent 2, there was a moderate positive significant correlation

between SD Attitude and Perceived Partner Responsiveness, $\beta = 0.21$, $t(225) = 2.98$, $p = .003$. SD Attitude explained nearly 4% of the variance in R2 Perceived Partner Responsiveness uniquely, holding SD Negative Affect and SD Positive Affect constant. SD Attitude was not uniquely significantly correlated with Perceived Partner Responsiveness for R1, $\beta = 0.09$, $t(244) = 1.36$, $p = .177$ and R3: $\beta = -.04$, $t(190) = -0.48$, $p = .636$.

H3b: Self-disclosure of Positive Affect is positively correlated with Perceived Partner Responsiveness to those who respond.

Hypothesis *H3b* is strongly supported by the data. There was a positive significant correlation between SD Positive Affect and Perceived Partner Responsiveness for all three respondents, R1, $\beta = 0.17$, $t(244) = 2.68$, $p = .008$; R2, $\beta = 0.14$, $t(225) = 1.13$, $p = .034$; R3, $\beta = 0.31$, $t(190) = 4.37$, $p < .001$. Self-disclosure of Positive Affect uniquely accounted for 3%, 2% and 9% of the variance in Perceived Partner Responsiveness for R1, R2, and R3 respectively.

H3c: Self-disclosure of Negative Affect is positively correlated with Perceived Partner Responsiveness to those who respond.

Hypothesis *H3c* is not supported by the data. Results for the correlation between Self-Disclosure of Negative Affect and Perceived Partner Responsiveness were not significant, R1, $\beta = 0.07$, $t(244) = 1.04$, $p = .299$; R2, $\beta = -0.00$, $t(225) = -0.02$, $p = .981$; R3, $\beta = -0.01$, $t(190) = -0.08$, $p = .933$.

In summary, results indicated that the three self-disclosure variables as a set were significantly correlated with Perceived Partner Responsiveness. The bivariate correlation of SD Positive Affect and R2 Perceived Partner Responsiveness was $r = .21$

and the bivariate correlation of SE Positive Affect and R3 Perceived Partner Responsiveness was $r = .30$, a strong significant association. When individuals self-disclose on Facebook, the act of self-disclosure, particularly the self-disclosure of positive affect, is associated with Perceived Partner Responsiveness toward the responding partner.

Table 11

Correlation of Self-Disclosure and PPR

Variable	+Affect	-Affect	SDAtt	R1 PPR	R2 PPR	R3 PPR
+Affect	-	-.10	.17**	.17**	.21**	.30**
-Affect		-	.39**	.09	.06	-.07
SD Att			-	.11*	.21**	.01
R1 PPR				-	.33**	.31**
R2 PPR					-	.42**
R3 PPR						-

Note. Correlations based on 1-tail analysis. +Affect = positive affect; -Affect = negative affect; SD Att = self-disclosure attitude; R1 = respondent 1; R2 = respondent 2; R3 = respondent 3; PPR = Perceived Partner Responsiveness.

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

H4: Partner's self-disclosure response will predict higher level of Perceived Partner Responsiveness with the self-discloser than a trivial response (i.e. "like") or a non-self-disclosing comment.

Procedures for the testing of *H4* were similar to the testing of *H2*. See Table 12 for details. The omnibus test of the main effect of response type on Perceived Partner Responsiveness was statistically significant for two of three respondents, R1: $F(2,256)$

= 7.33, $p = .001$; R2: $F(2, 238) = 5.33, p = .005$; R3: $F(2,202) = 2.94, p = .055$). Post hoc Tukey analysis indicated self-disclosure was rated higher on Perceived Partner Responsiveness than “like” and/or “other comment” for two of three respondents and there was no difference detected for Respondent 3. For Respondent 1, self-disclosure response was significantly higher on Perceived Partner Responsiveness than both “like” and “other comment.” For Respondent 2, self-disclosure response was significantly higher on Perceived Partner Responsiveness than “other comment.” For Respondent 3, there was no statistically significant difference for the three response types on Perceived Partner Responsiveness.

Table 12

Response Type Mean and Standard Deviation on Perceived Partner Responsiveness

RType	R1 <i>M</i>	R1 <i>SD</i>	R1 <i>n</i>	R2 <i>M</i>	R2 <i>SD</i>	R2 <i>n</i>	R3 <i>M</i>	R3 <i>SD</i>	R3 <i>n</i>
SDiscl	4.27	0.67	65	4.17	0.90	52	3.90	0.86	42
Like	3.75	1.15	45	3.68	1.23	36	3.33	1.03	45
OC	3.71	1.08	149	3.60	1.13	153	3.70	1.23	118
Totals	3.85	1.03	259	3.74	1.12	241	3.67	1.13	205

Note. RType = response type; SDiscl = self-disclosure; OC = other comment.

Table 13 displays significant differences between the means, showing that partner’s self-disclosure is significantly higher on Perceived Partner Responsiveness for two of three respondents. The omnibus test of the main effect of response type on Perceived Partner Responsiveness was statistically significant for two of three

respondents (R1: $F(2,256) = 7.33, p = .001, \eta^2 = .054$; R2: $F(2, 238) = 5.33, p = .005, \eta^2 = .043$; R3: $F(2,202) = 2.94, p = .055, ns$).

Furthermore, post hoc comparisons using the Tukey HSD analysis indicated a significant mean difference between the self-disclosure response type and the “like” and “other comment” response types on Perceived Partner Responsiveness, with a greater mean for self-disclosure response than either “like” or “other comment” for Respondent 1, as follows: mean difference for self-disclosure and “like” = $.52, p = .022$; mean difference for self-disclosure and other comment = $.56, p = .001$. For Respondent 2, the mean for self-disclosure response type was greater than “other comment”, but not “like”, as follows: mean difference for self-disclosure and other comment = $.57, p = .004$. These results suggest the self-disclosure response type is significantly different from “like” and “other comment” response types and is more closely associated with Perceived Partner Responsiveness than the other response types, meaning that on Facebook, disclosers are more likely to perceive their partners as responsive when the partner responds to a self-disclosure status update with a self-disclosure in return.

Table 13

Mean Differences for Response Type on Change in Intimacy and PPR

Response Type	R1 ΔI : <i>M (SD)</i>	R1 PPR: <i>M (SD)</i>	R2 ΔI : <i>M (SD)</i>	R2 PPR: <i>M (SD)</i>	R3 ΔI : <i>M (SD)</i>	R3 PPR: <i>M (SD)</i>
SDiscl	3.28 ^a (0.64)	4.27 ^b (0.67)	3.39 ^a (0.56)	4.17 ^b (0.90)	3.25 ^a (0.71)	3.90 (0.86)
Like	3.09 (0.40)	3.75 ^d (1.15)	3.13 (0.76)	3.68 (1.23)	3.03 (0.50)	3.33 (1.03)
OC	3.02 ^c (0.53)	3.71 ^d (1.08)	3.04 ^c (0.68)	3.60 ^d (1.13)	2.94 ^c (0.68)	3.70 (1.23)

Note. SDiscl = Self-Disclosure response type; OC = Other comment response type; R = Respondent; ΔI = Change in Intimacy; PPR = Perceived Partner Responsiveness.

^a = Tukey post hoc test indicated significant mean difference in response type, with self-disclosure higher on Change in Intimacy than “other comment” response type at $p < .05$ level of significance.

^b = Tukey post hoc test indicated significant mean difference in response type, with self-disclosure higher on Perceived Partner Responsiveness than “other comment” response type at $p < .05$ level of significance and self-disclosure higher than both “like” and “other comment” on Perceived Partner Responsiveness for R1 at $p < .05$ level of significance.

^c = Tukey post hoc test indicated significant mean difference in response type with item significantly lower on Change in Intimacy at $p < .05$ level of significance.

^d = Tukey post hoc test indicated significant mean difference in response type with item significantly lower on Perceived Partner Responsiveness at $p < .05$ level of significance.

H5: Perceived Partner Responsiveness is positively correlated with Change in Intimacy.

H5 is supported by the data with significant strong positive correlations between Perceived Partner Responsiveness and Change in Intimacy (Table 14). Participants

perceived a modest amount of responsiveness from their partners in all three Respondents (Table 15), with highest mean perceived for Respondent 1 ($M = 3.84$) and lowest mean for Respondent 3 ($M = 3.67$) indicating that the communication of understanding, validation and caring occurs on Facebook.

Results in Table 14 indicate Perceived Partner Responsiveness has a strong positive correlation with Change in Intimacy. Correlation magnitude between the variables PPR and Change in Intimacy was: $r(253) = .42, p < .01$ for Respondent 1, $r(239) = .50, p < .01$ for Respondent 2, and $r(205) = .49, p < .01$ for Respondent 3.

There was also significant inter-correlation among all three of the PPR and Change in Intimacy variables with the highest inter-correlation between R1 Change in Intimacy and R3 Change in Intimacy, $r = .54, p < .01$, indicating a very strong positive relationship between those who experienced a change in intimacy with the first respondent and the likelihood of also indicating a change in intimacy with the third respondent as the result of a self-disclosure status update. As the level of responsiveness from a Facebook friend increases, there is a corresponding increase in the self-discloser's feeling of intimacy with this Facebook friend.

Table 14

Correlation of Perceived Partner Responsiveness and Change in Intimacy

Variable	R1 PPR	R1 ΔI	R2 PPR	R2 ΔI	R3 PPR	R3 ΔI
R1 PPR	-	.42**	.33**	.22**	.31**	.20**
R1 ΔI		-	.27**	.40**	.27**	.54**
R2 PPR			-	.50**	.42**	.27**
R2 ΔI				-	.24**	.43**
R3 PPR					-	.49**
R3 ΔI						-

Note. Correlations based on one-tail analysis. R = Respondent; PPR = Perceived Partner Responsiveness; ΔI = Change in Intimacy.

** $p < .01$.

Table 15

Perceived Partner Responsiveness Means and Standard Deviations for Respondents

Respondent PPR	<i>M</i>	<i>SD</i>	<i>n</i>
R1 PPR	3.84	1.04	263
R2 PPR	3.72	1.13	244
R3 PPR	3.67	1.13	206

H6: Among the variables tested, Perceived Partner Responsiveness is the most important predictor of Change in Intimacy.

Analysis of the predictor variables for all three respondents supported Hypothesis *H6*. Table 16 indicates the best and most consistent predictor of Change in Intimacy was Perceived Partner Responsiveness (PPR). The ten predictors as a set had a significant effect on Change in Intimacy, as follows: R1: ($F(10, 208) = 0.685, p < .001, R^2 = .25$), R2: ($F(10, 208) = 9.45, p < .001, R^2 = .32$), and R3: ($F(10, 164) = 6.99, p < .001, R^2 = .30$). However, Table 16 shows that variables other than PPR were not consistently significant across all three respondents.

Table 16

Regression of Ten Predictor Variables on Change in Intimacy

Predictor Variables	R1, β	R2, β	R3, β
SD Attitude	-.10	.08	.01
SD -Affect	.12	.06	-.04
SD+Affect	.08	<.01	.01
PPR	.28**	.30**	.37**
Ambivalence	-.10	-.02	.13*
Self-Monitor	.06	.06	.04
FF	.12	.08	.06
Closeness	.07	.21*	.16
Relationship	-.13 _a *	-.03	.05
Response	-.09	-.07	-.14 _b *

Note. R = Respondent, PPR = Perceived Partner Responsiveness; SD-Affect = Self-disclosure of negative affect; SD + Affect = Self-disclosure of positive affect; FF = Frequent Facebook participation; Relationship = relationship type; Response = response type.

a = Close relationship such as parent, best friend or romantic partner rather than friend or acquaintance.

b = Response is more likely to be a self-disclosure rather than “like” or “other comment.”

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

H7: Perceived Partner Responsiveness mediates the relationship between self-disclosure and Change in Intimacy.

Baron and Kenny (1986) argued that mediation occurs when the independent variable is correlated with the mediator variable, the mediator is correlated with the

dependent variable, and the independent variable is correlated with the dependent variable. Then, when the independent variable and the mediator variable are simultaneously used to predict the dependent variable, the previously significant correlation between the independent variable and the dependent variable becomes reduced or becomes no longer statistically significant. In the interpersonal process model of intimacy, the independent variable is self-disclosure, the mediator is Perceived Partner Responsiveness, and the dependent variable is Change in Intimacy. For the mediation of the relationship to occur, the introduction of the Perceived Partner Responsiveness variable in addition to the basic self-disclosure predictors of Change in Intimacy would be expected to reduce the unique effects of the self-disclosure variables.

To test *H7* the following procedures were followed: First, the components of the Basic Self-Disclosure Model (Appendix A, Figure A1) were entered into a regression analysis. The self-disclosure variable was measured by three items in this study, including Self-Disclosure Attitude, and Self-Disclosure of Positive Affect and Self-Disclosure of Negative Affect expressed in the status update selected by the participant. The omnibus test indicated that as a set of the three self-disclosure components, the Basic Self-Disclosure Model had a significant effect on Change in Intimacy for two of three respondents, R1: $F(3, 235) = 4.49, p = .004$; R2: $F(3, 222) = 6.73, p < .001$; R3: $F(3, 189) = 2.61, p = .053$. Furthermore, Table 17 indicates that for each respondent, at least one of the three variables that as a set measured self-disclosure had a significant effect on Change in Intimacy, holding the other self-disclosure components constant.

Next the Interpersonal Process Model of Intimacy (Appendix A, Figure A2) was tested by including the Perceived Partner Responsiveness variable in addition to the

self-disclosure variables and performing regression analysis on Change in Intimacy.

The omnibus test indicated that the Interpersonal Process Model of Intimacy had a significant effect on Change in Intimacy for all three respondents, R1: $F(4, 234) = 14.32, p < .001$; R2: $F(4, 221) = 21.20, p < .001$; R3: $F(4, 188) = 15.25, p < .001$. Not only did the Perceived Partner Responsiveness variable mediate the effect of self-disclosure on Change in Intimacy, it fully mediated the effect for two of three respondents. For two of three respondents, the self-disclosure variables that were significant in the test of the basic model were no longer significant when the PPR variable was added. The standardized coefficients for the PPR variables for all three respondents were significant at the $p < .001$ level of significance. For Respondent 1, PPR partially mediated the relationship between self-disclosure and Change in Intimacy, reducing the effect of the Self-Disclosure of Negative Affect on Change in Intimacy, $t(234) = 2.55, p = .011$. For Respondent 1, both Perceived Partner Responsiveness and self-disclosure of negative information or vulnerable emotion predicted Change in Intimacy. However, after a self-disclosure status update is posted on Facebook, the perception of how the partner responded, rather than the act of self-disclosure alone, is more important for a positive Change in Intimacy to take place.

In summary, *H7* is supported by the data, as shown in Table 17. Perceived Partner Responsiveness fully mediated the relationship between self-disclosure and intimacy after a self-disclosure status update on Facebook for two of three respondents, and partially mediated the relationship between self-disclosure and Change in Intimacy for one of three respondents.

Table 17

Multiple Regression Predicting Change in Intimacy with Responders

Responders	Basic Self-Disclosure Model, β	Interpersonal Process Model of Intimacy, β
R1		
SD Attitude	.01	-.04
SD Positive Affect	.15*	.09
SD Negative Affect	.20**	.17**
PPR		.39***
R2		
SD Attitude	.22**	.12
SD Positive Affect	.10	.03
SD Negative Affect	.08	.08
PPR		.46***
R3		
SD Attitude	.04	.05
SD Positive Affect	.19*	.04
SD Negative Affect	.02	.03
PPR		.48***

Note. Basic Self-Disclosure Model included the outcome on Change in Intimacy using only the self-disclosure variables as predictors. Interpersonal Process Model of Intimacy included the outcome on Change in Intimacy using the self-disclosure variables and the Perceived Partner Responsiveness variable as predictors.

R1 = Responder 1, R2 = Responder 2, R3 = Responder 3; SD = self-disclosure; PPR = Perceived Partner Responsiveness.

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

Gender. Means testing generally revealed no significant differences between men and women on several key variables. In this study, men and women reported similar patterns of self-disclosure, Perceived Partner Responsiveness (with the exception of women significantly higher on PPR than men for one of three respondents), Closeness with respondents, and Change in Intimacy.

H8a: Women will report greater self-disclosure than men.

H8a was not supported. To test *H8a*, the means for women and men on Self-Disclosure Attitude, Self-Disclosure of Positive Affect and Self-Disclosure of Negative Affect were compared and *t*-tests were performed, anticipating that women would be significantly higher than men on both variables. However, no significant differences were noted between men and women in self-disclosure attitude, the self-disclosure of positive affect, or in the self-disclosure of negative affect. Women and men had nearly the same means on Self-Disclosure Attitude (Men: $M = 2.47$ ($SD = 0.75$); Women: $M = 2.47$ ($SD = 0.67$)). Women had mean scores on both positive affect (Men: $M = 5.94$ ($SD = 3.22$); Women: $M = 6.52$ ($SD = 3.38$)) and negative affect (Men: $M = 2.55$ ($SD = 1.48$); Women: $M = 2.69$ ($SD = 1.57$)) that were slightly higher than men, but these differences were not statistically significant. The difference between men and women on Self-Disclosure Attitude was not significant, $t(252) = 0.03$, $p = .981$. The difference between men and women on Self-Disclosure of Positive Affect was not significant, $t(265) = 1.39$, $p = .166$. The difference between men and women on Self-Disclosure of Negative Affect was not significant, $t(261) = 0.73$, $p = .464$. On Facebook men and women show a similar pattern of self-disclosure. Both men and women exhibit a

pattern of greater disclosure of positive information and emotion than disclosure of negative information and emotion.

H8b: Women will report higher ratings of Perceived Partner Responsiveness than men.

To test *H8b*, the means for women and men on Perceived Partner Responsiveness were compared and *t*-tests were performed, anticipating that women would report significantly more Perceived Partner Responsiveness with their respondents than men would report with their respondents. Gender predicted higher ratings of Perceived Partner Responsiveness for one of three respondents. Table 18 displays the means for Gender on Perceived Partner Responsiveness. Hypothesis *H8b* was not consistently supported across all three respondents, R1: $t(259) = 1.32, p = .188$; R2: $t(240) = 2.33, p = .021$; R3: $t(202) = 0.72, p = .471$. Thus evidence only weakly supported Hypothesis *H8b*, that females report perceived higher levels of responsiveness from their friends than do males.

Table 18

Gender Means and Standard Deviations on PPR for R1, R2, and R3

	R1 PPR			R2 PPR			R3 PPR		
	<i>M</i>	<i>SD</i>	n	<i>M</i>	<i>SD</i>	n	<i>M</i>	<i>SD</i>	n
Men	3.73	1.09	95	3.49	1.07	89	3.60	1.09	75
Women	3.90	1.01	165	3.84	1.14	152	3.72	1.15	128

Note. PPR = Perceived Partner Responsiveness.

H8c: Women will report more closeness with their respondents than men will report with their respondents.

H8c was not supported. To test *H8c*, the means for women and men on Closeness were compared and *t*-tests were performed, anticipating that women would report significantly more closeness with their respondents than men would report with their respondents. However, no significant differences were noted between men and women in closeness with any of the three respondents. In Table 19, means were slightly higher for women than men, but these differences were not statistically significant. *T*-tests were not significant, R1: $t(256) = 1.90, p = .058$; R2: $t(235) = 1.95, p = .052$; R3: $t(197) = 1.67, p = .097$. Thus *H8c* was not supported. Women do not feel closer with their respondents to a self-disclosure status update on Facebook than do men.

Table 19

Gender Means and Standard Deviations on Closeness for R1, R2, and R3

	R1 Closeness			R2 Closeness			R3 Closeness		
	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>
Men	5.43	2.68	95	5.51	2.53	86	5.59	2.54	73
Women	6.09	2.71	162	6.24	2.87	150	6.25	2.80	125

H8d: Women will report greater Change in Intimacy as a result of self-disclosure than men.

Evidence did not support *H8d*. Means testing showed no difference between the levels of Change in Intimacy for women as compared with men. Table 20 displays the means for Respondents 1, 2, and 3 for Gender on Change in Intimacy. The test of the main effect of gender was not statistically significant, $t(251) = 0.21, p = .83$ for Respondent 1; $t(235) = 1.39, p = .17$ for Respondent 2, and $t(203) = 0.00, p = 1.00$ for Respondent 3. On average, men and women were not statistically different in their perceptions of Change in Intimacy based on respondents' replies to self-disclosure status updates on Facebook.

Table 20

Gender Means on Change in Intimacy

<i>Change in Intimacy</i>	<i>M</i>	<i>SD</i>	<i>95% CI Lower</i>	<i>95% CI Upper</i>
R1 Δ I M	3.07	0.48	2.98	3.17
R1 Δ I F	3.09	0.61	3.00	3.19
R2 Δ I M	3.05	0.75	2.89	3.20
R2 Δ I F	3.17	0.64	3.07	3.28
R3 Δ I M	3.02	0.55	2.90	3.15
R3 Δ I F	3.02	0.72	2.90	3.15

Note. R = Respondent; Δ I = Change in Intimacy; M = Male; F = Female; CI = confidence interval.

Attachment orientation. Correlations between attachment orientation variables, Perceived Partner Responsiveness, and Change in Intimacy are displayed in Table 21. High ratings on avoidance indicate the participant has scored high on the

insecure attachment dimension of avoidance, and high ratings on ambivalence indicate the participant has scored high on the insecure attachment dimension of ambivalence.

H9a: There is a positive correlation between secure attachment orientation and Perceived Partner Responsiveness as a result of self-disclosure.

There was no evidence to support *H9a*; results do not indicate a statistically significant relationship between secure attachment orientation and Perceived Partner Responsiveness.

H9b: There is a positive correlation between secure attachment orientation and Change in Intimacy as a result of self-disclosure.

There was no evidence to support *H9b*; results do not indicate a statistically significant relationship between secure attachment orientation and Change in Intimacy as a result of self-disclosure.

H9c: There is a negative correlation between avoidant attachment orientation and Perceived Partner Responsiveness as a result of self-disclosure.

There was no evidence to support *H9c*; results do not indicate a statistically significant relationship between avoidant attachment orientation and Perceived Partner Responsiveness.

H9d: There is a negative correlation between avoidant attachment orientation and Change in Intimacy as a result of self-disclosure.

There was no evidence to support *H9d*; results do not indicate a statistically significant relationship between avoidant attachment orientation and Change in Intimacy as a result of self-disclosure.

H9e: There is a positive correlation between ambivalent attachment orientation and Perceived Partner Responsiveness as a result of self-disclosure.

There was no evidence to support *H9e*; results do not indicate a statistically significant relationship between ambivalent attachment orientation and Perceived Partner Responsiveness.

H9f: There is a positive correlation between ambivalent attachment orientation and Change in Intimacy as a result of self-disclosure.

There was a positive statistically significant correlation between Ambivalence and Change in Intimacy for one of three respondents. That correlation was a positive significant correlation between Ambivalence and R3 Change in Intimacy ($r(196) = .13$, $p = .032$), indicating that higher levels of ambivalent attachment orientation was positively correlated with Change in Intimacy. Because this result was not replicated in the other respondents, it indicates weak support for *H9f*. Future studies should determine whether this result was an anomaly, a consequence of sampling error, or whether attachment ambivalence is indeed associated with greater likelihood of positive Change in Intimacy as a result of Facebook self-disclosure status updates.

In summary, securely attached individuals, in general, were no more or less likely than insecurely attached individuals (with the possible exception of insecurely attached individuals with ambivalent attachment orientation) to feel increasing levels of intimacy with a partner who responded to a self-disclosure status update. Furthermore, there was no evidence to indicate a statistically significant relationship between attachment orientation and Perceived Partner Responsiveness after receiving a response

to a self-disclosure status update for secure, avoidant or ambivalent attachment orientations.

Table 21

Correlation of Attachment, Change in Intimacy, and Perceived Partner Responsiveness

	Avoidance	Ambivalence	R1 ΔI	R1 PPR	R2 ΔI	R2 PPR	R3 ΔI	R3 PPR
Avoidance	-	.24**	.02	.00	.05	.04	-.06	-.08
Ambivalence		-	-.04	.03	.00	-.02	.13*	-.10
R1 ΔI			-		.40**		.54**	
R2 ΔI					-		.43**	
R3 ΔI							-	

Note. Avoidance = attachment avoidance; ambivalence = attachment ambivalence; R = Respondent; ΔI = Change in Intimacy; PPR = Perceived Partner Responsiveness.
* $p < .05$. ** $p < .01$.

Self-Monitoring. See Table 22 for correlations between self-monitoring and Change in Intimacy.

H10a: High self-monitors self-disclose at higher levels than low self-monitors.

There was partial support for *H10a*. There was a significant difference between high self-monitors and low self-monitors on Self-Disclosure Attitude, with high self-monitors, $M = 2.58$ ($SD = 0.72$) having a higher mean than low self-monitors, $M = 2.37$ ($SD = 0.70$), $t(262) = 2.40$, $p = .017$, $\eta^2 = .022$. High self-monitoring was positively correlated with the Self-Disclosure Attitude, $r = .15$, $p = .017$. Results suggest high

self-monitors have a more positive attitude about self-disclosing on Facebook than low self-monitors. However, correlation analysis did not show a significant relationship between self-monitoring and SD Positive Affect, $r = .06$, *ns*, and no significant relationship between self-monitoring and SD Negative Affect, $r = .05$, *ns*. In this study there was no difference, on average, in the self-disclosure behavior of high and low self-monitors.

H10b: High self-monitors report higher levels of Perceived Partner Responsiveness than low self-monitors.

There was partial support for *H10b*. There was a mean difference between high self-monitors and low self-monitors on PPR for R1. High self-monitors, $M = 4.00$ ($SD = 0.99$) reported higher levels of PPR than low self-monitors, $M = 3.67$ ($SD = 1.06$), a significant difference, $t(262) = 2.57$, $p = .011$, $\eta^2 = .025$. High self-monitoring had a significant positive correlation with R1 Perceived Partner Responsiveness, $r = .16$, $p = .011$, but the same pattern was not present for R2 Perceived Partner Responsiveness, $r = -.05$, $t(243) = 0.81$, $p = .420$, *ns*; and R3 Perceived Partner Responsiveness, $r = .05$, $t(205) = 0.64$, $p = .522$, *ns*.

H10c: High self-monitors report higher levels of Change in Intimacy as a result of self-disclosure than low self-monitors.

Self-monitoring was only significantly correlated with Change in Intimacy for Respondent 1, $r = .12$, $p = .024$ (one-tail). There was a mean difference between high self-monitors, $M = 3.15$ ($SD = 0.52$) and low self-monitors, $M = 3.01$ ($SD = 0.60$) on Change in Intimacy for R1, $t(253) = 1.99$, $p = .047$, $\eta^2 = .02$). Effect analysis revealed

2% of the variance in Change in Intimacy for Respondent 1 was explained by self-monitoring, with high self-monitors feeling more change in intimacy as a result of a self-disclosure status update on Facebook, than low self-monitors.

However, the results did not reveal any difference for the other respondents to the same status update. Those who scored high in self-monitoring were not more likely to increase their intimacy with responders than those scoring low in self-monitoring for Respondent 2, $t(238) = 0.96, p = .337$ and Respondent 3, $t(205) = 1.26, p = .209$. There is an association between high self-monitoring and Change in Intimacy with a respondent on Facebook. But there may be a difference in relationship between the self-discloser and the first and subsequent responders as reported in the survey. Perhaps high self-monitors connect first with friends who are closer and share norms of communication with the discloser, and these closer friends know what to say and how to say it.

Table 22

Correlation of Self-Monitoring and Change in Intimacy

Variable	Self-Monitoring	R1 Δ I	R2 Δ I	R3 Δ I
Self-Monitoring	-	.12*	.06	.09
R1 Δ I		-	.40**	.54**
R2 Δ I			-	.43**
R3 Δ I				-

Note. * $p < .05$. ** $p < .01$

H10d: High self-monitors report more Frequent Facebook participation than low self-monitors.

High self-monitoring had a significant positive correlation with Frequent Facebook Participation, $r = .17, p = .005$, supporting *H10d*. There is a mean difference between high self-monitors, $M = 2.68$ ($SD = 0.97$) and low self-monitors, $M = 2.33$ ($SD = 0.99$), $t(265) = 2.85, p = .005, \eta^2 = .03$, on Frequent Facebook participation. This suggests high self-monitors are more actively participating on Facebook with their friends than low self-monitors.

H10e: High self-monitors report higher levels of Closeness to their responders.

High self-monitoring had a significant positive correlation with R1 Closeness ($r = .16, p = .012$), partially supporting *H10e*. There is a mean difference between high self-monitors, $M = 6.26$ ($SD = 2.59$) and low self-monitors, $M = 5.42$ ($SD = 2.76$), $t(259) = 2.53, p = .012, \eta^2 = .02$, on closeness, suggesting high self-monitors feel closer to their respondents than low self-monitors. Results were not significant for R2, $t(238) = 0.99, p = .322$ or R3, $t(200) = 0.87, p = .385$.

H10f: High self-monitoring is positively correlated with an audience of “everyone” and negatively correlated with an audience of “no one”.

There was partial support for Hypothesis *H10f*. In response to questions concerned with the target of the self-disclosure, low self-monitoring was weakly associated with participant’s self-disclosure status update target “no one”, but the results were not statistically significant ($r = -.04, p = .47$). High self-monitoring had a statistically significant positive correlation with participant’s self-disclosure status

update target “everyone” ($r = .13, p = .016$). The t-test of the difference between high and low self-monitoring on target “everyone” was statistically significant, $t(272) = 2.16, p = .032, \eta^2 = .02$.

H10g: High and low self-monitors differ in their relationship with the responder to a self-disclosure status update, with closer friends responding to High self-monitors than to Low self-monitors.

Results support *H10g*. Cross-tab frequency analysis revealed that a higher percentage of the 705 respondents who were described by participants as “best friends” responded to high self-monitors (17%) than to low self-monitors (12%). A higher percentage of respondents who were described by participants as “friends” responded to low self-monitors (56%) than to high self-monitors (50%). See Table 23 for further details. Further analysis of the adjusted standardized residuals indicated the observed count for “sibling” was significantly different from the expected count for one of three responders, with more high self-monitors receiving responses from siblings than would be expected, and fewer low self-monitors receiving responses from siblings than would be expected given the sample size.

Table 23

Self-Monitoring (Percentage) by Relationship Type

SM	R	BF	F	A	P	S	OF	Total
Low	12 (4%)	39 (12%)	186 (56%)	58 (18%)	7 (2%)	8 (2%)	20 (6%)	330
High	18 (5%)	62 (17%)	188 (50%)	66 (18%)	4 (1%)	15 (4%)	22 (6%)	375
Total	30	101	374	124	11	23	42	705

Note. Values are the summed relationship type frequencies across the three respondents as described by participants. SM = Self-Monitoring; Low = low self-monitor; High = high self-monitor; R = romantic partner; BF = best friend; F = friend; A = acquaintance; P = parent; S = sibling; OF = other family member.

Frequent Facebook Participation and Change in Intimacy.

H11a: Frequent Facebook participation is positively correlated with Self-

Disclosure on Facebook.

The omnibus test of the main effect of self-disclosure on Frequent Facebook participation was significant, $F(3, 248) = 45.98, p < .001$. However, only Self-Disclosure Attitude had a unique effect on Frequent Facebook participation, holding Self-Disclosure Positive Affect and Self-Disclosure Negative Affect constant. For Self-Disclosure Attitude, $\beta = .56, t(248) = 9.73, p < .001$, and this effect explained 25% of the variance in Frequent Facebook participation. Self-Disclosure of Positive Affect was not uniquely significant when the other self-disclosure variables were held constant, $\beta = .06, t(248) = 1.05, p = .269$, and Self-Disclosure of Negative Affect was not uniquely

significant when the other self-disclosure variables were held constant, $\beta = .06$, $t(248) = 1.11$, $p = .293$. This means that positive attitude toward self-disclosure on Facebook is correlated with how frequently one participates on Facebook.

H11b: Frequent Facebook participation is positively correlated with Change in Intimacy.

Hypothesis *H11b* was supported by the data for Respondent 1, $r = .21$, $p < .01$, $\beta = .21$, $t(246) = 3.35$, $p = .001$ and Respondent 2, $r = .23$, $p < .01$, $\beta = .23$, $t(230) = 3.53$, $p = .001$ but not Respondent 3, $\beta = .11$, $t(198) = 1.53$, $p = .113$. See Table 24 for correlations. The correlation between Frequent Facebook participation and Change in Intimacy was a moderate positive association. However, for Respondent 3, the magnitude of the correlation was not significant, $r(200) = .11$, $p = .056$. Thus data indicate there is a correlation between an individual's attitude toward and comfort level with Facebook, evidenced by frequent posting, and improving intimacy with Facebook friends who respond to self-disclosure status updates.

Table 24

Correlation of Facebook Frequency and Change in Intimacy

Variable	FF	R1 ΔI	R2 ΔI	R3 ΔI
FF	-	.21**	.23**	.11
R1 ΔI		-	.40**	.54**
R2 ΔI			-	.43**
R3 ΔI				-

Note. ** $p < .01$

Closeness and Change in Intimacy.

H12: Closeness with the respondent will be positively correlated with Change in Intimacy as a result of self-disclosure.

Intimacy with the responder was assessed with each of the three respondents to measure the closeness of the relationship. Hypothesis *H12* predicts a positive correlation between the Closeness variable and Change in Intimacy. Table 25 indicates data supported the prediction with significant positive correlations between Closeness and Change in Intimacy. Strong positive correlations were found for all three respondents. For Respondent 1, $r = .37, p < .01$; for Respondent 2, $r = .48, p < .01$; for Respondent 3, $r = .45, p < .01$. Hypothesis *H12* is supported. In general, the perception of closeness or intimacy with a responder is associated with a greater likelihood of increased feelings of intimacy based on the response to a self-disclosing status update.

Table 25

Correlation of Closeness and Change in Intimacy

	R1	R2	R3	R1 ΔI	R2 ΔI	R3 ΔI
	Closeness	Closeness	Closeness			
R1 Closeness	-	.30**	.32**	.37**	.23**	.20**
R2 Closeness		-	.41**	.22**	.48**	.23**
R3 Closeness			-	.24**	.18**	.45**
R1 ΔI				-	.40**	.54**
R2 ΔI					-	.43**
R3 ΔI						-

Note. R = Respondent; ΔI = Change in Intimacy.

**p < .01.

Relationship Type and Change in Intimacy.

H13a: Perceived Partner Responsiveness is greater when responder is a parent or romantic partner, followed by best friend, followed by acquaintance or other family member.

Hypothesis *H13a* was partially supported because although Perceived Partner Responsiveness was higher for close relationships than for acquaintances, best friends ranked higher than romantic partners. The means displayed in Table 26 indicate higher levels of Perceived Partner Responsiveness on Facebook with respondents who are already intimate with the self-discloser than with casual friends, distant family members

and acquaintances. Highest Perceived Partner Responsiveness occurred with parent, best friend and romantic partner, with means ranging from 4.15 to 5.00. Means in the medium range of Perceived Partner Responsiveness occurred with friends and siblings, with means ranging from 3.75 to 4.44. The lowest means on Change in Intimacy occurred for other family members and acquaintances, with means ranging from 2.67 to 3.92.

The omnibus test of the main effect of relationship type on Perceived Partner Responsiveness was significant for all three respondents, R1: $F(6, 250) = 11.05, p < .001, \eta^2 = .21$; R2: $F(6, 233) = 20.24, p < .001, \eta^2 = .34$; R3: $F(6, 197) = 16.66, p < .001, \eta^2 = .34$. Post hoc analysis revealed somewhat different results from the prediction in the hypothesis. Parents were rated the highest for Respondents 1 and 2. Best friend was rated highest for Respondent 3 and second highest, after parent, for Respondents 1 and 2. Romantic partners were perceived as slightly less responsive than parents and best friends. Acquaintances were rated as least responsive in all three respondents, with LSD analysis indicating acquaintance was statistically lower than every other relationship type on Perceived Partner Responsiveness. For Respondent 1, the average mean differences between Acquaintance and other relationship types on Perceived Partner Responsiveness were as follows: romantic partner = $-1.28, SE = 0.30, p < .001$; best friend = $-1.63, SE = 0.21, p < .001$; friend = $-1.02, SE = 0.17, p < .001$; parent = $-2.12, SE = 0.55, p < .001$; sibling = $-1.26, SE = 0.43, p = .004$; other family member = $-1.05, SE = 0.27, p < .001$. Participants clearly perceive a difference: Friends and family are perceived as more responsive to self-disclosure status updates than acquaintances.

H13b: Change in Intimacy is greater when responder is a parent or romantic partner, followed by best friend, followed by acquaintance or other family member.

Hypothesis *H13b* was supported by the data. The means displayed in Table 26 indicate more improvement in intimacy on Facebook with respondents who are already intimate with the self-discloser than with distant family members and acquaintances. Highest means on Change in Intimacy occurred with parent, best friend and romantic partner, with means ranging from 2.86 to 4.00. The high value of 4.00 occurred in Respondent 1 when the respondent was a parent, perhaps reflecting an unusually close relationship or an especially salient message in the status update evoking an especially intimate response. Also the timing of the response may have been relevant for effecting a change in intimacy.

The low value in the range reflects a mean of 2.86 when Respondent 3 was a romantic partner. The average of 2.86 for Respondent 3 may be due to any or all of the following reasons: an outlier in the sample, small sample size of only 7 participants receiving the response from the romantic partner in Respondent 3, disappointment with the response itself, or disappointment with the timing of the response.

Means in the medium range of Change in Intimacy occurred with friends and siblings, with means ranging from 3.00 to 3.50. The lowest means on Change in Intimacy occurred for other family members and acquaintances, with means ranging from 2.70 to 3.04.

Furthermore, ANOVA revealed significant differences between the Relationship Type and Change in Intimacy for all three respondents, R1: $F(6, 245) = 4.38, p < .001, \eta^2 = .097$, R2: $F(6, 231) = 7.34, p < .001, \eta^2 = .160$, R3: $F(6, 197) = 4.82, p < .001, \eta^2 = .140$.

= .128. Post hoc Least Significant Difference (LSD) analysis revealed significant mean differences on Change in Intimacy in all three respondents, with acquaintance responses scoring significantly lower on Change in Intimacy than best friends and friends. The closeness of the relationship matters for a response to elicit feelings of improvement in intimacy.

Table 26

Mean of Relationship Type on Change in Intimacy and Perceived Partner

Responsiveness

Relationship Type	R1 Δ I	R1 PPR	R2 Δ I	R2 PPR	R3 Δ I	R3 PPR
	<i>M</i>	<i>M</i>	<i>M</i>	<i>M</i>	<i>M</i>	<i>M</i>
Parent	4.00	5.00	3.67	4.94	3.00	4.33
Best Friend	3.28	4.50	3.42	4.67	3.43	4.62
Romantic	3.33	4.15	3.81	4.56	2.86	4.38
Sibling	3.00	4.13	3.53	4.30	3.36	4.44
Friend	3.11	3.89	3.11	3.76	3.07	3.75
Other family	<u>2.78</u>	3.92	3.04	3.50	2.86	3.09
Acquaintance	2.90	<u>2.88</u>	<u>2.73</u>	<u>2.67</u>	<u>2.70</u>	<u>2.69</u>

Note. Relationship type with the highest mean on Change in Intimacy or Perceived Partner Responsiveness per respondent is in boldface. Relationship type with the lowest mean on Change in Intimacy or Perceived Partner Responsiveness per respondent is underlined. Romantic = romantic partner; R = Respondent; Δ I = Change in Intimacy; PPR = Perceived Partner Responsiveness.

Expectation Confirmation.

H14: Partner's response confirming the self-discloser's expectation of a positive response will be positively associated with Change in Intimacy.

H14 was supported in this study. When positive expectations were supported, feelings of intimacy increased. To test this hypothesis, participants indicated an expected message (although they could select "*I did not expect this person to respond*") and a received message from a forced choice list. Supportive messages were coded as either emotionally supportive or instrumentally supportive.

Small to moderate positive correlations between supported expectations and Change in Intimacy occurred for all three respondents (see Table 27). ANOVA indicated a main effect for positive expectation confirmation and Change in Intimacy, with 7% of the variance in Change in Intimacy explained for R1, 9% of the variance in Change in Intimacy explained for R2, and 5% of the variance in Change in Intimacy explained for R3 by supported positive expectations. In general, when Facebook participants experience an expected positive response to a self-disclosure status update they feel increased intimacy with their partner.

Table 27

Correlation for Positive Expectancy Confirmation on Change in Intimacy

Respondent	<i>n</i>	<i>r</i>	R^2/η^2	<i>t</i>	<i>F</i>
R1 ΔI	255	.26	.07		18.08**
R1 ΔI -ES	102	.30	/.09	5.37**	
R1 ΔI -IS	4	.18	/.04	3.54**	
R2 ΔI	237	.30	.09		23.30**
R2 ΔI -ES	107	.33	/.11	5.41**	
R2 ΔI -IS	5	.04	/0	1.33	
R3 ΔI	202	.22	.05		10.20**
R3 ΔI -ES	91	.20	/.03	2.77**	
R3 ΔI -IS	3	-.08	/0	-.84	

Note. R = Respondent; ΔI = Change in Intimacy; ES = emotional support; IS = instrumental support.

** $p < .001$.

H14a: Partner's response confirming the self-discloser's expectation of a positive, emotionally supportive response will be positively associated with Change in Intimacy.

To further investigate positive support in the context of Facebook, the distinction between expected and received emotional support and expected and received instrumental support was analyzed. Emotionally supportive messages included expressions of caring, respect or liking. Data supported Hypothesis *H14a*. Small to moderate positive correlations between confirmed emotionally supportive expectations

and Change in Intimacy occurred for all three respondents (see Table 27). ANOVA indicated a main effect for positive emotional support expectation confirmation and Change in Intimacy, with 9%, 11%, and 4% (R1, R2 and R3 respectively) of the variance in Change in Intimacy explained by confirmed emotionally supportive positive expectations. In general, when Facebook participants experience an expected positive emotionally supportive response to a self-disclosure status update they feel increased intimacy with their partner. Frequency analysis revealed that Facebook interaction involved expectations/responses of emotional support to a greater extent than instrumental support. Emotionally supportive expectations and responses were also more common than neutral or negative expectations and responses.

H14b: Partner's response confirming the self-discloser's expectation of a positive, instrumental response will be positively associated with Change in Intimacy.

An instrumentally supportive expectation and response was reflected by the participant's selection of either advice or help. Small positive correlations between confirmed expectations and Change in Intimacy occurred for Respondents 1 and 2 (see Table 27). A very small negative correlation was detected for Respondent 3. One possible reason why intimacy could decrease after receiving instrumental support is the receiver dislikes or rejects the advice given.

ANOVA indicated a main effect for instrumental support expectation confirmation and Change in Intimacy for Respondent 1 only ($F(1, 253) = 8.21, p = .005, R^2 = .03$). But Respondent 1 differed from the other respondents, indicating there may be a different perception for the first person to respond to a Facebook self-disclosure status update as compared to other respondents. For Respondent 2 and Respondent 3,

ANOVA was not statistically significant (R2: $F(1, 235) = 0.34, p = .559$; R3: $F(1, 201) = 1.36, p = .246$). Because the data yielded mixed results on Hypothesis *H15b*, it cannot be concluded that Facebook participants experience an increase in intimacy when they expect and receive an instrumentally supportive response to a self-disclosure status update. In summary, the confirmation of positive expectations, especially when the expectation is for emotional support, is associated with an increase in intimacy.

Expectancy Violations.

According to expectancy violation theory (Burgoon & Hale, 1988), the “reward valence” of the responder and the “behavior” itself is interpreted and evaluated by the self-discloser. The violator’s reward valence is positive if the rewards of interacting with the person exceed the costs. The violator’s reward valence is negative if the costs of interacting with the person exceed the rewards. The behavior, for this study, is defined as the Facebook response to the status update. The response (either a self-disclosure, “like” or other comment) may be interpreted and evaluated as positive if the response satisfies perceived social norms of interaction on Facebook and personal preferences of the self-discloser. The response may be interpreted or evaluated as negative if the response does not satisfy perceived social norms of interaction on Facebook and personal preferences of the self-discloser. There are four possible evaluations of expectancy violations (Burgoon & Hale, 1988): positive valence/ positive behavior, positive valence/ negative behavior, negative valence/negative behavior and negative valence/positive behavior. In this study, only a few unexpected responses were evaluated and interpreted by participants as negative, thus there are few negative expectancy violations.

Participants who were neutral in their judgment of the respondent on either, but not both, of the violation criteria of reward valence and violating behavior tended to improve their intimacy with the respondent above the average. Means for neutral valence or neutral behavior combined with positive or negative valence or positive or negative behavior improved intimacy. Results for the 9 conditions including neutral responses are displayed in Table 32 for R1, Table 35 for R2 and Table 38 for R3. When a response is unexpected, neutral evaluations and positive evaluations have a similar influence on Change in Intimacy. Thus for analysis purposes neutral evaluations were collapsed into the positive category. This simplified the analysis process by reducing the number of groups from nine to four and did not significantly change the results. Because the sample sizes were low for conditions in which participants reported evaluations other than positive reward valence/positive violating behavior, caution must be taken in the interpretation of results for the other three conditions.

The ANOVA of expectancy violations on Change in Intimacy yielded a significant main effect for Respondent 1, $F(3,145) = 4.24, p = .007, \eta^2 = .08$, and Respondent 2, $F(3,133) = 2.73, p = .046, \eta^2 = .06$. The ANOVA for Respondent 3 was not significant, $F(3,111) = 2.55, p = .059$. See Tables 30-38 for details. For the first two respondents, on average, there was a difference in means due to type of expectancy violation on Change in Intimacy. Post hoc Least Significant Difference (LSD) analysis revealed one significant mean difference in groups for Respondent 1 and two significant mean differences in groups for R2, as noted in Table 28. There is no consistent pattern of differences between the groups across the three Respondents. Reasons for the lack of

a main effect for Respondent 3 could be a different type of relationship for later respondents to a self-disclosure status update, lower sample size, or sampling error.

Table 28

Significant Mean Differences Between Expectancy Violation Conditions

Expectancy Violation:	Mean Difference	SE
Group Differences		
R1: (+V+B) and (-V+B)	.73*	0.29
R2: (+V+B) and (-V-B)	.79*	0.33
R2: (-V-B) and (-V+B)	-.93*	0.40

Note. Results on Post Hoc Least Significant Difference test (LSD).

R = respondent; V = valence; B = behavior; - = negative; + = positive.

* $p < .05$.

H15a: Violation of the self-discloser's expectations after posting to Facebook will be positively correlated with Change in Intimacy if the responder reward valence is positive and the response behavior is positive.

Expectancy violations were generally viewed as positive. The cell means (Tables 29-37) revealed a pattern consistent with the prediction in Hypothesis *H15a* for the positive reward valence and positive behavior condition with all three respondents improving their intimacy with the self-discloser. Thus Hypothesis *H15a* is supported by the data. When an expectancy violation occurs on Facebook and the self-discloser's perceptions of the reward valence and behavior valence of the violator are positive, there is a positive Change in Intimacy. Furthermore, the means for unexpected positive reward

valence and positive behavior for each of the three respondents on Change in Intimacy exceed the respective overall means on Change in Intimacy (Table 29), as Burgoon and Hale's (1988) expectancy violations model would predict. Independent samples tests revealed the means were significantly different, with positive expectancy violations for reward valence and behavior predicting greater Change in Intimacy for R1: $t(253) = 3.57, p < .001, 95\% \text{ CI } [.11, .39]$; R2: $t(237) = 2.06, p = .040, 95\% \text{ CI } [.01, .36]$; and R3: $t(204) = 3.36, p = .001, 95\% \text{ CI } [.13, .50]$.

Table 29

Comparison of EV, +V+B Mean and Scale Mean on ΔI

Respondent	EV, +V+B	EV, -V-B	Overall
	<i>M (SD) on ΔI</i>	<i>M (SD) on ΔI</i>	<i>M (SD) on ΔI</i>
R1	3.24 (0.53)	2.42 (1.23)	2.99 (0.56)
R2	3.24 (0.56)	2.35 (1.27)	3.06 (0.73)
R3	3.24 (0.58)	2.33 (1.15)	2.92 (0.68)

Note. Table lists the mean and standard deviation on Change in Intimacy for the positive reward valence/positive behavior expectancy violation condition and the negative reward valence/negative behavior expectancy violation condition for 9 groups and the overall mean and standard deviation of Change in Intimacy. Sample of participants selecting expectancy violation, positive reward valence/positive behavior: R1: $n = 102$, R2: $n = 90$, R3: $n = 73$. Sample of participants selecting expectancy violation, negative reward valence/negative behavior: R1: $n = 3$, R2: $n = 5$, R3: $n = 3$. Sample of participants remaining in overall ΔI : R1: $n = 153$, R2: $n = 149$, R3: $n = 133$. EV = Expectancy violation. +V+B = Positive reward valence and positive behavior. -V-B = Negative reward valence and negative behavior; ΔI = Change in Intimacy.

H15b: Violation of the self-discloser's expectations after posting to Facebook will be negatively correlated with Change in Intimacy if the responder reward valence is positive and the response behavior is negative.

Data was consistent with the prediction in Hypothesis *H15b* for the positive reward valence and negative behavior condition with all three respondents showing lower cell means than the respective grand mean indicating less Change in Intimacy than average with the responder if the reward valence is positive but the response itself is negative. When an expectancy violation occurs and the rewardingness of the responder is positive and the response is negative, then there will be a negative impact on Change in Intimacy.

H15c: Violation of the self-discloser's expectations after posting to Facebook will be negatively correlated with Change in Intimacy if the responder reward valence is negative and the response behavior is negative.

Lowest cell mean average for the negative reward valence and negative behavior condition (Hypothesis *H15c*) was also consistent with the expectancy violation prediction with self-disclosers feeling less intimacy with these respondents. When an expectancy violation occurs and the rewardingness of the responder is negative and the response is negative, then there will be a negative impact on Change in Intimacy. Furthermore, the means for unexpected negative reward valence and negative behavior for each of the three respondents on Change in Intimacy are lower than the respective overall means on Change in Intimacy (Table 29), as Burgoon and Hale's (1988) expectancy violations model would predict. However, the sample sizes for the negative valences are small, thus it would be inappropriate to run parametric statistical analyses

on these groups because sample sizes are generally required to be at least 30 before the means approach the normal distribution (Howell, 2007, p. 171).

H15d: Violation of the self-discloser's expectations after posting to Facebook will be positively correlated with Change in Intimacy if the responder reward valence is negative and the response behavior is positive.

Inconsistent results occurred for the negative reward valence and positive behavior condition (Hypothesis *H15d*), with only Respondent 2 achieving an improvement on Change in Intimacy with a cell mean greater than the grand mean. When an expectancy violation occurs and the reward valence of the responder is negative and the response is positive, it cannot be concluded this will generate a positive Change in Intimacy with the self-discloser.

Table 30

RI Means for Expectancy Violation Groups on Change in Intimacy

<i>Group</i>	<i>N</i>	<i>Mean</i>	<i>SD</i>	<i>SE</i>	<i>95% CI for</i>		<i>Min</i>	<i>Max</i>	<i>Btwn</i>	
					<i>Mean</i>					<i>Variance</i>
					<i>Lower</i>	<i>Upper</i>				
+V+B	133	3.13	0.61	0.05	3.03	3.24	1.00	5.00		
+V-B	8	2.72	0.53	0.19	2.28	3.16	1.75	3.50		
-V+B	5	2.40	0.84	0.38	1.36	3.44	1.00	5.00		
-V-B	3	2.42	1.23	0.71	-0.65	5.48	1.00	3.25		
Total	149	3.07	0.65	0.05	2.97	3.18	1.00	5.00		
Model	Fixed		0.63	0.05	2.97	3.17				
	Effects									
	Random			0.33	2.03	4.11			0.13	
	Effects									

Note. V = valence; B = behavior.

Table 31

Analysis of Variance for 4 Expectancy Violation Groups on R1 Change in Intimacy

	<i>Sum of</i>	<i>df</i>	<i>Mean Square</i>	<i>F</i>	<i>p</i>
	<i>Squares</i>				
Between Groups	5.02	3	1.67	4.24	.007
Within Groups	57.24	145			
Total	62.26	148			

Table 32

*RI Means for Change in Intimacy,**9 Expectancy Violation Groups*

<i>Group</i>	<i>N</i>	<i>Mean</i>	<i>SD</i>	<i>SE</i>
+V+B	102	3.24	0.53	0.05
+V-B	8	2.72	0.53	0.19
-V+B	4	2.25	0.89	0.44
-V-B	3	2.42	1.23	0.71
nV+B	6	3.08	0.20	0.08
nV-B	0	-	-	-
+VnB	10	2.85	0.49	0.15
-VnB	1	3.00	-	-
nVnB	15	2.62	0.97	0.25
Total	149	3.07	0.65	0.05
Model	Fixed		0.60	0.04
	Effects			
	Random			0.24
	Effects			

Note. V = valence; B = behavior, n = neutral.

Table 33

R2 Means for Expectancy Violation Groups on Change in Intimacy

<i>Group</i>	<i>N</i>	<i>Mean</i>	<i>SD</i>	<i>SE</i>	<i>95% CI for</i>		<i>Min</i>	<i>Max</i>	<i>Btwn</i>	
					<i>Mean</i>					<i>Variance</i>
					<i>Lower</i>	<i>Upper</i>				
+V+B	111	3.14	0.72	0.07	3.01	3.28	1.00	5.00		
+V-B	12	2.81	0.65	0.19	2.40	3.23	1.75	4.00		
-V+B	9	3.28	0.55	0.18	2.85	3.70	3.00	4.25		
-V-B	5	2.35	1.27	0.57	0.77	3.93	1.00	3.75		
Total	137	3.09	0.74	0.06	2.97	3.22	1.00	5.00		
Model	Fixed		0.72	0.06	2.97	3.20				
	Effects									
	Random			0.21	2.43	3.76			0.06	
	Effects									

Note. V = valence; B = behavior.

Table 34

Analysis of Variance for 4 Expectancy Violation Groups on R2 Change in Intimacy

	<i>Sum of Squares</i>	<i>df</i>	<i>Mean Square</i>	<i>F</i>	<i>Sig.</i>
Between Groups	4.30	3	1.43	2.73	.046
Within Groups	69.84	133	0.53		
Total	74.14	136			

Table 35

*R2 Means for Change in Intimacy,**9 Expectancy Violation Groups*

<i>Group</i>	<i>N</i>	<i>Mean</i>	<i>SD</i>	<i>SE</i>
+V+B	90	3.24	0.56	0.06
+V-B	9	2.69	0.69	0.23
-V+B	6	3.21	0.51	0.21
-V-B	5	2.35	1.27	0.57
nV+B	5	3.10	1.42	0.64
nV-B	3	3.17	1.38	0.22
+VnB	2	3.25	-	-
-VnB	3	3.42	0.72	0.42
nVnB	14	2.50	1.02	0.27
Total	137	3.09	0.74	0.06
Model	Fixed		0.70	0.06
	Effects			
	Random			0.22
	Effects			

Note. V = valence; B = behavior, n = neutral.

Table 36

R3 Means for Expectancy Violation Groups on Change in Intimacy

Group	N	Mean	SD	SE	95% CI for Mean		Min	Max	Btwn Variance
					Lower	Upper			
+V+B	95	3.07	0.76	0.08	2.91	3.22	1.00	5.00	
+V-B	9	2.44	0.74	0.25	1.88	3.01	1.00	3.25	
-V+B	8	2.94	0.79	0.28	2.28	3.60	1.75	4.5	
-V-B	3	2.33	1.15	0.67	-0.54	5.20	1.00	3.00	
Total	115	2.99	0.77	0.07	2.84	3.13	1.00	5.00	
Model	Fixed			0.07	2.85	3.13			
	Effects								
	Random			0.24	2.21	3.77			0.08
	Effects								

Note. V = valence; B = behavior.

Table 37

Analysis of Variance for 4 Expectancy Violation Groups on R3 Change in Intimacy

	<i>Sum of Squares</i>	<i>df</i>	<i>Mean Square</i>	<i>F</i>	<i>Sig.</i>
Between Groups	4.54	3	1.51	2.55	.059
Within Groups	65.88	111	0.59		
Total	70.42	114			

Table 38

*R3 Means for Change in Intimacy,**9 Expectancy Violation Groups*

<i>Group</i>	<i>N</i>	<i>Mean</i>	<i>SD</i>	<i>SE</i>
+V+B	73	3.24	0.58	0.07
+V-B	6	2.71	0.56	0.23
-V+B	7	2.93	0.85	0.32
-V-B	3	2.33	1.15	0.67
nV+B	3	3.08	0.63	0.36
nV-B	3	1.92	0.88	0.51
+VnB	2	3.25	0.35	0.25
-VnB	1	3.00	-	-
nVnB	17	2.31	1.04	0.25
Total	115	2.99	0.79	0.07
Model	Fixed		0.71	0.07
	Effects			
	Random			0.31
	Effects			

Note. V = valence; B = behavior, n = neutral.

Target's Point of View

Target: Gender.

H16: Women are more often the intended target of self-disclosures than are men.

In Phase 2, after participants selected and posted a status update from their Facebook page to the questionnaire, they were asked whether they were imagining a conversation with a particular person or a specific group of individuals. Table 39 lists the frequencies for responses ($n = 203$ valid responses). Almost half of the sample ($n = 92$, 45%) of respondents indicated “don’t know.” For those respondents who did indicate a target, females were only slightly more likely to be the individual target, and the number of participants targeting females was very small ($n = 14$ for individual target). When the target was a group, it was more likely to include both males and females. Thus data is too limited to support and adequately test *H16*, and from the data in this study it cannot be concluded that there is a gender difference in the target of self-disclosure status updates.

Table 39

Target of Self-Disclosure Status Update

Target	Frequency	Valid Percent
Target is Individual (<i>n</i> = 30; 14%)		
Male	11	37%
Female	14	47%
Don't Know	5	16%
Target is Group (<i>n</i> = 88; 42%)		
All Male	6	7%
All Female	4	5%
Mixed Gender	75	85%
Don't Know	3	3%

H17: Women are more likely than men to respond to status updates.

Data related to Hypothesis *H17* were gathered in several different places in the survey. In the “Target Point of View” part of the survey, tests of an “EGDR” composite variable revealed that women respond to women. When women post status updates they are more likely to get responses from other women. A composite variable EGDR was created to assess the likelihood that, in general, females communicate more frequently on Facebook. ANOVA indicated a main effect for Gender on EGDR to status updates, $t(264) = 2.52, p = .012$. Women and men differ in their communication

with women on Facebook, with women sending and receiving messages to other women with greater frequency than men.

Also in the “Target’s Point of View” section, responsiveness to others’ status updates was assessed. In response to the question, “*How many status updates do you respond to each week, on average*”, see Table 40 for details. At the low end of responses per week, on average, men (15%) were more likely than women (3%) to respond to 0 messages per week. Men (7%) were less likely than women (14%) to respond to 1 status updates. Women (51%) were more likely to respond to a medium level of 2-3 status updates per week than men (47%). Men (31%) and women (32%) were equally likely to respond to the high level of 4 or more status updates.

Further analysis of the adjusted standardized residuals was necessary to tell how far the observed count in each cell was from the expected count. Adjusted standardized residuals indicated a statistically significant difference in the cell counts for men and women for “0 status updates responded to.” These results indicate more men than women do not respond to any status updates at all in a typical week. While women report responding to more status updates than men, lending support to Hypothesis *H17*, the gender difference is generally small.

Table 40

Differences by Gender in Responsiveness to Status Updates per Week

Status	Male	Male %	Female	Female %	Total
Updates responded to					
0	8	15%	3	3%	11
1	4	7%	15	14%	19
2	11	20%	31	29%	42
3	15	27%	24	22%	39
4 or more	17	31%	34	32%	51
Total	55	100%	107	100%	162

When the specific instance of an actual status update in this study was posted by a woman, responders were significantly more likely to be women. Thus the actual status update and responses reported in the data supported Hypothesis *H17*. ANOVA revealed a significant effect for the gender of the participant on gender of the respondent. For Respondent 1, 7% of the variance in the gender of the respondent is explained by the gender of the self-discloser: $t(254) = 4.31, p < .001, R^2 = .07$. For Respondent 2, 10% of the variance in the gender of the respondent is explained by the gender of the self-discloser: $t(236) = 4.96, p < .001, R^2 = .10$. For Respondent 3, 2% of the variance in the gender of the respondent is explained by the gender of the self-discloser: $t(203) = 2.23, p = .027, R^2 = .02$. In Table 41, crosstab analysis showed participants and respondents were more likely to be same gender pairs than to be mixed

gender pairs. When men were self-disclosers, women responded more than 40% of the time. When women were self-disclosers, men responded less than 40% of the time.

Women appear to respond to more status updates than men.

Table 41

Gender of Self-Discloser by Gender of Respondent

Self-Discloser	R1- M	R1- F	R2- M	R2- F	R3- M	R3- F	Totals
Male	52	41	50	38	39	36	256
M %	(56%)		(57%)		(52%)		
Female	48	115	39	111	47	83	443
F %		(71%)		(74%)		(64%)	
Totals	100	156	88	150	86	119	699

Note. Self-Discloser = Gender of Participant; R = Respondent; M = Male; F = Female

Target: Self-Monitoring.

H18a: High self-monitors more likely to believe they are the target of others' self-disclosures than low self-monitors (confidence).

While there was a positive association between high self-monitoring and confidence that one is the target, ($r = .12$, $p = .128$, one-tail), the data was not statistically significant and thus did not allow for rejection of the null hypothesis that high self-monitors could not be distinguished from low self-monitors as a predictor of

Confidence, $t(266) = 1.92, p = .056$. Therefore Hypothesis *H18a* was not supported.

H18b: High self-monitors show a greater concern for appropriateness in their Target Responsiveness than low self-monitors.

H18b was supported by the data. High self-monitors indicated a greater concern for appropriateness in their responsiveness than did low self-monitors. There was a positive correlation between high self-monitoring and a summed Appropriateness variable ($r = .14, p = .021$). Furthermore, ANOVA indicated a statistically significant difference between high and low self-monitoring on Appropriateness, $t(272) = 2.33, p = .021$. High self-monitors are more likely than low self-monitors to be concerned about social norms such as reciprocity, appropriateness and partner's expectations when they are responding to a self-disclosing status update.

H18c: High self-monitors respond to others more frequently than low self-monitors on Facebook.

Hypothesis *H18c* was tested on Phase 2 data, $n = 205$. High self-monitors were no more likely than low self-monitors to respond affirmatively to the statement, "I respond to others' personal status updates" ($r = .039, p = .574$). Those responding affirmatively were directed to additional items related to Responsiveness. This composite variable measured frequency of Facebook responding, enjoyment of responding to others on Facebook, and number of status updates responded to.

Analysis of high self-monitoring on Responsiveness found a significant positive correlation between high self-monitoring and Responsiveness ($r = .21, p = .007$).

ANOVA revealed a significant main effect for self-monitoring on Responsiveness, $F(1,$

158) = 7.49, $p = .007$. The variance in Responsiveness explained by high self-monitoring was 5%.

To further test the data of those participants who respond to status updates, responses to the question, “*How many status updates do you respond to each week, on average?*” were analyzed. Self-Monitoring was statistically significant, $r(160) = .17$, $p = .032$, $F(1, 158) = 4.70$, $p = .032$, $R^2 = .03$. While high self-monitors are not more likely than low self-monitors to respond to personal status updates in general, for those individuals who do respond to status updates, high self-monitors on average are likely to respond more frequently, and possibly to a greater breadth of topics and to a wider range of Facebook friends, than low self-monitors. Furthermore, most of the variance in responsiveness to others’ status updates can be explained by the participants’ frequency of responses per week. High self-monitors are more responsive than low self-monitors, confirming Hypothesis *H18c*.

Target: Confidence.

H19: Confidence that one is the target is positively correlated with Target Responsiveness.

Hypothesis H19 was supported, with a significant positive correlation between the feeling of confidence, defined as knowing when one is the target of a status update, and responsiveness to others on Facebook ($r = .31$, $p < .001$). Further analysis revealed a statistically significant main effect for Confidence on Responsiveness, $F(1, 158) = 16.44$, $p < .001$, $R^2 = .09$. For the Phase 2 sample of 160 individuals who respond to others on Facebook, there is a positive relationship between Confidence and

responding. Confidence that one knows when one is the intended target of a status update is correlated with high levels of responsiveness on Facebook.

Target: Appropriateness and Responsiveness.

H20: Appropriateness is positively correlated with Target Responsiveness.

This hypothesis was supported by the Phase 2 data. When participants reacted to the thread, “*I respond to a friend’s status update on their Facebook Wall if I...(Check all answers that apply)*”, the selection of items that dealt with norms of appropriateness was positively correlated with Responsiveness. The summed items included: “*I feel obliged to comment on my friend’s status update because he/she commented on my status update*”; “*I feel it is appropriate for me to respond*”; and “*I know my friend would expect me to respond.*”

The correlation of Appropriateness with Responsiveness was positive and statistically significant ($r = .28, p < .001$). Furthermore, ANOVA revealed a main effect for Appropriateness on Responsiveness with 8% of the variance in Responsiveness explained by Appropriateness, $F(1, 158) = 12.89, p < .001, R^2 = .08$. Confidence that one is appropriately complying with Facebook norms is associated with greater likelihood of high levels of responsiveness to status updates.

In addition, respondents were asked to rate the appropriateness of five topics for Facebook self-disclosure. See frequency analysis in Table 42. In order, topics that were emotionally supportive, family-oriented, or related to politics were deemed more socially appropriate while topics that were considered less appropriate were those with potentially negative outcomes such as telling the truth even if it hurts or too personal such as explicitly sexual self-disclosure.

Table 42

Appropriateness

Topic	<i>M</i>	<i>SD</i>
Things that will make the other person feel good	4.02	1.15
Family	3.43	1.23
Politics	3.05	1.34
To tell the truth even if hurtful	2.29	1.14
Sex	1.94	1.22

Research Questions**Interaction not found between attachment dimensions.**

RQ1: Is Change in Intimacy predicted by an interaction between Avoidance and Ambivalence?

Statistical analysis was performed on the two attachment dimensions to test for correlation. In addition, Avoidance, Ambivalence and the interaction of Avoidance X Ambivalence were regressed on Change in Intimacy for the three respondents. Results indicated there was a statistically significant positive correlation between Avoidance and Ambivalence, $r(240) = .24, p < .001$, 2-tailed. Regression analysis for Avoidance, Ambivalence, and the interaction term (Avoidance X Ambivalence) on Change in Intimacy was not statistically significant for Respondent 1, $F(3, 227) = 0.31, p = .819, R^2 = .004$; Respondent 2, $F(3, 211) = 0.17, p = .915, R^2 = .002$; or Respondent 3, $F(3, 180) = 2.24, p = .085, R^2 = .036$. Individual variables Avoidance and Ambivalence and

the interaction term were not significant predictors of Change in Intimacy, except for one main effect for Ambivalence in Respondent 3, which indicated a main effect, $t(227) = 2.07, p = .04$, predicting Change in Intimacy.

Target variables for responding.

RQ2: When do individuals believe they are the target of a Facebook self-disclosure?

RQ2 was tested by performing a regression of the variables impacting the response Confidence variable. The predictor variables include Frequent Facebook participation (FF), SDIndex (self-disclosure index that measures comfort with self-disclosure on Facebook), attachment ambivalence, and extent of female interaction on Facebook (EGDR).

The regression model generated the following equation and statistics:

Predicted Response Confidence = $.53 + .29 \text{ SD Attitude} + .23 \text{ EGDR} + .22 \text{ Frequent Facebook participation} + .11 \text{ Attachment Ambivalence}$. ANOVA revealed a significant main effect for the model with 22% of the variance in Response Confidence explained by the variables as a set ($F(4, 238) = 16.82, p < .001, R^2 = .22$). Results of *t*-tests of the coefficients indicated all predictors except attachment ambivalence were statistically significant (Table 43). After variance for SD Attitude, EGDR and FF is removed, there is not a significant amount of residual variance associated uniquely with attachment ambivalence. The other variables mediate the relationship between attachment ambivalence and Confidence.

The greatest significance was noted for EGDR, suggesting greater likelihood of target confidence occurs when Facebook interaction is with women. Also frequency,

familiarity and comfort with self-disclosure on Facebook are important, perhaps for understanding Facebook social norms and for being an active presence on the site, which may encourage further and more nuanced interaction with others who also frequent the site.

Table 43

Predictor Variables of Response Confidence

Variable	β	t
SD Attitude	.20*	2.84
EGDR	.19*	3.18
FF	.21*	2.92
Ambivalence	.11	1.85

Note. SD = self-disclosure; EGDR = Expected gender difference in response; FF = Frequent Facebook participation; Ambivalence = ambivalent attachment orientation. * $p < .05$.

Motivations for responding to a self-disclosure status update.

RQ3: What motivates individuals to respond to someone else's Facebook post?

Motivation for responding to another's Facebook post were assessed by asking participants to select responses to the statement, "*I respond to a friend's status update on their Facebook Wall if I...(Check all answers that apply)*". Table 44 displays results for the six most common responses, selected by more than 60% of the sample participants out of a list of 19 items provided in the survey, along with results for the three least common responses. Generally, participants are motivated to respond to a status update when they can express good feelings. Messages incorporating humor,

support, common interests and/or concern for appropriateness are all conducive to positive relationship maintenance.

Table 44

Frequency Analysis of Highest and Lowest Motivations to Respond to Status Update

Most Common Motivations for Responding	
Rank / Frequency / % of Total	Motivation
1 / 229 / 80%	can think of a funny response
2 / 228 / 80%	feel close to the friend
3 / 217 / 76%	want to congratulate my friend if he/she posted exciting news
4 / 191 / 67%	am involved with the topic or I knew about the topic
5 / 176 / 62%	care about the person and want to offer support and encouragement
6 / 173 / 61%	feel it is appropriate for me to respond
Least Common Motivations for Responding	
Rank / Frequency / % of Total	Motivation
17 / 49 / 17%	am responding to a male friend
18 / 50 / 18%	want to express what I think even if I am responding to someone I don't know very well
19 / 52 / 18%	feel my comment is a gift or favor to my friend

Note. Total Responses = 285.

Multiple modes of communication.

RQ4: When are individuals more likely to communicate through multiple modes of communication?

Consistent with Haythornthwaite and Wellman's (1998) finding that wider variety of media are chosen for use with closer relationships, when a participant classified a respondent as "friend", there were fewer modes of communication used than when a respondent was classified as a "romantic partner" or "best friend". When a respondent was classified as "acquaintance", they typically communicated through Facebook alone.

Bivariate correlation analysis indicated a significant difference between relationship type and whether the partner responded using additional media for R1: ($r = .13, p = .037$). The omnibus test of the main effect of relationship type on additional media was statistically significant, $F(6, 251) = 2.24, p = .040$. Further post hoc Tukey one degree-of-freedom analysis of the mean differences between best friend and acquaintance was statistically significant, with best friend more likely to respond beyond Facebook with additional media: R1: *mean difference between best friend and acquaintance* = 0.27, $p = .04$. A similar pattern was observed for Respondents 2 and 3. Other media included "text" (10%), phone (6%), face-to-face (5%), chat (2%), email (1%) and private Facebook message (1%).

Discussion

Overview

This dissertation represents a starting point for building a model to explain individual and relationship differences in Facebook intimacy. In this study, scientific theories about self-disclosure (Jourard & Lasakow, 1958), perceived partner responsiveness (Reis, Clark, & Holmes, 2004; Laurenceau, Barrett, & Pietromonaco, 1998) and the interpersonal process of intimacy (Reis & Shaver, 1988) were examined in the context of Facebook. The focus of the research was to explore whether processes of the communication of intimacy on Facebook are similar to face-to-face or whether communication of intimacy through the online social network context is different from the offline, face-to-face context. Hypotheses related to tests of the interpersonal process model of intimacy (Reis & Shaver, 1988) will be reviewed in this discussion. In addition I examined the characteristics of individuals who benefitted from intimacy processes on Facebook. Hypotheses and results related to tests of individual characteristics and relationship characteristics that are more likely to achieve improvement in intimacy on Facebook will be discussed.

Expectancy confirmation was also tested to explore the expectations of participants as they posted their status update and whether the expectations were met by respondents. Expectancy violations theory (Burgoon & Hale, 1988) was used as a framework for understanding processes and consequences for intimacy resulting from unexpected responses to a Facebook self-disclosure status update. Hypotheses, results and implications for effective communication will be discussed.

In this dissertation, participants not only answered questions about their own status update and the responses they received. They also answered questions posed to them in a section that begins with the following thread, “*Imagine that you are the person commenting or pressing the “like” button in response to a friend’s personal status update.*” Engaging in role-play as the “target” of another’s status update, participants then provided information regarding their perceptions as they responded to questions. Results of tests of hypotheses concerned with the target’s point of view will be described in this section.

Results that were obtained for the research questions will also be explored in this section as I describe the motivations for responding to another person’s status update. Participants were asked to select from a list of possible motivations using some of the motivations uncovered by Bryant and Marmo (2009). Patterns noted from the data collected will be discussed. Another research question assessed the media used in communicating with partners of varying closeness to the participant in a test of Haythornthwaite and Wellman’s (1998) suggestion that a wider variety of media is used with closer relationships than with acquaintances.

Cohen (1988) determined the effect size of the Pearson correlation coefficient .1 to be a small correlation, .3 a medium correlation, and .5 a large correlation. However, this study examines one status update and three responses. Cumulative effects may be assumed and therefore even small statistically significant correlations are important. An alpha level of .05 was used for all statistical tests.

The following format will be used to structure this Discussion section: The first topic in this section of the dissertation will be a discussion of hypotheses and results

from the self-discloser's point of view about changes in intimacy. Second, I will explain the hypotheses and results from the target's point of view. Third, there will be a discussion of the remaining research questions and the results of analyses related to these research questions. The fourth topic will delineate some of the caveats and limitations of the research in this dissertation. The section ends with suggestions for future research and conclusions.

Self-Discloser's Point of View

Evidence for Interpersonal Process Model of Intimacy on Facebook. The overarching purpose of this dissertation is to compare and contrast the processes of intimacy on Facebook with processes of intimacy in face-to-face communication. Two conceptual models were tested. The first model is based on theories that posited an association between self-disclosure and intimacy (Jourard, 1959; Altman & Taylor, 1973). The second model reflects the interpersonal process model of intimacy. Reis and Shaver (1988) provided this model of the interpersonal process of intimacy in an effort to synthesize interdisciplinary ideas about this essential process from prominent scholars in the forefront of relationship research. Important components of the interpersonal process model of intimacy include a self-disclosure and a partner response, both of which are associated with increasing intimacy and are components found in the basic model. In addition, the interpersonal process model of intimacy includes the self-discloser's perception of the partner's responsiveness (the additional variable, Perceived Partner Responsiveness). Perceived Partner Responsiveness is thought to mediate the relationship between self-disclosure, partner response, and intimacy in the interpersonal process model of intimacy. Interactions using the

interpersonal process model of intimacy can be analyzed by each individual interaction, but it is assumed that intimacy changes over the course of many interactions. Partners are presumed to mutually self-disclose, with each providing the role of self-discloser and listener/responder in conversations.

Studies of the interpersonal process model of intimacy to date have examined the process in the context of face-to-face communication (Laurenceau, et al, 2005; Laurenceau, et al., 2005; Manne, et al., 2004; Lippert & Prager, 2001). For example, Laurenceau and colleagues used a daily diary approach to explore daily face-to-face interactions for the components of the intimacy process in married couples (2005) and college undergraduates (1998). These studies showed that self-disclosure itself is directly associated with intimacy, and the relationship between self-disclosure and intimacy is partially mediated by perceived partner responsiveness. The components of Perceived Partner Responsiveness are the perception by the self-discloser that the partner's response conveys understanding, validation and caring for the self-discloser (Reis & Shaver, 1988). These perceptions are thought to occur as the self-discloser interprets the responder's response through a cognitive filter that includes the self-discloser's motives, needs, goals and fears (Reis & Shaver).

In the current study, I replaced the face-to-face setting with the online social networking site Facebook as the context. I analyzed the data in my study by following the models developed to test the interpersonal process model of intimacy in a face-to-face context by Laurenceau, et al. (2005; 1998). I tested a basic self-disclosure model (Appendix A, Figure A1) and an interpersonal process model of intimacy (Appendix A, Figure A2). Both models were tested in the Facebook environment. While my results

indicated many similarities between results found in the Facebook context and results found in the face-to-face context, I also discovered interesting differences in the process of intimacy found in the Facebook context as compared with the face-to-face context.

Some of the findings in my study were similar to those revealed in studies of face-to-face intimacy interaction. In the basic model (Figure A1), self-disclosure is fundamental, starting the process of intimate interaction (Altman & Taylor, 1973; Reis & Shaver, 1988) and is thus the first requirement of the basic model. The interpersonal process model of intimacy also requires self-disclosure, proposing that self-disclosure is associated with increased intimacy. Previous research found self-disclosure is positively associated with intimacy (Laurenceau, Barrett, & Rovine, 2005; Laurenceau, Barrett, & Pietromonaco, 1998). My findings satisfy the first requirement, indicating self-disclosure in the Facebook context operates similarly to the face-to-face context, with a positive relationship between self-disclosure and intimacy, and this lends support to the basic model (Altman & Taylor, 1973; Jourard, 1958) and also partial support to the interpersonal process model of intimacy.

I measured the variables of self-disclosure in the participant's specific status update selected for study in the survey. Self-Disclosure of Positive Affect was positively correlated with Change in Intimacy for all three respondents. Self-Disclosure of Negative Affect was also positively associated with Change in Intimacy for two of three respondents. The Self-Disclosure Index, which measured the participant's general tendency (not necessarily regarding the specific status update selected for the study) to openly self-disclose on Facebook, had a weaker effect on Change in Intimacy, with

positive correlation with Change in Intimacy present for only one of the three respondents. Importantly, it was the behavior itself more than the participant's general attitude about self-disclosure on Facebook that had the greatest impact on Change in Intimacy.

The second requirement for both models is that the partner's response predicts intimacy. When there was a reciprocal self-disclosure response to the self-disclosure status update, this predicted Change in Intimacy in both the face-to-face and the Facebook contexts. The basic model of intimacy posits that partner self-disclosure reciprocity is positively associated with intimacy. Previous research on the interpersonal process model of intimacy found that a self-disclosing comment by the partner improved intimacy (Laurenceau, Barrett, & Pietromonaco, 1998; Manne, Ostroff, Rini, Fox, Goldstein, & Grana, 2004). Therefore I hypothesized that a partner's reciprocal self-disclosure in response to the initial self-disclosure would predict higher level of Change in Intimacy than a trivial response (i.e. "like") or a non-self-disclosing comment. This hypothesis was supported by the data satisfying the second requirement, found in both models. Post hoc analysis indicated that the self-disclosure response type was most effective for improving intimacy, followed by "liking" the status update. "Other comments" were less effective for improving intimacy. This finding is important because it indicates that on Facebook intimacy processes follow the same rules as face-to-face intimacy processes. This lends support to Altman and Taylor's (1973) social penetration theory which posits that deepening mutual self-disclosure "peels the onion" of the self and leads to greater intimacy. In summary, the basic model is supported on Facebook, with self-disclosure and partner

reciprocal response (partner self-disclosure) positively associated with Change in Intimacy. Partner response is also subsumed into the interpersonal process model of intimacy, thus this supported hypothesis lends partial support to the interpersonal process model of intimacy.

The third requirement in the interpersonal process model of intimacy involves the mediator, Perceived Partner Responsiveness. Self-disclosure is positively associated with Perceived Partner Responsiveness for both the self-discloser and the partner. Therefore I hypothesized that on Facebook I would find a positive correlation between the Self-Disclosure of Positive Affect and Perceived Partner Responsiveness; a positive correlation between the Self-Disclosure of Negative Affect and Perceived Partner Responsiveness; and a positive correlation between the general Self-Disclosure Index and Perceived Partner Responsiveness. My results indicated the disclosure of positive affect in the self-disclosure status update was consistently likely to be associated with Perceived Partner Responsiveness. Friends' responses to disclosures of happy information and positive emotion are consistently perceived as responsive by self-disclosers. Facebook may be a context suited for spreading happy news. From the social exchange theoretical perspective, perhaps the self-disclosure of happiness and the response to happiness provide positive rewards for both partners.

Similarly, the general Self-Disclosure Index was positively correlated with Perceived Partner Responsiveness in two of three respondents. Self-Disclosure of Negative Affect was not uniquely correlated with Perceived Partner Responsiveness. However, as a set, Self-Disclosure of Positive Affect, Self-Disclosure of Negative

Affect, and Self-Disclosure Index consistently predicted Perceived Partner Responsiveness.

Also in the interpersonal process model of intimacy, the fourth requirement is the partner's reciprocal response of self-disclosure is positively associated with Perceived Partner Responsiveness. Therefore I hypothesized that on Facebook, a partner's self-disclosure would be associated with Perceived Partner Responsiveness to a greater extent than a trivial response ("like") or a non-self-disclosing comment. This hypothesis was supported in two of the three respondents. How the partner responded was indeed important, with a self-disclosing response more likely to be associated with Perceived Partner Responsiveness than a "like" or some other non-self-disclosing response. In summary, the third and fourth requirements were met by the Facebook data, indicating self-disclosure by both the discloser and the partner was positively associated with Perceived Partner Responsiveness, lending partial support to the interpersonal process model of intimacy.

The fifth requirement of the interpersonal process model of intimacy is a positive association between Perceived Partner Responsiveness and Change in Intimacy. Previous studies of the interpersonal process model of intimacy found Perceived Partner Responsiveness was strongly positively correlated with Change in Intimacy in a face-to-face context (Laurenceau, Barrett, & Rovine, 2005; Laurenceau, Barrett, & Pietromonaco, 1998). Therefore I hypothesized that Perceived Partner Responsiveness would be positively correlated with Change in Intimacy on Facebook. This requirement was strongly supported by the data: I found that Perceived Partner

Responsiveness had the highest correlation with Change in Intimacy of any variable tested in my study.

In Laurenceau et al.'s 2005 study that explored how the interpersonal process model of intimacy (Reis & Shaver, 1988) applied to the interactions of marital couples, the correlation of Perceived Partner Responsiveness to intimacy was $r = .50$ for men and $r = .57$ for women. In an earlier study that explored how the interpersonal process model of intimacy applied to daily interactions of college undergraduates, Laurenceau, Barrett and Pietromonoco (1998) found the correlation between Perceived Partner Responsiveness and intimacy was $r = .59$. The current research found high correlations between Perceived Partner Responsiveness and Change in Intimacy that were similar to Laurenceau's results, thus demonstrating the relevance of the interpersonal process model of intimacy (Reis & Shaver, 1988) to relationships conducted in a social network context. Correlations between Perceived Partner Responsiveness and Change in Intimacy revealed the following relationships in the present study: R1: $r = .42$, R2: $r = .50$, and R3: $r = .49$. These correlations were surprisingly robust considering the indirect, seemingly impersonal approach of a single Facebook status update, and highly illustrative of the power of Facebook interaction. These results supported the hypothesis that Perceived Partner Responsiveness is positively correlated with Change in Intimacy and also the hypothesis that Perceived Partner Responsiveness is the most important predictor of Change in Intimacy. To the extent the partner in the Facebook interaction conveyed a combination of understanding, validation and caring for the self-discloser (the components of the Perceived Partner Responsiveness construct), there was an increase in intimacy.

The sixth requirement in the interpersonal process model of intimacy is to find a mediation effect for Perceived Partner Responsiveness in the relationship between self-disclosure and Change in Intimacy. In previous face-to-face studies of the interpersonal process model of intimacy, research found Perceived Partner Responsiveness partially mediated the relationship between self-disclosure and intimacy (Laurenceau, et al., 2005; Laurenceau, et al., 1998). The results in this Facebook study were strikingly different: In two of three respondents, Perceived Partner Responsiveness fully mediated the effects of self-disclosure on intimacy. (In one of the respondents, Self-Disclosure of Negative Affect, a measure of anxiety and personal information, accounted for an additional unique portion of the variance in Change in Intimacy after Perceived Partner Responsiveness was controlled for.) This complete mediation indicates an important difference between the current understanding of the relevance of self-disclosure for intimacy revealed in face-to-face studies, and a new way of understanding intimate communication in the online, social network setting of Facebook.

The basic self-disclosure model was supported in both face-to-face and Facebook communication. In face-to-face interaction, self-disclosure with a friend may predict intimacy. Face-to-face communication requires a response: the interlocutor is physically present and presumably communicating even if nothing is said (Watzlawick, Beavin, & Jackson, 1967). In contrast, on Facebook it is unclear if anyone is paying attention when one self-discloses. In this study increases in intimacy were partner driven, suggesting that the components of understanding, validation and caring are possibly more important on Facebook than they are in face-to-face interaction. From the data in this study it appears that self-disclosure has little to no effect on Change in

Intimacy; the reward of receiving a quality response from a sentient human being is solely responsible for improving intimacy on Facebook.

In summary, my data indicated all of the components of the interpersonal process model of intimacy can be found in Facebook interaction. Self-disclosure status updates are used to communicate with others in the network, but it is only those individuals who see the update and feel called upon to respond who will reply to a status update. This dissertation revealed that when an individual posts a self-disclosure status update on Facebook, intimacy for the self-discloser depends on a perception of partner responsiveness.

Gender. Extensive research in face-to-face communication suggests that women are higher in self-disclosure and perceive their relationships as more intimate than do men (Reisman, 1990; Youniss & Haynie, 1992), thus it was important to see if gender differences were evident on Facebook. Therefore, four hypotheses in this study predict that women and men will have different results when they self-disclose in a status update on Facebook. These hypotheses included: Women will report higher ratings of Change in Intimacy than men. Women will report higher ratings of self-disclosure than men. Women will report more closeness with their respondents than men will report with their respondents. Women will report higher ratings of Perceived Partner Responsiveness than men.

Whether gender made a difference on Facebook in the variables Change in Intimacy, Self-Disclosure, Closeness and Perceived Partner Responsiveness with respondents was tested, but men and women did not differ significantly. These results were somewhat surprising because of past research, but hypotheses examining gender

differences were not supported in this Facebook study of an actual self-disclosure and the responses to the self-disclosure. The differences that occur in offline communication seemed to evaporate in the online setting. Status updates result in similar ratings between men and women on closeness with respondents and Change in Intimacy. This may indicate men are more communicative online and effectively achieve similar levels of intimacy on Facebook as women. Conversely it may indicate women decrease their level of self-disclosure in the Facebook context and thus self-disclose similarly to men in their status updates. Because women disclose less on Facebook, they are less likely to feel more intimate with responders as a result. Another possible reason for the lack of gender effect may be that although the level of disclosure and intimacy are the same for men and women, the topics discussed are different. Future studies should examine this issue by coding the Facebook self-disclosure status updates and responses by topic.

However, a weak positive correlation between the gender of the self-discloser and Perceived Partner Responsiveness was found. For one of the three respondents, women were significantly higher in Perceived Partner Responsiveness, as a result of their self-disclosure, than men. Women also reported that they tend to communicate more with other women than with men on Facebook, in general. This means that women may be somewhat more likely than men to perceive responses as understanding, validating and caring, which may be due to a feminine communication style (Stephen & Harrison, 1985). But Change in Intimacy was not similarly differentiated between men and women in this study, suggesting possible ceiling effects. Women may have already

been intimate with their respondents, so one response to one status update may be unlikely to raise the level of intimacy.

Attachment. Attachment theory posits that secure attachment orientation is associated with trust and supportive interactions with others (Tidwell, Reis & Shaver, 1996; Mikulincer & Nachshon, 1991; Reis & Patrick, 1996). The interpersonal process model of intimacy (Reis & Shaver) is based in part on attachment theory (Bowlby, 1973), thus attachment is an important variable to test in conjunction with a study of intimate communication in a Facebook context. Following the social information processing theory (Walther, 1996) I expected to find secure individuals would use Facebook status updates to reinforce or expand their feelings of trust, supportiveness and intimacy with their friends. Securely attached individuals tend to conduct their interactions with openness and directness (Simpson, Rholes & Phillips, 1996). Therefore I hypothesized that attachment security is positively correlated with Change in Intimacy. Results in this study do not confirm the hypothesis that secure attachment orientation is associated with greater Change in Intimacy based on responses to a self-disclosure status update.

Similarly, based on the supportive relationships associated with secure attachment (Hazan & Shaver, 1987), I also hypothesized that secure attachment would be associated with higher levels of Perceived Partner Responsiveness. This hypothesis was also not supported. Whether a participant had secure or insecure attachment orientation did not make a difference in the individual's perception of partner responsiveness to a self-disclosure status update.

There are many possible explanations for the null results. Securely attached individuals may use Facebook for purposes other than intimate communication, reserving their most intimate communication for special relationships that are conducted face-to-face. When those with secure attachment communicate on Facebook, their status updates may elicit mostly non-intimate interactions that have no effect on Change in Intimacy and Perceived Partner Responsiveness. Secure individuals have trusting relationships with others and it may be that they use the richness of face-to-face interaction with specific individuals. Secure individuals differentiate between closer and more distant relationships such that intimacy needs may only be met with a specific relationship partner (Baumeister & Leary, 1995). Hazan and Shaver (1987) suggested a progression of attachment figure from infancy to childhood to adolescence to adulthood as a replacement of the parent with peers, especially romantic partners. It may be that effects of attachment style among college students are specific to romantic partners and not to the friends who constituted the majority of the interactions studied in this survey.

Avoidant attachment is associated with a negative working model of others and thus avoidant individuals are less likely to express emotions and seek support from others (Simpson, Rholes & Phillips, 1996). Those with avoidant attachment orientation are self-reliant and do not seek support from others. Therefore I hypothesized that avoidant attachment orientation is negatively associated with Change in Intimacy. Results did not confirm this hypothesis. Avoidance was not associated with Change in Intimacy. Perhaps while avoidant individuals use their status updates to communicate with others, their lack of apparent interest in intimacy is evident and their friends respond in kind; thus intimacy remains unchanged.

Attachment theory suggests individuals with ambivalent attachment are likely to seek reassurance from others (Bowlby, 1973). Therefore I hypothesized that ambivalent attachment orientation would be positively associated with Change in Intimacy. This hypothesis was supported by the data. When the participant was ambivalent in attachment orientation, there was a positive association with greater Change in Intimacy with the respondent to a self-disclosure status update for one of three respondents. This result may be a function of the low self-esteem associated with ambivalent attachment orientation (Brennan & Morris, 1997). Insecure individuals are also less trusting and have fewer positive expectations about interactions with others (Mikulincer & Nachshon, 1991). In addition, analysis of the Adult Attachment Questionnaire (AAQ) used in this survey indicated that those scoring high on Ambivalence have a much more negative view of themselves than those who score low on Ambivalence (Simpson, Rholes & Phillips, 1996). Participants with ambivalent attachment orientation may thus seek acceptance from others to meet their dependency and self-acceptance needs (although the level of dependency and self-acceptance needs were not measured in this study and would need to be investigated in future studies). Perhaps ambivalently attached individuals perceive Facebook as a safer environment from which to approach others because of the wide net of Facebook and less likelihood of the outright rejection that can be felt in face-to-face encounters. The asynchronous and less personal aspects of status updates on Facebook may make it easier for them to approach and feel more intimate with others. Ambivalent attachment orientation is also positively associated with Frequent Facebook participation, suggesting that ambivalent

individuals seek interaction with others online to a greater extent than those with secure or avoidant attachment orientations.

Furthermore, insecure attachment, whether avoidant or ambivalent, is associated with a lack of differentiation between close relationships and distant relationships (Baumeister & Leary, 1995). While avoidant individuals tend to disregard their emotions and are heavily self-reliant, ambivalent individuals tend to be preoccupied and hyper-vigilant in their focus on significant others (Hazan & Shaver, 1987). Ambivalent individuals may thus seek to improve intimacy from many sources, including Facebook friends. This may explain why those with ambivalent attachment orientation may be more likely to disclose indiscriminately on Facebook, perceiving reassurance and increased intimacy with almost any respondent in the wide network of Facebook friends.

In two of the three respondents, however, the participant's attachment orientation had no effect on Change in Intimacy, rendering the positive association between ambivalent attachment orientation and Change in Intimacy after a self-disclosure status update somewhat weak. Whether an individual had a secure or insecure avoidant or insecure ambivalent attachment orientation was not significantly correlated with Change in Intimacy based on the participant's rating of intimacy with the respondent after receiving respondent's response to a self-disclosure status update for two of the three respondents. An explanation for the lack of conclusive significant results for attachment orientation may be that attachment processes are activated in times of stress (Sroufe & Waters, 1977). Kobak and Duemmler (1994) posited that the attachment system is activated when the situation calls for a secure base or a safe haven,

including contexts of fear, challenge or conflict. Most of the interactions processed in this study involved the self-disclosure of positive emotion and not the self-disclosure of distress. If the study would have manipulated status updates such that participants disclosed higher levels of fear, challenge or conflict, attachment orientation could possibly have been activated more effectively.

In summary, the hypothesis that secure attachment orientation is positively associated with greater Change in Intimacy was not supported by the data in this study. The hypothesis that avoidant attachment is negatively associated with Change in Intimacy was not supported by the data in this study. The interaction between Avoidance and Ambivalence was not significantly related to Change in Intimacy. However, the study revealed weak evidence indicating that ambivalent attachment orientation is positively associated with greater Change in Intimacy. Attachment orientation was not associated with Perceived Partner Responsiveness.

Self-Monitoring. Previous research has suggested that the characteristics of high self-monitors include a combination of knowledge of group norms of appropriateness along with open self-disclosure and interaction with close friends (Snyder, 1974). These characteristics may also be relevant for understanding Facebook intimacy. High self-monitors may enjoy more intimacy benefits from using Facebook than low self-monitors. Therefore self-monitoring may be an important variable to consider in a study of self-disclosure and intimacy on Facebook. I hypothesized that high self-monitoring is positively correlated with Change in Intimacy. I also hypothesized that high self-monitoring would be positively correlated with Self-Disclosure, Frequent Facebook participation, Closeness with response partner, and

Perceived Partner Responsiveness. In this study there was weak evidence indicating that high self-monitors achieve a greater increase in intimacy than low self-monitors as a result of a self-disclosure status update.

High self-monitoring was also positively correlated with other predictors of Change in Intimacy. High self-monitoring had a positive correlation with Frequent Facebook participation and with the Self-Disclosure Index (a measure of self-disclosure, in general on Facebook). Weaker positive correlations were found between High self-monitoring and Closeness, Perceived Partner Responsiveness and Change in Intimacy. In addition, I found a negative correlation between high self-monitoring and avoidant attachment orientation.

These results suggest high self-monitors are active in the Facebook social environment and seek their friends by frequently participating and self-disclosing openly. In at least one of three responses, in general, high self-monitoring was associated with closeness, Perceived Partner Responsiveness and Change in Intimacy, indicating positive active involvement on Facebook with at least one close friend.

Snyder (1974) suggested high self-monitors are acutely aware of situational cues. Self-disclosure status updates are broadcast to a wide audience. Therefore I hypothesized that high self-monitoring is positively correlated with an expected audience of “everyone” and negatively correlated with an audience of “no one”. To test this hypothesis, participants were asked to indicate who specifically they were thinking of when they posted their status update. If there was no specific individual or group, then they were instructed to indicate their intended audience as either “no one in particular” or “everyone.” A significant relationship between high self-monitors and

selection of the answer “everyone” was found. This may be because high self-monitors are cognizant that status updates can be seen by “everyone” while low self-monitors may not be aware of the implications of the attention of the public audience when they post, or it may be because low self-monitors are aware of the public audience but they may not care. There was no significant difference between high and low self-monitors on the selection of “no one” as a target for a self-disclosure.

It was also hypothesized that there would be a difference in the relationship type (parent, best friend, friend, sibling, or other family member) of the respondent to the status update based on whether the participant was a high or a low self-monitor. My analysis indicated high self-monitors were more likely than low self-monitors to describe their responders as “best friends”, and low self-monitors were more likely to describe their responders as “friends” than high self-monitors. A higher percentage of respondents who were described by participants as “best friends” responded to high self-monitors (17%) than to low self-monitors (12%). A higher percentage of respondents who were described by participants as “friends” responded to low self-monitors (56%) than to high self-monitors (50%). One reason why high self-monitors may benefit from Facebook intimacy more than low self-monitors may be that their interaction partners are more likely to know them well.

In summary, high self-monitoring is a predictor of Facebook intimacy. It is associated with greater frequency and greater self-disclosure on Facebook, and is also linked with greater intimacy on Facebook. High self-monitors target their status updates to everyone in their network to a greater extent than low self-monitors. Responses to status updates, however, come from a similar mix of people in terms of

relationship to the self-discloser, with slightly greater numbers of “best friends” responding to high self-monitors than low self-monitors, and slightly greater numbers of “friends” responding to low self-monitors than high self-monitors.

Frequent Facebook Participation. I hypothesized that a positive attitude toward Facebook will be positively correlated with self-disclosure on Facebook. Frequent Facebook posting (indicating a positive attitude toward Facebook) was associated with increased intimacy with two of the three respondents. This means that those who are frequent users of Facebook are more likely to increase intimacy with their respondents based on their self-disclosing status update. Understanding how to use Facebook to gain intimacy with others may be a skill that takes practice, and those who frequently use Facebook may have mastered the skill. Alternatively, success in gaining intimacy with friends on Facebook may also improve self-discloser’s confidence, resulting in using the site more frequently and with a positive attitude.

Closeness. The interpersonal process model of intimacy suggests that self-disclosure and partner disclosure are associated with intimacy, mediated by Perceived Partner Responsiveness (Reis & Shaver, 1988). Perceived Partner Responsiveness is determined by the degree to which the self-discloser perceives the partner understands, validates and cares for the self-discloser (Reis & Shaver). Research indicates partners who know each other well may be better able to understand and respond to each other’s self-disclosures (Laurenceau, Barrett & Rovine, 2005). Closeness of the relationship between self-discloser and responder is thus important to explore in the Facebook context. Therefore I hypothesized that Closeness will be positively correlated with Change in Intimacy. This was supported by the data in this study, $R1, r = .37, p < .01$;

R2, $r = .48, p < .01$; R3, $r = .45, p < .01$. There was a strong positive association between a close relationship with the respondent and increased intimacy after receiving the response to a self-disclosure status update.

Relationship Type. Research shows that intimate relationships develop through a process of self-disclosure and partner responsiveness (Reis & Shaver, 1988). Relationship history may be important on Facebook because it is likely that those with a close relationship to the self-discloser would be more likely to know the self-discloser well and would respond with greater understanding to a self-disclosure status update. Therefore I predicted that Change in Intimacy is highest with family members and romantic partners followed by close friends, followed by acquaintances. Intimacy improvement was generally found among close relationships, especially with a parent, best friend or romantic partner. However, frequency analysis indicated a majority of interaction responses came from those classified as friends and acquaintances. That intimacy did not increase as much with friends (besides best friends), acquaintances and other family members (besides parents and siblings) indicates that increasing intimacy may not be as important in these more distant Facebook interactions.

I also hypothesized that partners with a close relationship to the discloser respond with understanding, validating and caring (Perceived Partner Responsiveness) to self-disclosures on Facebook, thus family members and romantic partners are most responsive, followed by best friends, followed by acquaintances. Relationship type is a significant predictor of intimacy on Facebook, with more Change in Intimacy and greater Perceived Partner Responsiveness found for those in closer relationships with the participant. Relationship partners who share a history of closeness offline can be

expected to respond to each other with understanding, validation and caring online, further benefitting their already close relationship through interaction on Facebook.

Close relationships generally include romantic partners, parents and best friends, and responses from close others to a self-disclosure status update elicit Perceived Partner Responsiveness and increases in Change in Intimacy. Those classified as friends elicit a moderate amount of Perceived Partner Responsiveness and Change in Intimacy. The least amount of Perceived Partner Responsiveness and Change in Intimacy is when the respondent is a casual acquaintance. This suggests that although status updates are public on Facebook, when a self-disclosure is conveyed in a status update, the statement may draw relationally closer responders to post a response accruing increased intimacy with the discloser. When those who are more distant to the discloser post a response to a self-disclosure status update, less intimacy is accrued with the discloser.

Expectation Confirmation. Burgoon and LePoire (1993) suggest that enduring patterns of anticipated behavior from others provide the cognitive structure for interpreting and evaluating a partner's behavior. In this study, expectation confirmation means the expectations of the self-discloser of a Facebook status update were met by the behavior (Facebook response) of the responder. Furthermore, Prager (1997) posited that expressions of positive feelings and emotions by the respondent enable the self-discloser to feel supported (Prager, 1997; Lippert & Prager, 2001). Therefore the following hypothesis was tested regarding expectancy confirmation: Partner's response confirming the self-discloser's expectation of a positive response will be positively associated with Change in Intimacy.

The theory of optimal matching (Cutrona, 1990) suggests that supportive behavior should match the need. Therefore I hypothesized that a partner's response confirming the self-discloser's expectation of a positive, emotionally supportive response will be positively associated with Change in Intimacy, and that a partner's response confirming the self-discloser's expectation of a positive, instrumental response will be positively associated with Change in Intimacy.

Expectation confirmation analysis revealed the salience of emotional support on Facebook, which was strongly correlated with Change in Intimacy. Not only do most self-disclosures involve the seeking and receiving of emotional support, but also confirmed expectations of positive emotional support are positively associated with Change in Intimacy with the respondent. Relational intimacy is based on symbolic verbal behavior, thus the text-based self-disclosure status update communication on Facebook is meaningful for participants who are seeking emotional support. In this study, a few self-disclosures sought and received instrumental support, but Facebook is generally not the venue for those seeking real, tangible assistance. Confirmed expectations of instrumental support had a weak positive association with Change in Intimacy.

Patterson's (1983) functional model of behavior matching states that when behavior matches expectations there is a stable exchange. Therefore I hypothesized that a partner's response confirming the self-discloser's expectation of a neutral response will not be associated with Change in Intimacy. I also hypothesized that a partner's response confirming the self-discloser's expectation of a negative response will not be

associated with Change in Intimacy. Presumably intimacy with the partner would remain the same because, although the partner met the self-discloser's expectations, a neutral or negative response would not help the self-discloser to meet personal interaction goals.

The data indicated a few self-disclosures sought and received neutral or negative reactions, but significant effects were not consistently found. Facebook is a social networking site used for friendship and connection, thus it is unlikely that status updates would seek anything but positive interaction with friends. Differences were observed between the three respondents, but caution must be taken in interpreting the results because the sequence of responses was not strictly controlled. Confirmed neutral expectation was weakly associated with a decrease in intimacy. Similarly, confirmed negative expectation was weakly associated with a decrease in intimacy. (Interestingly there was no change in intimacy for the last of three respondents in reaction to a neutral or negative expectancy confirmation, perhaps indicating a timing difference. This might suggest that by the time the third response is received, participants may have little emotional investment in the response. Alternatively, it may suggest participants selectively ordered the responses in terms of supportiveness or by some other criteria.)

Self-monitoring theory posits that high self-monitors are highly aware of and attuned to the social environment (Snyder, 1974). Therefore I predicted that high self-monitoring will be positively correlated with expectation confirmation. However, according to the data in this study, self-monitoring is not a factor in expectation confirmation.

Expectancy Violation. Expectancy violations theory (Burgoon & Hale, 1988) suggests violating social norms and expectations sometimes has beneficial consequences. The framework of expectancy violations theory provided a useful conceptualization of consequences of Facebook's open communication to the social network. On Facebook, the target of a self-disclosure is typically not identified, leaving the possibility for any Facebook friend to respond. Self-disclosers may internally target certain people to respond, but may receive responses from anyone in the larger network, depending on privacy restrictions. Research in this study indicates receiving a Facebook response from an unexpected source to a self-disclosure status update is generally a positive surprise and is likely to be associated with a positive Change in Intimacy.

Four reward valence/behavior conditions were explored in the study. Expectancy violations theory presumes that violations are noticed because they exceed a threshold of social norms and known idiosyncrasies of individuals or relationships (Burgoon & Hale, 1988). When the known norms and patterns are interrupted and exceed the threshold, a violation has occurred, triggering an interpretation and evaluation process (Burgoon & Hale).

This process begins with the enactment of the violating behavior itself; in this study, the behavior is the unexpected response to a self-disclosure status update. This triggers the self-discloser's arousal level and an evaluation of the violator's reward valence (Burgoon & Hale). The reward valence is predicated on previous interactions with the violator in which the self-discloser has acquired knowledge of the violator's gender, credibility, status, physical attractiveness, personality, and other variables that

form a general feeling of liking (positive reward valence) or disliking (negative reward valence) toward the violator. Positive valence indicates the rewards of interacting with the person exceed the costs, and negative valence indicates the costs of interacting with the person exceed the rewards.

The second part of the process, according to Burgoon and Hale, is an evaluation of the behavior by the recipient of the behavior. In this study the behavior in question is the response itself. The response is assigned either a positive or negative valence based on the interpretation and evaluation of the violation by the self-discloser. Expectancy violations thus fall into one of the following four categories: positive reward valence and positive behavior, positive reward valence and negative behavior, negative reward valence and positive behavior, or negative reward valence and negative behavior. Therefore the following four hypotheses were tested in the study: Violation of the self-discloser's expectations after posting to Facebook will be positively correlated with Change in Intimacy if the responder reward valence is positive and the response behavior is positive. Violation of the self-discloser's expectations after posting to Facebook will be positively correlated with Change in Intimacy if the responder reward valence is negative and the response behavior is positive. Violation of the self-discloser's expectations after posting to Facebook will be negatively correlated with Change in Intimacy if the responder reward valence is negative and the response behavior is negative. Violation of the self-discloser's expectations after posting to Facebook will be negatively correlated with Change in Intimacy if the responder reward valence is positive and the response behavior is negative.

Expectancy violation analysis revealed an omnibus main effect for the four reward valence/behavior conditions of violation type for two of the three respondents. The majority of expectancy violations in the sample were interpreted by self-disclosers as positive reward valence/positive behavior, $R1 = 89\%$, $R2 = 81\%$, $R3 = 83\%$. Positive expectancy violations were associated with an increase in intimacy. In general, these results suggest the lack of context and cues on Facebook could be used by a strategic communicator to reach communication goals (Burgoon & Hale, 1998). The strategic communicator, knowingly interrupting a usual pattern, could respond to a friend's status update anticipating an increase in intimacy. Expectancy violations theory and results from this study would indicate the surprise would be interpreted and evaluated positively.

The mean differences in the four types of expectancy violation conditions were not consistent across Respondents. For one of three respondents the differences were between positive reward valence/positive behavior having a higher mean on Change in Intimacy than both negative reward valence/positive behavior and negative reward valence/negative behavior. Thus when the response to the self-disclosure status update was unexpected, if the self-discloser's evaluation of that individual's reward valence was negative, then there would be no increase in intimacy. Whether the response itself was interpreted as positive or negative was irrelevant.

For one of the three respondents, the one mean difference was found between negative reward valence/negative behavior, with a lower mean than negative reward valence/positive behavior. In one of the three respondents, the behavior itself was highly salient. Because of low sample size for participants indicating that the

unexpected response was other than positive, with the vast majority of results indicating both positive reward valence and positive behavior, the mean difference analysis for two of three respondents may be highly idiosyncratic and need further testing with a larger sample.

Target's Point of View

Target: Gender. It was hypothesized that women are more often the target of self-disclosures than are men. Whether gender made a difference on Facebook as the target of self-disclosure status updates was tested. Participants indicated women were no more likely than men to be their targets when they post status updates. However, data indicated when women post status updates they are more likely to receive responses from other women. There was a gender effect showing that the gender of the participant had a significant effect on the gender of the respondent, with same gender pairs more frequent than mixed gender pairs. But when the pairs were mixed gender, women were more likely to respond to men than men to women. Thus gender may not distinguish the intended target of the status update, in general, but women are nevertheless more likely to respond. This might suggest that because women show greater need for self-disclosure and intimate communication than males in face-to-face communication (Reisman, 1990; Youniss & Haynie, 1992), they may spend more time interacting with others on Facebook as well as in the face-to-face context.

It was also hypothesized that women respond to more status updates than men. Participants in this study indicated that they intended a mixed gender group as the target of their own self-disclosures, but the data showed women interact more frequently as responders. Gender differences in Facebook interaction are evident, with men more

frequently participating at low levels of interaction than women, but men and women indicate the same level of participation at high levels of interaction. Men were more likely to avoid Facebook interaction entirely. In this study women reported a higher likelihood than men of responding to 2-3 status updates per week while men were more likely to respond to 0-1 status updates, supporting previous findings that women spend more time online interacting with friends than men (Acar, 2008; Sheldon, 2008). But in this study there was no gender difference for those responding to four or more status updates, suggesting at high levels of Facebook interaction highly communicative women and men are equally likely to have adapted Facebook to meet their interaction needs.

Target: Self-Monitoring. Participants were asked to indicate when they would respond to others on Facebook. I expected to find high self-monitors show a greater concern for appropriateness in their Target Responsiveness than low self-monitors. My results indicated high self-monitors are more concerned with social norms in their Facebook interaction than low self-monitors. The data showed that reciprocity, appropriateness and fulfilling partners' expectations are more important concerns for high self-monitors than low self-monitors on Facebook, consistent with Gangestad and Snyder's self-monitoring theory (1985b) elaborated to the Facebook context.

I also expected to find that high self-monitors respond to others more frequently than low self-monitors on Facebook. My data supported this hypothesis. High self-monitors who are active on Facebook respond more frequently to a wider network on a greater variety of topics than low self-monitors. This might suggest that because they understand norms on Facebook, high self-monitors respond appropriately and

confidently to a wider network, on more topics, than low self-monitors. My hypothesis that high self-monitors would be more likely than low self-monitors to know when they are the target of someone's status update (Confidence), was not supported by the data, suggesting self-monitoring is not a factor in Confidence that one is a target.

Target: Responsiveness. I hypothesized that Confidence that one is the target is positively correlated with Target Responsiveness. My results supported a moderate correlation between the variables. I found that a higher level of Confidence that one is the target of another person's status update is associated with a higher level of responsiveness on Facebook. This result suggests people who are more responsive on Facebook are also more likely to believe they are the intended target of a self-disclosure status update. Thus Facebook conversation entails belief that one should be listening because one is the target, thus one would respond to indicate to the self-discloser that they are participating in the interaction.

Similarly, I expected to find that higher scores on Appropriateness positively correlate with Target Responsiveness. This, too, was supported by my data. In face-to-face interaction a self-disclosure may be met with an understanding, validating and caring response from the listener. Knowledge of norms of interaction in the Facebook context would enable a Facebook responder to interact in a normal, confident, friendly manner on an appropriate range of topics.

Research Questions

When are individuals confident that they are the target? Individuals may vary in their confidence in their judgment that they are the target of another person's

status update. The variables in this study that were associated with Confidence were Self-Disclosure Index, EGDR, Frequent Facebook participation and Attachment Ambivalence. Analysis indicated 22% of the variance in Confidence was explained by these variables. All except Attachment Ambivalence explained a unique portion of the variance. EGDR was most important, indicating interaction with women was most conducive to Confidence. Previous research has shown that women are higher in self-disclosure than men (Dindia & Allen, 1992). When women post status updates, their friends believe with confidence that they are the target, perhaps because the self-disclosure is more personal and directed to specific friends. When individuals are confident they are the target, more likely the case when the individuals are communicating with women, they are more likely to respond. This might suggest the communication advantage women enjoy in face-to-face interaction is also manifest on Facebook.

Self-Disclosure Index was a significant factor for Confidence. This may suggest that those who are open and self-disclose have partners who do the same. Open expression on Facebook may overtly target certain people, and people who engage in open communication with each other on Facebook may have less doubt as to whether they are the target of a status update. Frequent Facebook participation is also a significant factor in Confidence. This may mean that those who are comfortable with Facebook and use it regularly become familiar with the group norms on Facebook and over time begin to recognize when they are the target of someone else's status update. Attachment ambivalence is weakly associated with Confidence that one is the target. This may indicate individuals with ambivalent attachment orientation either overreact to

others' status updates by misunderstanding the intention, or they interact more intensely, and presumably, more intimately on Facebook and thus know with more confidence when friends posting status updates on Facebook are targeting them.

What are the motivations for responding to a status update? Participants indicated myriad reasons for responding to a status update, but most important was to share good humor, close feelings and support. Participants were less likely to indicate they respond to a status update for strategic reasons, or to indicate they respond to a status update simply to express ideas to someone less well-known.

When do participants use multiple modes of communication? Multiple modes of communication were used with closer friends, consistent with Haythornthwaite and Wellman's (1998) findings. Facebook is used by close friends as an additional mode of communication to augment face-to-face, phone, text messaging, email and/or chat. When a parent, best friend or romantic partner responds to a status update, it may represent a brief exchange in a rich conversation that spans different media and face-to-face. Acquaintances are more likely to communicate via Facebook alone, thus responses from acquaintances, while welcome occurrences, may be less likely to increase intimacy. These results support Bryant and Marmo's (2009) Facebook research that found participants expected close friends to use multiple modes of communication in addition to Facebook to maintain close relationships, but that Facebook alone is sufficient for the support of relationships with casual friends and acquaintances.

Limitations of the Present Study

Undergraduate college students at a large Midwestern university were participants in the study. The population of undergraduate college students is an appropriate and reasonable starting point for gathering data on self-disclosure and intimacy in the Facebook context that can be expanded upon in further studies of different populations. However, research limitations with this undergraduate sample include socioeconomic status, race, cultural and ethnicity biases. The sample was mostly Caucasian and middle class Midwestern. College students are in the stage of life where social interaction may be particularly important, group living situations are common, and communication with geographically scattered high school friends may be important. While the sample is limited to undergraduate college students, these young adults are an appropriate sample. College students were the first to use Facebook when it launched in 2004 by college student Mark Zuckerberg (Kirkpatrick, 2010), and college students were the first target audience. College students may have more free time than those in other age groups to connect with friends because they are less likely to have full time careers or family responsibilities than older people, and yet are much more mobile and autonomous than younger people. Social interaction is a high priority for college students, and Facebook offers the social network capabilities that students can use to easily notify or invite others to social events. Students who socialize together offline may find it quite natural to continue to interact and conduct relationships online. Furthermore, college students may have more interest in remaining emotionally close with friends from high school due to the relatively short period of elapsed time since these friends were in the immediate face-to-face social circle, and Facebook status

updates can help to keep friends informed as to what is going on in each others' lives. Many undergraduates may be more comfortable interacting with others on social networking sites because they have been exposed to social media from a relatively young age, whereas Facebook is still a newer concept for those participants of an older generation who may still use Facebook for social networking on an experimental basis. For many college students Facebook is already a part of everyday living.

Results indicated parent, romantic partner and best friend were rated highest in terms of increased intimacy. College students frequently live in different cities from their parents or best friends, so Facebook interaction with these partners may be important for maintaining and enhancing those interdependent relationships. Facebook is used by all age groups, however, and future research should determine if the results in this study generalize to a wider population of all ages and relationship types. Ceiling effects possibly observed in this study may prevail to an even greater extent in long-term relationships such that greater increases in intimacy would occur for friends as opposed to long-term romantic relationships in older, married individuals because those in long-term relationships may already feel sufficiently close with one another and may not be seeking increased intimacy. It is noteworthy that fewer romantic partners responded to the status updates in the sample than best friends, friends and acquaintances. Romantic partners may already be extremely interdependent and intimate with each other such that interaction on Facebook has little effect on improving intimacy. Typically, romantic partners are physically close and communicate face-to-face. Romantic partners who are living apart for work or other reasons, however, may find increasing intimacy through Facebook interaction, but this remains to be tested.

Although the findings are consistent with the directional hypotheses following from theories (Reis & Shaver, 1988; Burgoon & Hale, 1988), the data is correlational and not causal. The study was a non-experimental design, thus the relationships between the components of a self-disclosure status update, a response to the status update, perceptions by the self-discloser of partner responsiveness and the impact on Change in Intimacy and expectancy confirmation or violation cannot be explained as causal. While it may be that there are no plausible alternatives explaining the relationship between the variables, and there appears to be a temporal sequence of events where the self-disclosure precedes the responses, we cannot be sure. Correlation is not causation and reverse causal effects may account for observed effects (Kenny, Kashy, & Bolger, 1997). For example, feelings of increased intimacy may cause perceptions of partner responsiveness or vice versa, and increased intimacy may cause perceptions of positive reward valence and positive behavior.

Although data was gathered for both the self-disclosure status update and up to three responses, data came from only one person, the self-discloser. The interpersonal process model of intimacy is dyadic and proper testing would include both partners in a Facebook self-disclosure and response process. The self-reported data gathered in this study do not capture the full interactional process involved. It is important to explore both partners' perceptions of the interaction process to see if they agree.

Another limitation in this study was indistinguishable timing order. Because date and time were not required for status updates and the three responses, the sequence of responses only suggest an order, with the first response preceding the second and the second preceding the third, respectively. Participants may have interpreted sequence in

other formats. For example, they may have reported responses in order of their importance and relevance to the participant. Also, because the date and time were not required the time lag between the status update and each response cannot be determined. Both the sequence and the time lag for responses would be useful data for understanding processes of self-disclosure and intimacy on Facebook.

Directions for Future Research

Research on social media and communication is important for such wide ranging concepts as relational aggression, social support and health communication, and shyness or communication apprehension, in addition to intimacy. As with any research study, the results of this effort gave rise to ideas for clarifying the results further. Other important issues and new questions emerged from my research. In the following section I will make suggestions for a future program of study.

Implications of interpersonal process model of intimacy on social media.

One important issue revealed in this study is that Perceived Partner Responsiveness fully mediates self-disclosure's positive association with intimacy on Facebook. Studies of the interpersonal process model of intimacy in face-to-face interaction found the effect of self-disclosure on intimacy is partially mediated by Perceived Partner Responsiveness.

The implications of this may include a caveat that should be added to the old adage, "one cannot not communicate" (Watzlawick, et al., 1967) stating "except on Facebook." Future research should explore the interactions that are pursued through social media as a consequence of the ability to self-disclose without receiving feedback from another person. Appropriate self-disclosure on Facebook may be a factor in

eliciting partner responsiveness, but inappropriate self-disclosure may evade feedback of any kind. Perhaps feedback helps to regulate the discloser. The lack of response may help to explain some of the problems that have been encountered in online communication such as relational aggression. For example, cyber-bullying through Facebook may avoid the censure or evidence of hurt feelings that would ensue in face-to-face verbal aggression. Future research should also consider the implications of the lack of face-to-face feedback resulting in inappropriate communication that crosses other boundaries of socially acceptable behavior. For example, inappropriate sexual relationships that develop on Facebook may be related to partner response and Perceived Partner Responsiveness. The exploration of partner responsiveness should include research on when partner responses on Facebook encourage the escalation of self-disclosure to levels that would be unlikely to occur in face-to-face contexts.

Visual and audio components of intimacy on Facebook. The communication of intimacy is changing. In the past intimacy was conducted in a face-to-face setting, but many intimate interactions are now taking place online. Research should continue to uncover the multiple facets of intimacy. This study showed that individuals do use text-based self-disclosures to enact intimate interactions on Facebook. However, while the text-based interaction may explain a portion of the variance in Change in Intimacy that is enacted on Facebook, photos or video status updates should be examined in future studies for additional and comparative data in the exploration of intimacy on Facebook. This study showed that individuals are often seeking emotional support when they post a self-disclosure status update. Posting photos is another common form of status update possibly even more evocative than text of emotional content, as is

evident in the well-known phrase, “a picture is worth a thousand words.” A photo can display a friend smiling, for example, and thus provoke an immediate response, perhaps more effectively than a text-based status update describing a happy or funny moment. In addition, photos can involve friends more directly by posting photos that display friends physically present in the pictures, making it easier for friends to know they are the intended audience and that they could appropriately respond. Photos can also display context in the background. For example, photos of locations can show friends where an event took place perhaps more effectively than a text-based description. Photos can enlarge the self-discloser’s “vocabulary” to describe and share thoughts and feelings. I would compare the responses to text-based versus photo-based status updates in a future study. Similarly, video links could be explored for comparisons to text-based status updates or photo-based status updates to see how the audio and digital video affects processes of self-disclosure to enhance or decrease intimacy between people on Facebook.

Extent of openness/privacy tension in Facebook self-disclosure. The focus in this dissertation was on the change in intimacy on Facebook as a function of personal and relationship characteristics. Data indicated variables such as Frequent Facebook participation, high self-monitoring, and closeness with respondents are associated with increases in self-disclosure, perceived partner responsiveness and increases in intimacy. However, variables such as interaction with Facebook friends who are acquaintances or distant family members may operate to inhibit self-disclosure. Privacy is not reliable on Facebook, thus individuals who are concerned about this issue may restrict their communication. Excessive openness on Facebook can also lead to problems, especially

for exposing oneself to outsiders who may have negative intentions or may be less sympathetic to one's concerns, thus self-censorship may be prudent. In addition, social group norms may operate to discourage self-disclosure status updates. Future studies should examine the tension between openness and privacy on Facebook status updates, perhaps by screening the self-disclosures and partner responses for openness and privacy in the coding process.

Facebook boundaries. The audience for young people on Facebook is wide. Future studies should examine the criteria young people use when they decide to friend or "unfriend" another person. The threshold for entering into a Facebook relationship with another individual in terms of intimacy, along with the limits of offenses a friend may commit before the friend is unfriended, could help to illuminate the typical boundaries of a social network. Studies could also explore the groups individuals join on Facebook. It is possible those who join groups on Facebook benefit more in terms of intimacy with their friends in the group because the boundaries of the group within a Facebook social network may imply exclusivity, privacy, status, or other valued outcomes.

Suggestions to elaborate findings from the current study. The results of the current study could be explored in more depth with implementation of some of the following suggestions:

Code self-disclosures and code responses. Elaborations to my study could help to further illuminate the interpersonal variables impacting feelings of intimacy between interaction partners. For example, there is a bias inherent in self-reports. One of the first steps that should be taken is to reduce or eliminate this bias by reviewing the data

and using objective coding of the status updates and the responses. Coding would add clarity and detail to the data gathered in this study regarding partner disclosure. I asked participants to evaluate their own self-disclosure status update in terms of information and emotion conveyed. Coding the actual message content of status updates may include, for example, analysis in which trained expert coders indicate the level of verbal immediacy, such as number of “I” statements, as well as the content of positive emotional expression and negative emotional expression and amount and breadth of personal information. A statistical tool which assists with data coding, compilation of data, and reporting may be used as an aid.

One benefit of coding would be to explore whether those individuals with attachment ambivalence structure their self-disclosures to evoke responses which provide the affirmation and support sought as relationship interaction goals. By coding the data and comparing coded status updates with participant analyzed self-report, research could assess whether independent observers or text analysis computer software agree with self-reports by participants as to the level of positive or negative affect embedded in the text. Researchers could analyze any differences and look for discernible patterns to discrepancies. Coding may illuminate and clarify the findings from the current study by eliminating some of the bias inherent in personal interpretations of one’s own statements and highlighting where the differences occur. Discrepancies found between objective coding and self-report could highlight text that may enact group norms of communication common or unique to a specific social group.

Expert coding would also be useful for a better understanding of the partner responses received after posting a status update. Participants were asked to describe the

responses by indicating whether the response type was “*self-disclosure*”, “*like*” or “*other comment*.” My analysis of response types indicated self-disclosure responses were statistically different from “like” and “other comment”, with partner self-disclosure showing a higher mean on Change in Intimacy, but the content of the self-disclosure in these responses was not assessed. Future surveys that study intimacy should ask participants to evaluate the partner’s response with the same evaluation criteria employed for evaluating their own self-disclosure. In addition, the “self-disclosure” and “other comment” categories could be coded by independent observers and analyzed to determine in detail which comments were more or less likely to effect a change in intimacy. It would also be interesting to investigate the meaning of “like” for status updates. If the status update is expressing a negative emotion, for example, “like” may be inappropriate but in other instances, “like” may lead to increased Change in Intimacy.

Assess the timing of responses. Another enhancement to the current study would entail acquiring the exact timing of the communication between the self-discloser and the responder. Walther and Tidwell (1995) found interaction effects on perceptions of dominance and affection for timing differences in email messages. Date and time information could aid in understanding and uniformly ordering the data. Differences in feelings about respondents that are due to a time lag in communication could then be more reliably explored. While this study accumulated data based on three responses to a status update, the timing of the responses is unknown. Future studies should examine the time ordering of the data by asking participants to indicate the date and time of all interactions used as data, information that is automatically stamped on Facebook

communication. Perhaps there is a difference in felt intimacy toward someone who responds quickly to a status update and helps the participant to reflect on the emotion of the moment versus someone who responds two days later, for example. Perhaps closer, more intimate friends and family are expected to respond more quickly than acquaintances and are held to a different standard. Reaction to unexpected responses could also be a function of the timing of the response, with a quick surprise response boosting feelings of intimacy, for example, much more than a surprise response received days later. Future research should consider chronemic effects in the interaction of the timing of response messages with the content of the response for effect on Change in Intimacy in the Facebook context.

Explore the dyadic process. In this study I asked participants to imagine switching roles and to describe the circumstances in which they would respond to others' status updates. However, the full dyadic process of the interpersonal process model of intimacy (Reis & Shaver, 1988) should be explored in future studies. The questionnaire in this study only examined one point of view. I gathered only the self-discloser's data, but future studies should also gather data from the responder to the self-disclosed status update. Details and characteristics of those who respond to self-disclosure status updates should be studied, gathering similar data for both the self-discloser and the responder. A future study could gather and analyze data from actual respondents to the participant's status update to find out what prompted their response, along with their interpretations of the self-discloser's status update, their closeness with the self-discloser, Perceived Partner Responsiveness and Change in Intimacy. Demographic and personality data should also be gathered and analyzed for the

responder. The interpersonal process model of intimacy emphasizes the dyadic interaction between partners as they alternate disclosing, listening and responding to each other. It would be interesting to begin to understand some of the interaction patterns that occur on Facebook from perspectives of both self-disclosers and responders.

Compare self-monitoring methodolgies. Impression management based on awareness of social norms operating in an online context seems important for Facebook intimate self-disclosure and response, thus the concept of self-monitoring (Snyder, 1974) is an appropriate variable to explore. Future studies should re-examine the self-monitoring hypotheses in this study. Weaker results regarding self-monitoring's effects on self-disclosure and intimacy may be due to methodological problems with the measurement instrument, Snyder and Gangestad's Revised Self-Monitoring Scale (1986). Perhaps other instruments such as Lennox and Wolfe's (1984) revision of the self-monitoring scale would help to provide more meaningful results. It is possible that Lennox and Wolfe's definition of the self-monitoring construct as actually composed of two distinct latent factors, one an active self-monitoring factor and the other a passive self-monitoring factor, is more accurate. It would be worthwhile to explore these factors to see if they better explain self-monitoring effects on Change in Intimacy.

Additional sample populations of interest. The Facebook community is worldwide, consisting of myriad cultural, age and ability differences. Therefore it would behoove any future researcher to consider including some of the sample populations listed below for further elaboration of the meaningfulness of interactions on Facebook.

Differences due to stage of life or due to cultural background. The current sample included only college undergraduates, in a late-adolescent/early adulthood stage of life, an entirely appropriate sample. Future studies should expand upon the current sample to include younger or older people because individuals in different life stages may use Facebook self-disclosure status updates for purposes that may be different from college undergraduates. For example, attachment theory posits that young adolescents look to close friends for intimacy and older adolescents tend to look to opposite sex, romantic partners for intimacy (Allen, Moore, Kuperminc, & Bell, 1998; Sroufe & Waters, 1977). Future studies could also compare populations outside of the US to the population surveyed in this study to examine cultural differences in self-disclosure and intimacy on Facebook.

Differences due to attachment orientation. A weak, positive association between Ambivalent attachment orientation and Change in Intimacy was found in this study. Attachment orientation may be more effectively studied in the future by comparing status updates that convey positive information and emotions with those that convey information and emotions such as fear, challenge or conflict. The stressful situations in which fear, challenge or conflict are present may be more likely to activate the attachment system (Kobak & Duemmler, 1994). Securely attached individuals may react to responses differently than insecurely attached individuals differently when messages self-disclosed in status updates reflect fear, challenge or conflict.

The association between attachment ambivalence, Frequent Facebook participation, and Change in Intimacy should also be explored in future studies. Findings from this study hint that those with attachment insecurity may find certain

aspects of Facebook positively impact their relationships. Just as those with secure attachment look offline for intimacy, those with ambivalent attachment may look online. These intriguing results may derive from the characteristics of those with ambivalent attachment orientation such as low self-esteem and a negative view of themselves, along with a positive image of others (Bartholomew & Horowitz, 1991; Bowlby, 1973). Attachment ambivalent individuals may thus have a goal of self-acceptance, which may be attained by evidence of acceptance from others, fulfilling dependency needs and needs for affirmation from others to assuage feelings of low self-worth (Bartholomew & Horowitz). Facebook may seem safer than face-to-face for encountering and approaching people. To self-disclose on Facebook may be an ingratiation technique and may be helpful for those with communication apprehensions including ambivalent attachment. The ease of Facebook for reaching out and receiving responses may be immensely gratifying for widening one's social network, for improving existing social relationships, and for reaffirming one's self-acceptance. Thus the goals of those with ambivalent attachment orientation for their Facebook interactions should be compared with those with secure attachment orientation to see if there is a difference that is manifest on Facebook, with consequences for intimacy.

Atypical populations. In addition, further studies of intimacy on Facebook with atypical populations (such as those with personality/behavior disorders, housebound individuals, or partners in long-distance relationships) could yield important data. For example, for some individuals, it may not be intuitive to know how to communicate effectively on Facebook to achieve positive social consequences such as increased intimacy. Teaching the components of partner responsiveness on Facebook to

individuals with social impairment diseases such as Asperger's syndrome, for example, may help these individuals to accrue the benefits of Facebook's asynchronous and nonverbal interaction context as a viable mode for improving relationships. Likewise, Facebook interaction may be valuable for those with communication apprehensions such as shyness

Additional Variables of Interest.

Person Centeredness. Person-centeredness has been shown to be important for emotional support (Jones & Wirtz, 2006). Expectancy confirmation analysis indicated the attainment of emotional support is a key goal of self-disclosure status updates. Self-disclosures and responses could be coded and analyzed to assess the level of person-centeredness apparent in the responses to a self-disclosure status update and determine if there is an effect on Facebook that is similar to the effect shown in face-to-face communication for the reappraisal of emotional upset as a result of person-centered interaction on Facebook. It would be interesting to determine the personality characteristics and attitudes of individuals experiencing emotional upset that are more likely to achieve emotional improvement as a result of interaction on Facebook.

Loneliness. Emotional support is associated with positive health outcomes (Cohen, Underwood, & Gottlieb, 2000). Intimate interaction is associated with emotional support (Reis, 1984), and this study indicated emotional support was the most common expectation of self-disclosure status updates. Conversely, a feeling of loneliness is associated with a lack of feelings of closeness and support (Reis & Shaver, 1988). Intimacy is an ongoing process that ebbs and flows over time and a single status update at a snapshot in time would not be expected to be associated with large increases

in intimacy. However future studies should identify and measure the strength of other personal goals, needs and gratifications in addition to, or in place of, intimacy which are important for interaction on Facebook. A variable that should be studied is loneliness, to determine if Facebook interaction is associated with decreases in loneliness. Future studies should examine whether the emotional support available from Facebook is sufficient to assuage loneliness in individuals.

Humor. My research indicated that sharing humor was one of the most important motivations for posting a status update and is thus an important interpersonal variable for future study. Entertaining friends and conveying one's ability to be funny, incisive, witty and intelligent is clearly important for many Facebook users. For some groups of friends, for example, there may be little overt self-disclosure in status updates, but perhaps the disclosure of humor, which may expose important aspects of the inner self, is common in status updates and is encouraged by group norms. How group norms and values are negotiated and respected on Facebook should also be studied.

Additional "friend" categories. Friend categories should be elaborated, as well. The current study segmented relationship type by asking participants to select parent, best friend, friend, sibling, other relative, or acquaintance to describe their response partner. Two additional dichotomies should be explored when categorizing "friends" in future research on intimacy on Facebook. Research suggests Perceived Partner Responsiveness may be more important for relationships that are long-term, and Self-Disclosure itself may be more important for short-term relationships where partners are getting to know one another (Laurenceau, et al., 2005). Relationships of different lengths of time could be studied to explore whether ceiling effects occur for long-term

relationships in terms of how the different facets of the intimacy process can effect Change in Intimacy on Facebook, and whether meaningful intimacy increases are generally limited to newer, developing relationships.

Another facet of the online intimacy process to consider is the physical location of the partner in relation to the self-discloser. Facebook may be used differently based on friend proximity. When intimacy cannot be performed face-to-face, does reliance on Facebook for intimate interaction increase? Future research should differentiate between those who live close to the participant and those who are in a long-distance relationship with the participant. For example, Facebook users who live close to one another may use the site for planning get-togethers and parties where they can interact face-to-face, while those who live farther apart may use it for intimacy and relationship maintenance. An interesting study could compare the improvement in intimacy in long distance relationships between those who do use Facebook and those who do not use Facebook.

Conclusion

Excitement about Facebook has enveloped almost the entire world. Even with the burgeoning of newer technologies, Facebook continues to grow, obviously satisfying people who participate in the social networking site. Individuals can, and do, interact with each other and conduct their relationships partially or completely through Facebook. This study illuminated aspects of intimate interaction in the Facebook context which appeared to differ from face-to-face processes.

Of the many variables tested, Perceived Partner Responsiveness was the key component for improving intimacy on Facebook. To the extent that partners were able

to respond to a self-disclosure with a conveyance of understanding, validation and caring communication (the items that comprise the Perceived Partner Responsiveness variable), there was an increase in intimacy. Perceived Partner Responsiveness mediated the relationship between self-disclosure and intimacy and is clearly essential for quality Facebook interaction to take place. While other research indicates that self-disclosure is an important component of intimacy, this study showed that the emphasis is somewhat different on Facebook. In face-to-face communication the very act of self-disclosing evokes feelings of intimacy, but on Facebook, it is more important to receive and perceive a responsive reply to one's self-disclosing status update. For everyday users of Facebook this implies that individuals should carefully consider their responses to the self-disclosing status updates of others. By crafting a message that conveys responsiveness, individuals may use the Facebook context to indicate that they are not only paying attention to their friends' self-disclosure, but also that they understand the self-discloser, accept the self-discloser, care for the self-discloser, and value the friendship.

This study revealed that self-disclosure status updates usually seek emotional support from others, and self-disclosers reported that responders provide adequate support, which is associated with increased intimacy. Furthermore, unexpected responses to a Facebook self-disclosure status update are generally positively received and improve intimacy. People who self-disclose are generally satisfied with responses, indicating most individuals convey appropriate and satisfying communication to one another on Facebook.

For those who are willing to be open and self-disclosing and for whom Facebook social norms are well understood, social network sites can be an effective mode of communication. Although the results of this study are but a first step in understanding how intimacy is conducted on Facebook, there may be implications in this research for improving friendships with close and distant others. One intriguing finding in this study was the frequency and effectiveness of Facebook for intimate communication for those with an ambivalent attachment orientation.

There is explosive growth in computer mediated social networking in our culture, with Facebook becoming increasingly ubiquitous. The power of the social network site is only beginning to be understood. Future studies can build upon the basic framework of this study to further delineate the factors that lead to successful, satisfying and intimate communication online and also the factors that lead to negative or harmful communication. Learning how Facebook can be an effective social media tool for the maintenance, sustenance and enhancement of relationships will continue to be a fascinating subject for researchers of interpersonal communication.

References

- Acar, A. (2008). Antecedents and consequences of online social networking behavior: The case of Facebook. *Journal of Website Promotion, 3*, 62.
- Ainsworth, M. (1985). Attachments across the life span. *Bulletin of the New York Academy of Medicine, 61*, 792-812.
- Ainsworth, M. D. S., Bell, S. M., & Stayton, D. J. (1974). Infant-mother attachment and social development: "Socialization" as a product of reciprocal responsiveness to signals. In P. M. Richards (Ed.), *Integration of a child into a social world* (pp. 99-135). Cambridge, UK: Cambridge University Press.
- Ainsworth, M.D.S., Waters, E., & Wall, S. (1978). *Patterns of attachment: A psychological study of the strange situation*. Lawrence Erlbaum Associates.
- Allen, J. P., McElhaney, K. B., Kuperminc, G. P., & Jodl, K. M. (2004). Stability and change in attachment security across adolescence. *Child Development, 75*(6), 1792-1805.
- Allen, J. P., Moore, C. Kuperminc, G., & Bell, K. (1998). Attachment and adolescent psychosocial functioning. *Child Development, 69*(5), 1406-1419.
- Altman, I. (1973). Reciprocity of interpersonal exchange. *Journal for the Theory of Social Behavior, 3*(2), 249-261.
- Altman, I., & Taylor, D. A. (1973). *Social penetration: The development of interpersonal relationships*. New York: Holt, Rinehart, & Winston.

- Afifi, W. A., & Metts, S. (1998). Characteristics and consequences of expectation violations in close relationships. *Journal of Social and Personal Relationships, 15*(3), 365.
- Afifi, W. A. & Burgoon, J. K. (2000). The impact of violations on uncertainty and the consequences for attractiveness. *Human Communication Research, 26*(2), 203-233.
- Aries, E. J., & Johnson, F. L. (1983). Close friendship in adulthood: Conservational content between same-sex friends. *Sex Roles, 9*, 1183-96.
- Bachner-Melman, R., Bacon-Shnoor, N., Zohar, A. H., Elizur, Y., & Ebstein, R. P. (2009). Psychometric properties of the revised self-monitoring scale (RSMS) and the Concern for appropriateness scale (CAS) in Hebrew. *European Journal of Psychological Assessment, 25*(1), 8-15.
- Baron, R. M. & Kenny, D. A. (1986). Moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology, 51*, 1173-1182.
- Backstrom, L., (2009). Facebook memology-Top status trends of 2009, Facebook blog, December 21, 2009.
- Barry, B. & Crant, J.M. (2000). Dyadic communication relationships in organizations: An attribution/expectancy approach. *Organization Science, 11*(6), 648-664.

- Bartholomew, K., & Horowitz, L. M. (1991). Attachment styles among young adults: A test of four-category model. *Journal of Personality and Social Psychology*, *61*(2), 226-244.
- Baumeister, R. F., & Leary, M. R. (1995). Need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin*, *117*(3), 497-529.
- Baym, N. K., Zhang, Y. B., & Lin, M. (2004). Social interactions across media: Interpersonal communication on the internet, telephone and face-to-face. *New Media Society*, *6*, 299-318.
- Berg, J. H., & Archer, R. L. (1982). Responses to self-disclosure and interaction goals. *Journal of Experimental Social Psychology*, *18*, 501-512.
- Berndt, J. (1982). Features and effects of friendship in early adolescence. *Child Development*, *53*, 1447-1460.
- Bolger, N., Davis, A., & Rafaeli, E. (2003). Diary methods: Capturing life as it is lived. *Annual Review of Psychology*, *54*(1), 579-616.
- Bowlby, J. (1973). *Attachment and loss: Separation: Anxiety & Anger*. New York: Basic Books.
- Bowlby, J. (1980). *Attachment and loss: Sadness and depression*. New York: Basic Books.

Bowlby, J. (1982). *Attachment and loss: Vol. I. Attachment*. New York: Basic Books.

(Original work published 1969).

Brennan, K. A., & Morris, K. A. (1997). Attachment styles, self-esteem, and patterns of seeking feedback from romantic partners. *Personality and Social Psychology Bulletin*, 23-29.

Bryant, E. M., & Marmo, J. (2009). *Relational maintenance strategies on Facebook*.

Paper presented at the annual meeting of the National Communication Association conference, Chicago, IL.

Bryant, E. M. & Marmo, J. (2010). *Rules of Facebook friendship: A two-stage examination of interaction rules in close, casual, and acquaintance friendships*.

Paper presented at the annual meeting of the National Communication Association, San Francisco, CA.

Burgoon, J. K. & Hale, J. L. (1984). Fundamental topic of relational communication.

Communication Monographs, 51, 193-214.

Burgoon, J. K. & Hale, J. L. (1987). Validation and measurement of the fundamental themes of relational communication. *Communication Monographs*, 54, 19-41.

Burgoon, J. K., & Hale, J. L. (1988). Nonverbal expectancy violations: Model elaboration and application to immediacy behaviors. *Communication*

Monographs, 55(1), 58-79.

- Burgoon, J. K. (1993). Interpersonal expectations, expectancy violations, and emotional communication. *Journal of Language and Social Psychology, 12*, 30-48.
- Burgoon, J. K. & LePoire, B. A. (1993). Effects of communication expectancies, actual communication, and expectancy disconfirmation on evaluations of communicators and their communication behavior. *Human Communication Research, 20*, 67-96.
- Burleson, B. R. (2003). Experience and effects of emotional support: What the study of cultural and gender differences can tell us about close relationships, emotion, and interpersonal communication. *Personal Relationships, 10*, 1-23.
- Buhrke, R., & Fuqua, D. (1987). Sex differences in same- and cross-sex supportive relationships. *Sex Roles, 17*, 339-352.
- Canary, D. J., & Emmers-Sommer, T. M. (1997). *Sex and gender differences in personal relationships*. New York: Guilford.
- Canary, D. J., Stafford, L., Hause, K. S., & Wallace, L. A. (1993). An inductive analysis of relational maintenance strategies: Comparisons among lovers, relatives, friends, and others. *Communication Research Reports, 10*(1), 5-14.
- Clark, M.S., Mills, J., & Powell, M.C. (1986). Keeping track of needs in communal and exchange relationships. *Journal of Personality and Social Psychology, 51*(2), 333-338.
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (Rev. Ed.). Hillsdale, NJ: Erlbaum.

- Cohen, S., Underwood, L. G., & Gottlieb, B. H. (Eds.) (2000). *Social Support Measurement and Intervention: A guide for Health and social Scientists*. Oxford University Press: New York.
- Caldwell, M. A., & Peplau, L. A. (1982). Sex differences in same-sex friendship. *Sex Roles*, 8, 721-32.
- Collins, W. A., & Steinberg, L. (2006). Adolescent development in interpersonal context. In W. Damon & N. Eisenberg (Eds.), *Handbook of child psychology: Vol. 4, Socioemotional processes* (pp. 1003-1067). New York: Wiley.
- Cozby, P. C. (1973). Self-disclosure: A literature review. *Psychological Bulletin*, 79(2), 73-91.
- Cutrona, C. E. (1990). Stress and social support: In search of optimal matching. *Journal of Social and Clinical Psychology*, 9, 3-14.
- Daft, R. L., & Lengel, R. H. (1984). Information richness: A new approach to managerial behavior and organization design. In B. M. Staw & L. L. Cummings (Eds.), *Research in Organizational Behavior*, 6, 191-233.
- Davis, M. H., Conklin, L., Smith, A., & Luce, C. (1996). Effect of perspective taking on the cognitive representation of persons: A merging of self and other. *Journal of Personality and Social Psychology*, 70, 713-726.
- Dindia, K., & Allen, M. (1992). Sex differences in self-disclosure: A meta-analysis. *Psychological bulletin*, 112(1), 106-124.

- Dolgin, K. G., & Minowa, N. (1997). Gender differences in self-presentation: A comparison of the roles of flatteringness and intimacy in self-disclosure to friends. *Sex Roles, 36*, 371-380.
- Ebesu Hubbard, A. (2001). Conflict between relationally uncertain romantic partners: The influence of relational responsiveness and empathy. *Communication Monographs, 68*(4), 400-414.
- Ellison, N. B., Steinfield, C., & Lampe, C. (2007). The benefits of facebook" friends:" social capital and college students' use of online social network sites. *Journal of Computer Mediated Communication-electronic edition, 12*(4), 1143.
- <http://www.facebook.com/press/info.php?statistics>
- Feeney, B. (2004). A secure base: Responsive support of goal strivings and exploration in adult intimate relationships. *Journal of Personality and Social Psychology, 87*, 631-648.
- Feeney, B. C., & Collins, N. L. (2001). Predictors of caregiving in adult intimate relationships: An attachment theoretical perspective. *Journal of Personality and Social Psychology, 80*(6), 972-994.
- Fitzpatrick, M. A. (1988). *Between husbands and wives: Communication in marriage*. Newbury Park, CA: Sage Publications.

- Fleuriet, C., Estrada, D., & Houser, M. L. (2009). *The cyber factor: An analysis of relational maintenance through the use of computer-mediated communication*. Paper presented at the annual meeting of the National Communication Association, Chicago, IL.
- Floyd, K. & Voloudakis, M. (1999). Affectionate behavior in adult platonic friendships: Interpreting and evaluating expectancy violations. *Human Communication Research, 25*(3), 341-369.
- Fredrickson, B. L. (2001). The role of positive emotions in positive psychology: The broaden-and-build theory of positive emotions. *American Psychologist, 56*(3), 218-226.
- Fuhrman, R., Flannagan, D., Matamoros (2009). Behavior expectations in cross sex friendships, same sex friendships and romantic relationships. *Personal Relationships, 16*, 575-596.
- Furman, W., Simon, V. A., Shaffer, L., & Bouchey, H. A. (2002). Adolescents' working models and styles for relationships with parents, friends, and romantic partners. *Child Development, 73*(1), 241-255.
- Gable, S. L., Gonzaga, G. C., & Strachman, A. (2006). Will you be there for me when things go right? Supportive responses to positive event disclosures. *Journal of Personality and Social Psychology, 91*(5), 904.

Gangestad, S., & Snyder, M. (1985b). To carve nature at its joints: On the existence of discrete classes in personality. *Psychological Review*, 92, 317-349.

Gilsdorf, E. (2010, July 11). Facebook world : Tracing the birth and mushrooming growth of the site and how it's reshaping relationships and society. Boston Globe, p. C.4. Retrieved July 18, 2010, from ProQuest Newsstand. (Document ID: 2077524091).

Grabill, C. M., & Kerns, K. A. (2000). Attachment style and intimacy in friendship. *Personal Relationships*, 7(4), 363-378.

Gross, E. (2004). Adolescent internet use: What we expect, what teens report. *Applied Developmental Psychology*, 25, 633-649.

Hall, J. A., & Bernieri, F. J. (2001). *Interpersonal sensitivity: Theory and measurement*. Lawrence Erlbaum Associates.

Haythornthwaite, C. (2002). Strong, weak, and latent ties and the impact of new media, *The Information Society*, 18 (5), 385-401.

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

Haythornthwaite, C. & Wellman, B. (2002). *The Internet in Everyday Life*. Malden, MA: Blackwell.

- Hazan C, & Shaver P.R. (1987). Romantic love conceptualized as an attachment process. *Journal of Personality and Social Psychology* 52(3): 511–24.
- Heim, M. (1992). The erotic ontology of cyberspace. In M. Benedikt (Ed.), *Cyberspace: First steps* (pp. 59-80). Cambridge, MA: The MIT Press.
- Hian, L. B., Chuan, S. L., Trevor, T. M. K., & Detenber, B. H. (2004). *Journal of Computer-Mediated Communication*, 9(3).
- Homans, G. C. (1961). *Social behavior: Its elementary forms*. New York: Harcourt, Brace, & World.
- Hook, M.K., Gerstein, L.H., Dotterich, L., & Gridley, B. (2003). How close are we? Measuring intimacy and examining gender differences. *Journal of Counseling and Development*, 81, 462-472.
- Howell, D. C. (2007). *Statistical Methods for Psychology* (6th ed.). Belmont, CA: Thomson Wadsworth.
- Hu, Y., Wood, J. F., Smith, V., & Westbrook, N. (2004). Friendships through IM: Examining the relationship between instant messaging and intimacy. *Journal of Computer-Mediated Communication*, 10(1), 10-05.
- Ickes, W. J. (1997). *Empathic accuracy*. The Guilford Press.
- Jones, S. M. & Wirtz, J. G. (2006). How *does* the comforting process work? An empirical test of an appraisal-based model of comforting. *Human Communication Research*, 32, 217-243.
- Jowett, S. & Clark-Carter, D. (2006). Perceptions of empathic accuracy and assumed similarity in the coach-athlete relationship. *British Journal of Social Psychology*, 45, 617-637.

- Jourard, S. M., & Lasakow, P. (1958). Some factors in self-disclosure. *Journal of Abnormal and Social Psychology*, 56(1), 91-98.
- Jourard, S. M. (1959). Self-disclosure and other-cathexis. *Journal of Abnormal and Social Psychology*, 59, 428–431.
- Jourard, S.M. (1975). Marriage is for life. *Journal of Marital and Family Therapy* 1(3), 199-208.
- Katz, E., Blumler, J. G., & Gurevitch, M. (1973). Uses and gratifications research. *Public Opinion Quarterly*, 37(4), 509-523.
- <http://www.kenburbary.com/2011/03/facebook-demographics-revisited-2011-statistics-2/>
- Kenny, D. A., Kashy, D., & Bolger, N. (1997). Data analysis in social psychology. In D. Gilbert, S. Fiske, & G. Lindzey (Eds.), *Handbook of social psychology* (4th ed., pp. 233-265). New York: McGraw-Hill.
- Kirkpatrick, D. (2010). *The Facebook effect: Inside story of the company that is connecting the world*. Simon & Schuster.
- Kobak, R. R., & Duemmler, S. (1994). Attachment and conversation: Toward a discourse analysis of adolescent and adult security. In K. Bartholomew & D. Perlman (Eds.), *Attachment processes in adulthood*. (pp. 121-149). London: Kingsley.

- Laurenceau, J., Barrett, L. F., & Rovine, M. J. (2005). The interpersonal process model of intimacy in marriage: A daily-diary and multilevel modeling approach. *Journal of Family Psychology, 19*(2), 314.
- Laurenceau, J. P., Barrett, L. F., & Pietromonaco, P. R. (1998). Intimacy as an interpersonal process: The importance of self-disclosure, partner disclosure, and perceived partner responsiveness in interpersonal exchanges. *Journal of Personality and Social Psychology, 74*, 1238-1251.
- Laurenceau, J. P., Troy, A. B., & Carver, C. S. (2005). Two distinct emotional experiences in romantic relationships: Effects of perceptions regarding approach of intimacy and avoidance of conflict. *Personality and Social Psychology Bulletin, 31*(8), 1123.
- Lennox, R. D. (1988). The problem with self-monitoring: A two-sided scale and a one-sided theory. *Journal of Personality Assessment, 52*, 58-73.
- Lennox, R. D., & Wolfe, R. N. (1984). Revision of the Self-Monitoring Scale. *Journal of Personality and Social Psychology, 46*, 1349-1364.
- Lin, Y-C. (1992). *Construction of the sense of intimacy from everyday social interaction*. Unpublished doctoral dissertation, University of Rochester, NY.
- Lippert, T., & Prager, K. J. (2001). Daily experiences of intimacy: A study of couples. *Personal Relationships, 8*(3), 283-298.

- Livingstone, S. (2008). Taking risky opportunities in youthful content creation: Teenagers' use of social networking sites for intimacy, privacy and self-expression. *New Media & Society, 10*(3), 393.
- Ludwig, D., Franco, J. N., & Malloy, T. E. (1986). Effects of reciprocity and self-monitoring on self-disclosure with a new acquaintance. *Journal of Personality and Social Psychology, 50*(6), 1077-1082.
- Manne, S., Ostroff, J., Rini, C., Fox, K., Goldstein, L., & Grana, G. (2004). The interpersonal process model of intimacy: The role of self-disclosure, partner disclosure, and partner responsiveness in interactions between breast cancer patients and their partners. *Journal of Family Psychology, 18*(4), 589.
- Marmo, J., & Bryant, E. M. (2010). *Using Facebook to maintain friendships: Examining the differences between acquaintances, casual friends, and close friends*. Paper presented at the annual meeting of the National Communication Association, San Francisco, CA.
- Marston, P.J., Hecht, M.L., Manke, M.L., McDaniel, S., & Reeder, H. (1998). The subjective experience of intimacy, passion, and commitment in heterosexual loving relationships. *Personal Relationships, 5*(1), 15-30.
- Mashek & Aron, Eds. (2004). *The Handbook of Closeness and Intimacy*. Mahwah, NJ: Lawrence Erlbaum Associates.
- McAdams, D. P. (1983). Intimacy and affiliation motives in daily living: An experience sampling analysis. *American Psychological Association, 47*(4), 851-861.

- McAdams, D. P., Healy, S., Krause, S. (1984). Social motives and patterns of friendship. *Journal of Personality and Social Psychology*, 47(4), 828-838.
- McKenna, K., & Bargh, J. (1999). Causes and Consequences of Social Interaction on the Internet: A Conceptual Framework. *Media Psychology*, 1(3), 249-269.
- Mendelson, M. J., & Kay, A. C. (2003). Positive feelings in friendship: Does imbalance in the relationship matter? *Journal of Social and Personal Relationships*, 20(1), 101.
- Mikulincer, M. (1998). Attachment working models and the sense of trust: An exploration of interaction goals and affect regulation. *Journal of Personality and Social Psychology*, 74, 1209-1224.
- Mikulincer, M., & Nachshon, O. (1991). Attachment styles and patterns of self-disclosure. *Journal of Personality and Social Psychology*, 61, 321-331.
- Miller, L. C., Berg, J. H., & Archer, R. L. (1983). Openers: Individuals who elicit intimate self-disclosure. *Journal of Personality and Social Psychology*, 44(6), 1234-1244.
- Miller, R. S. & Lefcourt, H. M. (1982). Assessment of social intimacy. *Journal of Personality Assessment*, 46(5), 514-518.
- Mitchell, A. E., Castellani, A. M., Herrington, R. L., Joseph, J. I., Doss, B. D., & Snyder, D. K. (2008). Predictors of intimacy in couples' discussions of

relationship injuries: An observational study. *Journal of Family Psychology*, 22(1), 21-29.

Newcomb, T.M. (1953). An approach to the study of communicative acts.

Psychological Review, 60, 393-404.

http://topics.nytimes.com/top/news/business/companies/facebook_inc/index.html

<http://query.nytimes.com/search/query?frow=0&n=10&srcht=s&query=facebook&srchst=nyt&submit.x=12&submit.y=7&hdlquery=&bylquery=&daterange=past365days&mon1=01&day1=01&year1=1981&mon2=06&day2=24&year2=2011>,
June 24, 2011.

Parks, M. R., & Floyd, K. (1996). Making friends in cyberspace. *Journal of Communication*, 46(1), 80-97.

Parks, M. R., & Floyd, K. (1996). Meanings for closeness and intimacy in friendship. *Journal of Social and Personal Relationships*, 13, 85-107.

Patterson, M. L. (1983). *Nonverbal behavior: A functional perspective*. New York: Springer-Verlag.

Peter, J., Valkenburg, P. M., & Schouten, A. P. (2005). Developing a model of adolescent friendship formation on the internet. *CyberPsychology & Behavior*, 8, 423-430.

Petronio, S. (2002). *Boundaries of privacy: Dialectics of disclosure*. Albany, NY: State University of New York Press.

- Petronio, S., Martin, J., & Littlefield, R. (1984). Prerequisite conditions for self-disclosing: A gender issue. *Communication Monographs*, 51(3), 268-273.
- Pietromonaco, P. R., & Feldman Barrett, L. (1997). Working models of attachment and daily social interactions. *Journal of Personality and Social Psychology*, 73, 1409-1423.
- Prager, K. J. (1995). *The psychology of intimacy*. The Guilford Press.
- Pronin, E., Fleming, J.J., & Steffel, M. (2008). Value revelations: Disclosure is in the eye of the beholder. *Journal of Personality and Social Psychology*, 95(4), 795-809.
- Putnam, R. (2001). *Bowling Alone: Collapse and Revival of American Community*. Simon & Schuster.
- <http://quickfacts.census.gov/qfd/states/27000.html>
- Radford, M.L. (2006). Encountering virtual users: A qualitative investigation of interpersonal communication in chat reference. *Journal of the American Society for Information Science and Technology*, 57(8), 1046-1059.
- Ramirez, A. J., & Bryant, E. M. (2010). *Effect of modality switching on impression formation*. Paper presented at the annual meeting of the National Communication Association, San Francisco, CA.

- Ramirez, A. J., Walther, J. B., Burgoon, J. K., & Sunnafrank, M. (2002). Information-seeking strategies, uncertainty, and computer-mediated communication. *Human Communication Research, 28*(2), 213-228.
- Ramirez, A., & Wang, Z. (2008). When online meets offline: An expectancy violations theory perspective on modality switching. *Journal of Communication, 58*(1), 20.
- http://www.readwriteweb.com/archives/facebook_own_estimates_show_youth_flight_from_sit.php, July 6, 2009.
- Reis, H. T. (2007). Steps toward the ripening of relationship science. *Personal Relationships, 14*(1), 1.
- Reis, H. T., & Aron, A. (2008). Love: What is it, why does it matter, and how does it operate? *Perspectives on Psychological Science, 3*(1), 80-86.
- Reis, H. T., Clark, M. S., & Holmes, J. G. (2004). Perceived partner responsiveness as an organizing construct in the study of intimacy and closeness. In D. Mashek & A. Aron (Eds.), *Handbook of Closeness and Intimacy* (pp. 201–225). Mahwah, NJ: Erlbaum.
- Reis, H. T., & Patrick, B. C. (1996). Attachment and intimacy: Component processes. In E. T. Higgins & A. W. Kruglanski (Eds.), *Social Psychology: Handbook of Basic Principles* (pp. 523–563). New York: Guilford Press.

- Reis, H. T., & Shaver, P. (1988). Intimacy as an interpersonal process. *Handbook of Personal Relationships*, 367-389.
- Reisman, J. M. (1990). Intimacy in same-sex friendships. *Sex Roles*, 23, 65-82.
- Rosenberg, J. (2009). *Online impression management: Personality traits and concern for secondary goals as predictors of self-presentation tactics on Facebook*. Unpublished manuscript, Kent State University, Kent, OH.
- Robinson, J. P., M. Kestnbaum, A. Neustadt, and A. s. Alvarez (2002). 'The Internet and Other Uses of Time', in B. Wellman and C. Haythornthwaite (eds) *The Internet in Everyday Life*, pp. 244-262. Malden, MA: Blackwell.
- Rosenberg, J., & Egbert, N. (2010). *Online impression management: Personality traits and concern for secondary goals as predictors of self-presentation tactics on Facebook*. Paper presented at the annual meeting of the National Communication Association, San Francisco, CA.
- Rubin, Z., & Shenker, S. (1978). Friendship, proximity and self-disclosure. *Journal of Personality*, 46, 1-22.
- Senchak, M., & Leonard, K. E. (1992). Attachment styles and marital adjustment among newlywed couples. *Journal of Social and Personal Relationships*, 9, 51-64.
- Shaffer, D. R., Smith, J. E., Tomarelli, M. (1982). Self-monitoring as a determinant of self-disclosure reciprocity during the acquaintance process. *Journal of Personality and Social Psychology*, 43(1), 163-175.

- Sherrod, D. (1989). Influence of gender on same sex friendships. In C. Hendrick (Ed.), *Close relationships* (Vol. 10, pp. 164-186). New York: Sage.
- Sheldon, P. (2008). The relationship between unwillingness to communicate and students' Facebook use. *Journal of Media Psychology, 20*, 67-75.
- Simpson, J. A. & Rholes, S. W. Eds. (1998). *Attachment Theory and Close Relationships*. The Guilford Press: New York.
- Simpson, Rholes, and Nelligan (1992). Support seeking and support giving within couples in an anxiety-provoking situation: Role of attachment styles. *Journal of Personality and Social Psychology, 62*, 434-446.
- Simpson, J. A., Rholes, S. W., & Phillips, D. (1996). Conflict in close relationships: An attachment perspective. *Journal of Personality and Social Psychology, 71*, 899-914.
- Smith, S.W. & Wilson, S. R. Eds. (2010). *New Directions in Interpersonal Communication Research*. Sage: Los Angeles.
- Snell, W. E., Miller, R. S., & Belk, S. S. (1988). Development of the emotional self-disclosure scale. *Sex Roles, 18*(1), 59-73.
- Snyder, M. (1974). Self-monitoring of expressive behavior. *Journal of Personality and Social Psychology, 30*(4), 526-537.

- Snyder, M., & Gangestad, S. (1986). On the nature of self-monitoring: Matters of assessment, matters of validity. *Journal of Personality and Social Psychology*, 5(1), 125-139.
- Snyder, M., & Stukas Jr, A. A. (1999). Interpersonal processes: The interplay of cognitive, motivational, and behavioral activities in social interaction. *Annual Review of Psychology*, 50(1), 273-303.
- Sroufe, L. A., & Waters, E. (1977). Attachment as an organizational construct. *Child Development*, 48, 1184-1199.
- Stephen, T. D., & Harrison, T. M. (1985). Gender, sex-role identity, and communication style: A Q-sort analysis of behavioral differences. *Communication Research Reports*, 2, 53-61.
- Sullivan, H. S. (1953). *The interpersonal theory of psychiatry*. New York: Norton.
- Swann, Jr., W. B. (1987). Identity negotiation: Where two roads meet. *Journal of Personality and Social Psychology*, 53(6), 1038-1051.
- Swann Jr, W. B., Bosson, J. K., & Pelham, B. W. (2002). Different partners, different selves: Strategic verification of circumscribed identities. *Personality and Social Psychology Bulletin*, 28(9), 1215.
- Theiss, J. A., & Solomon, D. H. (2008). Parsing the mechanisms that increase relational intimacy: The effects of uncertainty amount, open communication about

uncertainty, and the reduction of uncertainty. *Human Communication Research*, 34(4), 625-654.

Thibaut, J. W., & Kelly, H. H. (1959). *The social psychology of groups*. New York: Wiley.

Tidwell, L. C., & Walther, J. B. (2002). Computer-mediated effects on disclosure, impressions, and interpersonal evaluations: Getting to know one another a bit at a time. *Human Communication Research*, 28, 317-348.

Tidwell, M. O., Reis, H. T., & Shaver, P. R. (1996). Attachment, attractiveness, and social interaction: A diary study. *Journal of Personality and Social Psychology*, 71(4), 729-745.

Utz, S., Beukeboom, C. J. (2011). Role of social network sites in romantic relationships: Effects on jealousy and relationship happiness. *Journal of Computer-Mediated Communication*, 16(4). 511-527.

Walther, J.B. (1992). Interpersonal effects in computer-mediated interaction: a relational perspective. *Communication Research*, 19, 52-90.

Walther, J. B. (1996). Computer-mediated communication: Impersonal, interpersonal, and hyperpersonal interaction. *Communication Research*, 23(1), 3-43.

Walther, J. B., & Burgoon, J. K. (1992). Relational communication in computer-mediated interaction. *Human Communication Research*, 19(1), 50-88.

- Walther, J. B. & Ramirez, Jr., A. (2010). New directions in online relating. In S.W. Smith & S. R. Wilson (Eds.), *New Directions in Interpersonal Communication Research*, (pp. 264-282). Thousand Oaks, CA: Sage.
- Walther, J. B., & Tidwell, L. C. (1995). Nonverbal cues in computer-mediated communication, and the effect of chronemics on relational communication. *Journal of Organizational Computing*, 5, 355-378.
- Walther, J. B., Van Der Heide, B., Hamel, L. M., Shulman, H. (2009). Self generated versus other generated statements and impressions in computer mediated communication: Test of warranting theory using Facebook. *Communication Research*, 36(2), 229-253.
- Waring, E., & Chelune, G. J. (1983). Marital intimacy and self-disclosure. *Journal of Clinical Psychology*, 39(2), 183-190.
- Watzlawick, P., Beavin, J. H., & Jackson, D. D. (1967). *Pragmatics of Human Communication*. New York: Newton.
- Webster, G. D., Brunell, A. B., & Pilkington, C. J. (2009). Individual differences in men's and women's warmth and disclosure differentially moderate couples' reciprocity in conversational disclosure. *Personality and Individual Differences*, 46, 292-297.
- Westerman, D., Van Der Heide B, Klein, K., & Walther, J. (2008). How do people really seek information about others? Information seeking across Internet and

traditional communication channels. *Journal of Computer-Mediated Communication*, 13, 751-767.

Wood, J. T. (2000). *Relational Communication* (2nd ed.) Belmont, CA: Wadsworth.

Youniss, J., & Haynie, D. L. (1992). Friendship in adolescence. *Developmental and Behavioral Pediatrics*, 13, 59-66.

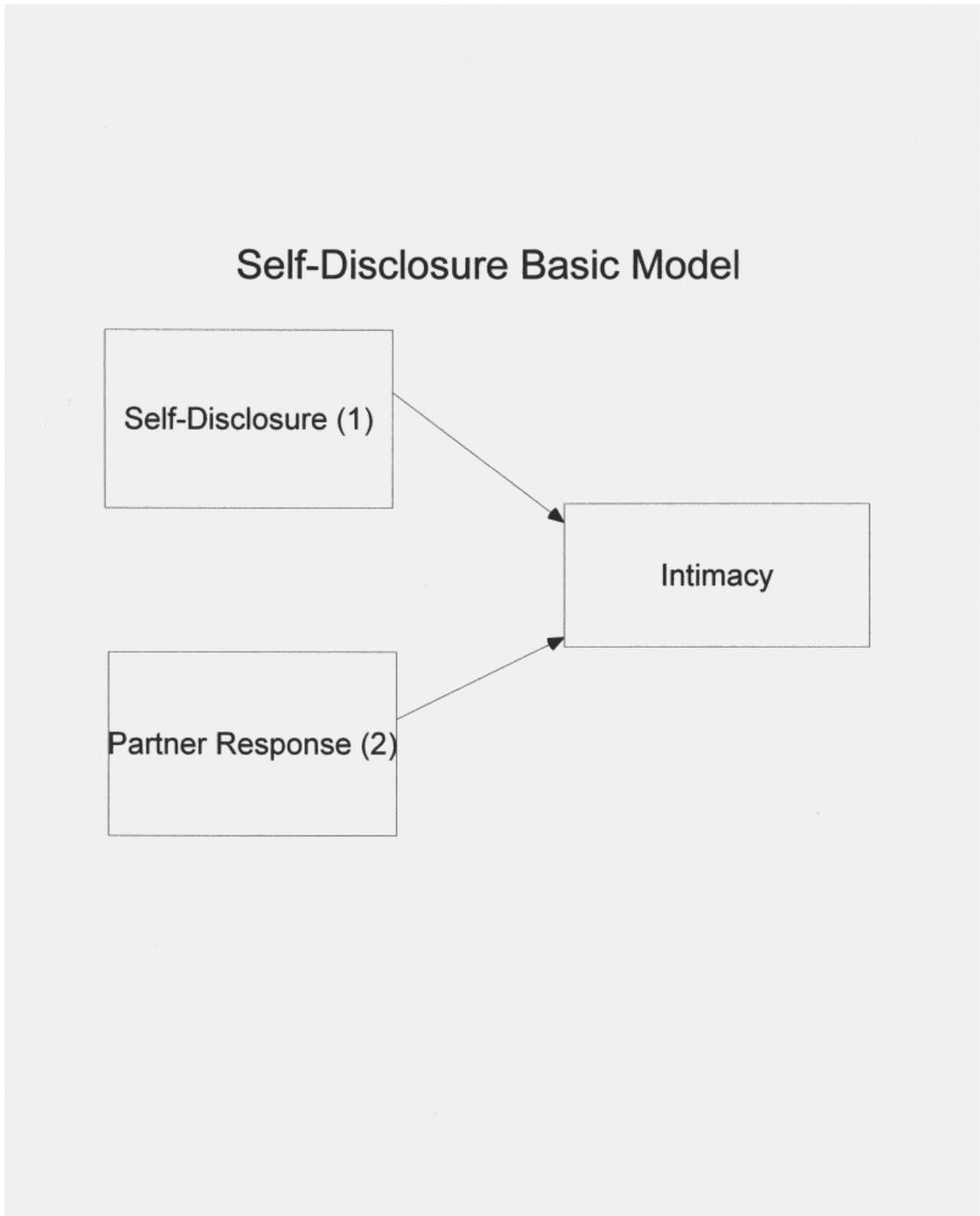


Figure A1. Self-Disclosure Basic Model

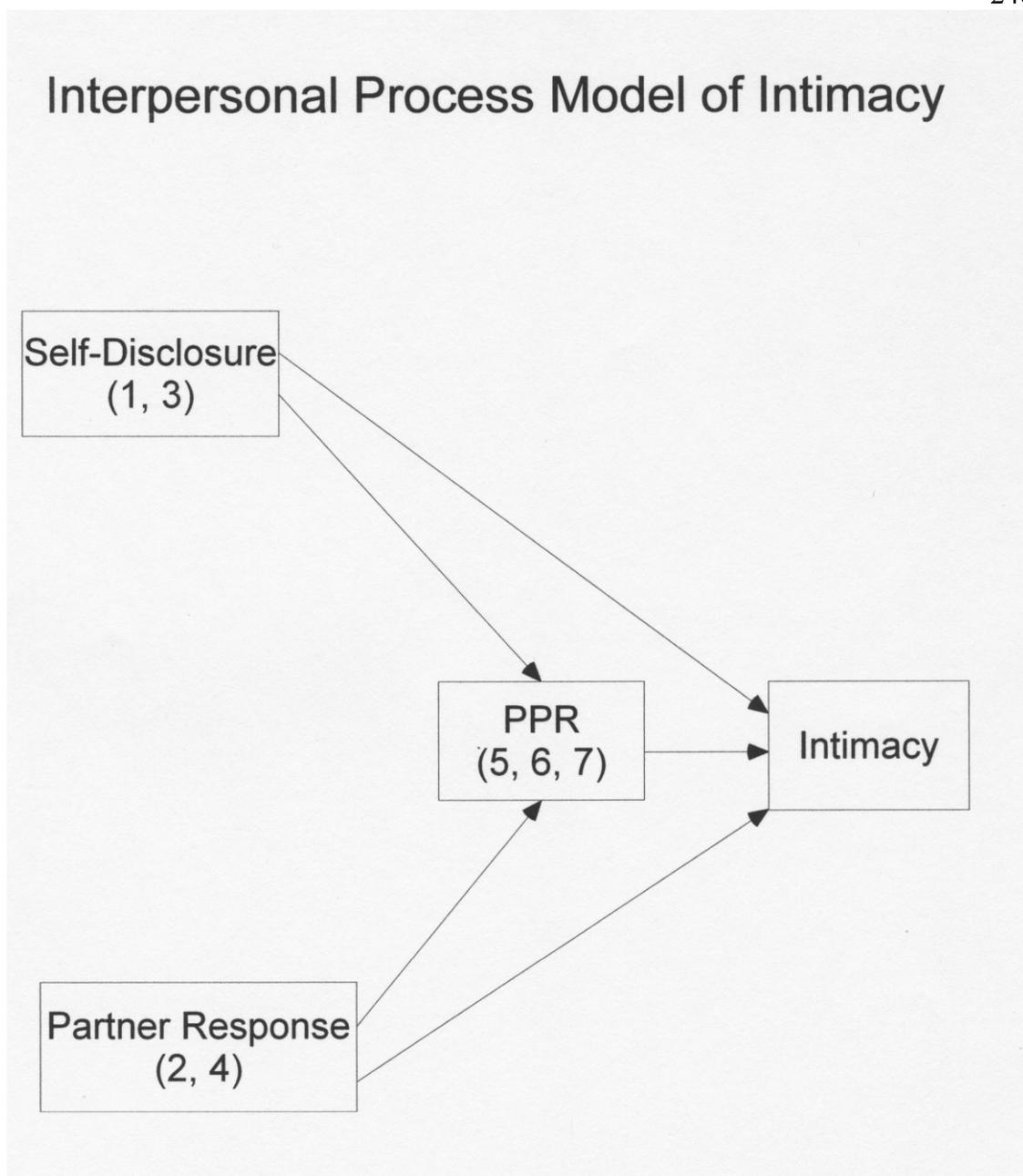


Figure A2. Interpersonal Process Model of Intimacy

Figure A3. Change in Intimacy (Respondent 1)

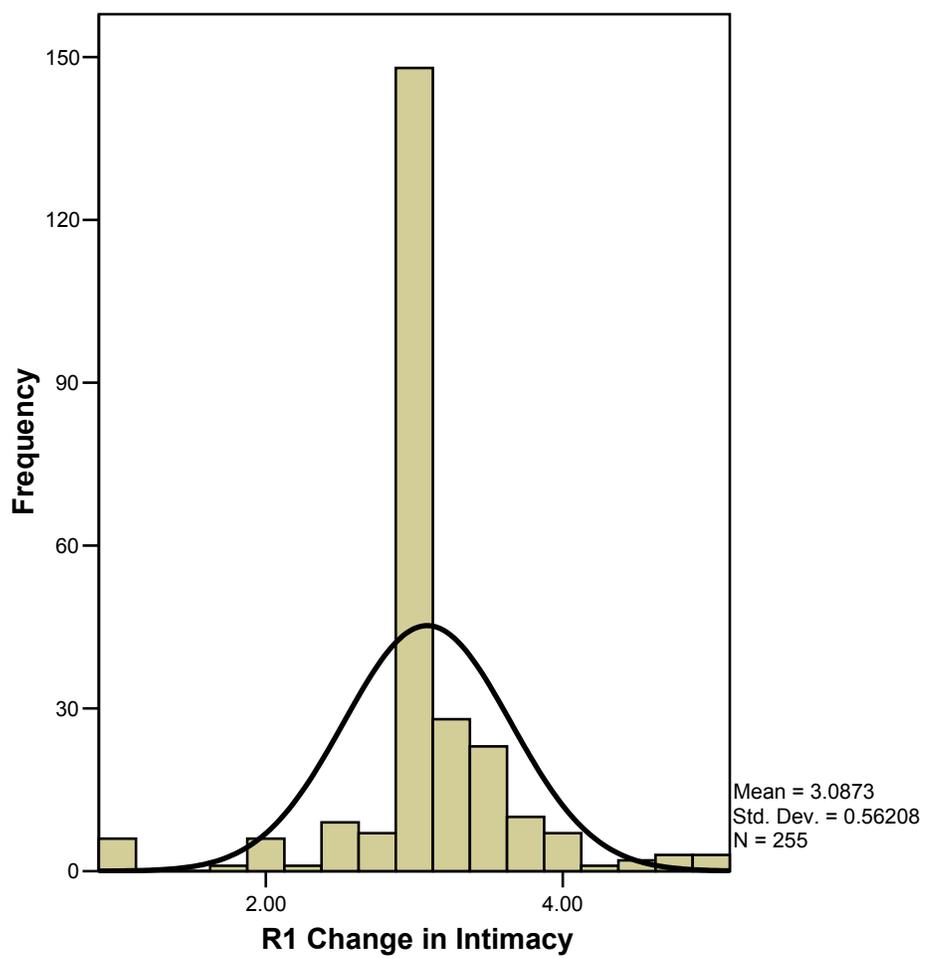


Figure A4. Change in Intimacy

(Respondent2)

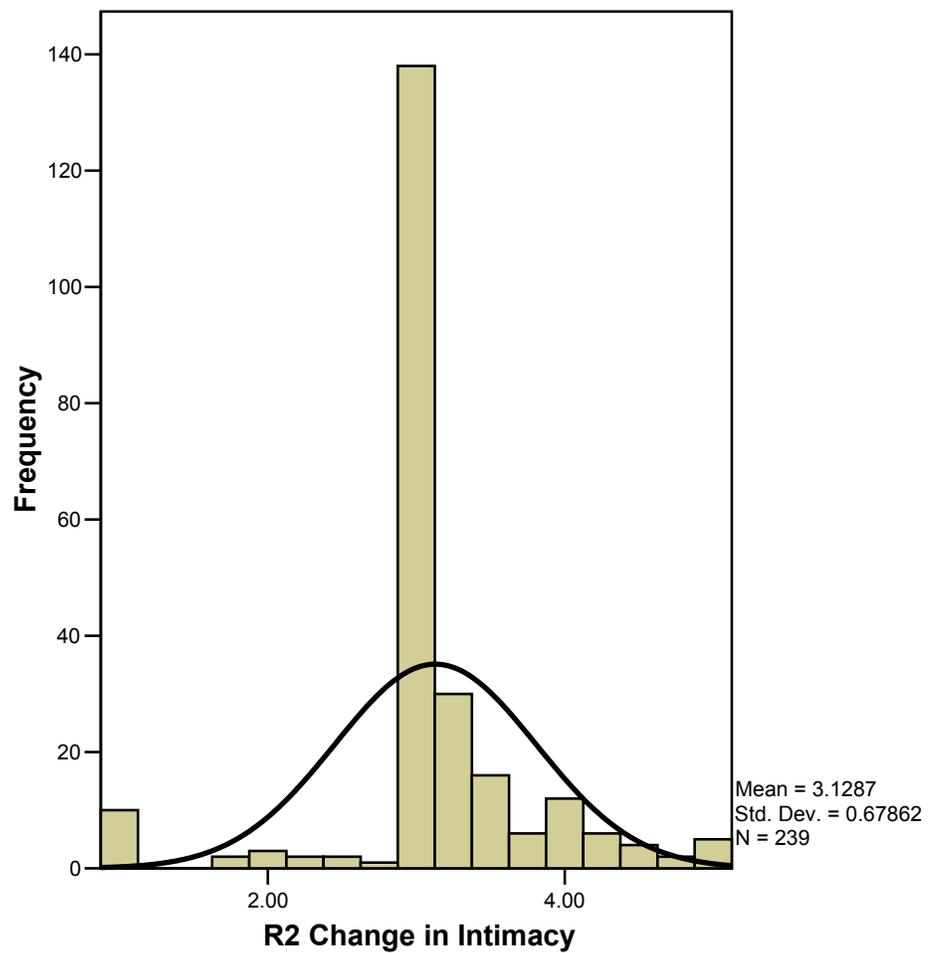
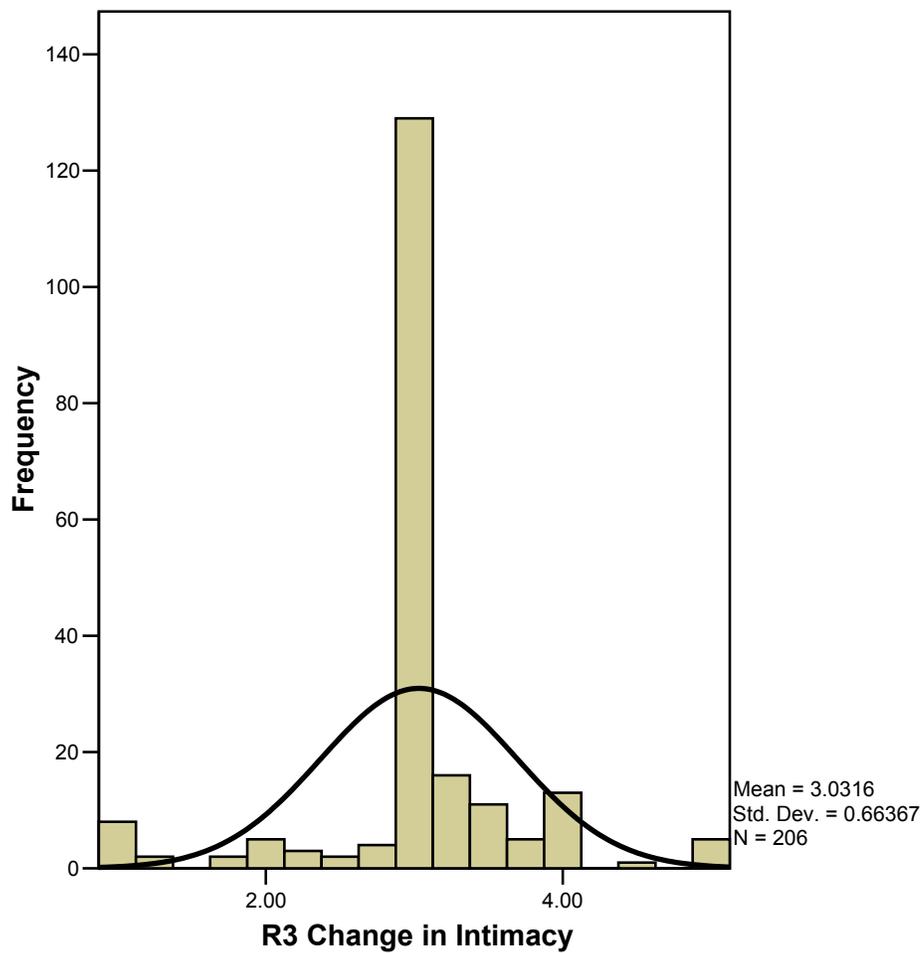


Figure A5. Change in Intimacy

(Respondent3)



Appendix B

CONSENT FORM

Facebook Self-Disclosure

You are invited to be in a research study of self-disclosure and interpersonal communication on Facebook. You were selected as a possible participant because you are an undergraduate at the University of Minnesota, are at least 18 years old, and have a Facebook profile. We ask that you read this form and ask any questions you may have before agreeing to be in the study.

This study is being conducted by: Linda K. Freeman, Communication Studies department, University of Minnesota

The purpose of this study is: To examine self-disclosures, expectancies and responses between friends in the setting of Facebook, and to determine whether theories that apply face-to-face about processes of intimacy, expectancy violations and satisfaction with interpersonal interactions and relationships also apply in the domain of Facebook.

Procedures:

If you agree to be in this study, we would ask you to do the following things: Please answer questions about your attachment security, your general feelings about computers, the Internet and self-disclosure on Facebook, your level of self-disclosure, your level of self-monitoring, your responses on Facebook and your experiences with self-disclosure on Facebook. In addition you will be asked to access your Facebook profile in order to copy and paste your self-disclosure along with your friends'

responses to your self-disclosure into the questionnaire. Only messages responding to your self-disclosure that were posted publicly, not any messages that were private or restricted in any way, should be cut and pasted to the survey.

You may feel exposed to psychological risk by self-disclosing and having friends respond on your Facebook profile wall knowing that the information will be collected and studied for scholarly research purposes. Information will not be linked to your name or other identifying characteristics and will be kept strictly confidential.

While there are no benefits to you personally for participating, your data will generally help us to understand more about how and why people use computer mediated communication, and specifically how college students may, on average, perceive benefits from interacting with others through social networking sites.

Compensation:

You will receive compensation for your participation in the study in the following manner: your class instructor will decide how many points you will obtain for participating in the study. Course points will occur subsequent to final tally of the questionnaires.

Confidentiality:

The records of this study will be kept private. In any sort of report we might publish, we will not include any information that will make it possible to identify a subject. Research records will be stored securely and only researchers will have access to the records.

Voluntary Nature of the Study:

Participation in this study is voluntary. Your decision whether or not to participate will not affect your current or future relations with the University of Minnesota. If you decide to participate, you are free to not answer any question or withdraw at any time without affecting this relationship.

Contacts and Questions:

The researcher conducting this study is: Linda K. Freeman. You may ask any questions you have now. If you have questions later, **you are encouraged** to contact me at 612-710-6142, and my email address is free0131@umn.edu. You may also contact my Advisor, Professor Ascan Koerner at koern011@umn.edu.

If you have any questions or concerns regarding this study and would like to talk to someone other than the researcher(s), **you are encouraged** to contact the Research Subjects' Advocate Line, D528 Mayo, 420 Delaware St. Southeast, Minneapolis, Minnesota 55455; (612) 625-1650.

You will be given a copy of this information to keep for your records.

Statement of Consent:

I have read the above information. I have asked questions and have received answers. I consent to participate in the study.

Click "I agree" button to indicate consent. Subject will not be allowed to proceed unless the consent button is clicked.

- I agree

3. How do you identify your ethnicity? Please indicate all that apply.

- a. American Indian
- b. Asian/Pacific Islander
- c. Hispanic
- d. African American
- e. Caucasian
- f. Other

4. Do you have a Facebook profile? a. Yes b. No

The Adult Attachment Questionnaire (AAQ); (Simpson, J. A., Rholes, S. W., & Phillips,
D.,1996)

Instructions:

a. In this section, please indicate how you typically feel toward romantic (dating) partners *in general*. Keep in mind that there are no right or wrong answers. Use the 7-point scale provided below and circle the appropriate number for each item.

6. I'm somewhat uncomfortable being too close to others. 1 2 3 4 5 6

7

7. I find it difficult to trust others completely. 1 2 3 4

5 6 7

8. I'm nervous whenever anyone gets too close to me. 1 2 3 4

5 6 7

9. Others often want me to be more intimate than I feel comfortable being.

1 2 3 4

5 6 7

10. Others often are reluctant to get as close as I would like. 1 2 3 4

5 6 7

11. I often worry that my partner(s) don't really love me. 1 2 3 4

5 6 7

12. I rarely worry about my partner(s) leaving me.

1 2 3 4

5 6 7

13. I often want to merge completely with others, and this desire sometimes scares

them away.

1

2 3 4 5 6 7

14. I'm confident others would never hurt me by suddenly ending our relationship.

1 2 3 4

5 6 7

15. I usually want more closeness and intimacy than others do.

1 2 3 4

5 6 7

16. The thought of being left by others rarely enters my mind.

1 2 3 4

5 6 7

17. I'm confident that my partner(s) love me just as much as I love them. 1 2 3 4

5 6 7

b. In this section, we would like you to think about your overall level of comfort with using computers and the Internet, and your general feelings about Facebook relationships.

We define self-disclosure as the process of providing private information about yourself to other people that they couldn't know unless you told them. This includes personal emotions, thoughts, feelings and facts.

Please circle the answer that indicates your agreement with the following 17 statements. The scaled ratings range from 1 (strongly disagree) to 5 (strongly agree).

In general, I feel at ease about using computers. 1 2

3 4 5

I feel competent about my ability to use the Internet. 1 2

3 4 5

I am comfortable navigating and using Facebook. 1 2

3 4 5

When I post to my Facebook Wall on my profile page, I believe these postings are private. 1 2

3 4 5

I am comfortable expressing my personal thoughts and feelings on Facebook.

1 2 3 4 5

Wall postings that involve personal thoughts and feelings are risky 1 2

3 4 5

Updating my status on my Facebook profile Wall is important to me. 1 2

3 4 5

I deliberately make my self-disclosures to my Wall ambiguous in meaning. 1 2

3 4 5

In general, Facebook relationships are meaningful to me. 1 2

3 4 5

Relationships that are primarily enacted through Facebook are as relevant to me as relationships that are primarily enacted through face-to-face encounters. 1 2 3 4 5

I expect some of my friends to respond to my self-disclosures on my Wall. 1 2 3 4 5

When I post to my Facebook Wall on my profile page, I believe these postings are public.

1 2 3 4 5

I have experienced negative consequences from self-disclosing on Facebook.

1 2 3 4 5

I post on Facebook (never.. some of the time.. almost always)

- | | |
|---------------------------|-----------|
| a. Home/dorm | 1 2 3 4 5 |
| b. Computer lab | 1 2 3 4 5 |
| c. Work | 1 2 3 4 5 |
| d. Other (please specify) | 1 2 3 4 5 |

I post to my own Wall quite frequently and more than most people post to their profile Wall. 1 2 3 4 5

I post a wide variety of topics to my profile Wall. 1 2 3 4 5

I typically post to my Wall more than once a week. 1 2 3 4 5

For the next question, please indicate your 3 most common motivations by ranking the following, with 1 being the most likely reason.

What motivates you to post a self-disclosure on your profile Wall?

To make friends laugh by posting jokes and funny comments

To amuse myself

To vent when my day isn't going well or I'm frustrated

To see who responds

To provoke friends into talking to me

To share good or bad news with friends

Posting my news so friends stay up-to-date on my life

Sharing poetry or personal notes I wrote

To keep in touch with friends who live far away

Posting that I am sad or worried to seek social support

Posting to my Wall because I want my comment to be public

To start drama or cause problems

To seek revenge on someone who I am mad at

Other (Explain _____)

Self-Disclosure Index (10 items, adapted from Miller, Berg, & Archer, 1983)

c. Please rate your level of comfort with posting the following information on Facebook. The scaled ratings range from 1 (not at all comfortable) to 5 (extremely comfortable).

My personal habits	1 2 3 4 5
Things I have done which I feel guilty about	1 2 3 4 5
Things I wouldn't do in public	1 2 3 4 5
My deepest feelings	1 2 3 4 5
What I like and dislike about myself	1 2 3 4 5
What is important to me in life	1 2 3 4 5
What makes me the person I am	1 2 3 4 5
My worst fears	1 2 3 4 5
Things I have done which I am proud of	1 2 3 4 5
My close relationships with other people	1 2 3 4 5

18-Item Measure of Self-Monitoring (Snyder & Gangestad, 1986).

d. Please indicate true (T) or false (F) for each of the following items.

I find it hard to imitate the behavior of other people

T / F

At parties and social gatherings, I do not attempt to do or say things that others will like.

T / F

I can only argue for ideas which I already believe.

T / F

I can make impromptu speech even on topics about which I have almost no information.

T / F

I guess I put on a show to impress or entertain others.

T / F

I would probably make a good actor.

T / F

In a group of people I am rarely the center of attention.

T / F

In different situations and with different people, I often act like very different persons.

T / F

I am not particularly good at making other people like me.

T / F

I'm not always the person I appear to be.

T / F

I would not change my opinions (or the way I do things) in order to please someone or win their favor.

T / F

I have considered being an entertainer.

T / F

I have never been good at games like charades or improvisational acting.

T / F

I have trouble changing my behavior to suit different people and different situations.

T / F

At a party I let others keep the jokes and stories going.

T / F

I feel a bit awkward in public and do not show up quite as well as I should.

T / F

I can look anyone in the eye and tell a lie with a straight face (if for a right end).

T / F

I may deceive people by being friendly when I really dislike them.

T / F

e. Imagine that you are the person responding to someone else's Facebook posting. The Person role assumes that you are commenting on something a friend self-disclosed through a post on his or her own Facebook Wall. This information may have appeared to you when you opened Facebook through the Newsfeed function linked to your Facebook profile, or you may have seen the post by directly accessing your friend's profile page.

Please answer the following questions.

4. Do you know when you are the target of someone else's Facebook posting?

(Circle one answer)

Never Sometimes Always

5. How sure are you that you are the target of someone else's Facebook post? The

scaled ratings range from 1 (not at all sure) to 5 (extremely sure). 1 2 3 4

5

6. I respond to someone's post on their Facebook Wall if I... (Check all answers that apply.)

- a. _____ can think of a funny response
- b. _____ feel close to the friend
- c. _____ feel the event discussed is particularly emotional
- d. _____ want to make him/her feel special
- e. _____ want to offer a motivational comment if my friend is preparing for an important event
- f. _____ feel romantically interested in the person, I may respond to flirt
- g. _____ want to congratulate my friend if he/she posted exciting news
- h. _____ am involved with the topic or I knew about the topic
- i. _____ want to share memories
- j. _____ feel my comment is a gift or favor to my friend
- k. _____ feel obliged to comment on my friend's Wall post because he/she commented on my post
- l. _____ care about the person and want to offer support and encouragement
- m. _____ want my other friends to see my response
- n. _____ am responding to a female friend
- o. _____ feel it is appropriate for me to respond
- p. _____ know my friend would expect me to respond
- q. _____ just feel like responding

- r. _____ want to express what I think, even if I am responding to someone I don't know very well
- s. _____ am responding to a male friend
- t. _____ Other
(explain _____)

- 7. I respond more often to females' posts than to males' posts
- 8. I receive more comments to my profile Wall posts from women than men.
- 9. Men comment more frequently to my posts than women.
- 10. I am more likely to know when I am target when it is a male's Wall post than when it is a female's Wall post.
- 11. I prefer to connect with my female friends on Facebook than with my male friends.
- 12. I am never entirely sure whether I should respond to someone else's Wall post.
- 13. *I respond more often than most people.
- 14. *It is difficult to respond to others' status updates.
- 15. *I like to respond to many of my friends' Facebook posts each day.
- 16. *I don't usually respond to others' status updates on their Wall.

f. Please look at your Facebook profile page and the messages you have posted to your Wall. Please find your most recent self-disclosure message (preferably within the past 2 weeks) that had at least 3 responses. This self-disclosure must have revealed something personal, meaningful and new about you. The information was not already known by your friends. You may have disclosed a combination of emotions, thoughts and facts.

Examples of self-disclosure:

1. "Yay! I just got accepted to Law School."
2. "What a bad week so far. Monday, I opened my car window to pay for parking as I was leaving work, and my window got stuck in the open position. Lucky me, it was 10 freezing degrees outside. Tuesday, I landed in the emergency room after accidentally splashing a chemical into my eye during lab."
3. "It has been one year. And what a year it was. Thanks to all my friends who supported me, advised me and comforted me. The coming year is filled with hope and promise. I look forward sharing good times with all of you. My mother was truly a very special person."

Please copy and paste your message from your profile Wall in the following box:

Please answer the following questions by indicating:

Not much A little A great deal

1.....2.....3.....4.....5.....6.....7.....8.....9.....10

To what extent did you self-disclose:

private information

1.....2.....3.....4.....5.....6.....7.....8.....9.....10

happiness

1.....2.....3.....4.....5.....6.....7.....8.....9.....10

jealousy

1.....2.....3.....4.....5.....6.....7.....8.....9.....10

anxiety

1.....2.....3.....4.....5.....6.....7.....8.....9.....10

anger

1.....2.....3.....4.....5.....6.....7.....8.....9.....10

fear

1.....2.....3.....4.....5.....6.....7.....8.....9.....10

When you thought of posting your self-disclosure message, were you imagining a conversation with a particular person or a specific group of individuals? Please indicate the relationship type you share with this person or these individuals. If you were not thinking of specific individuals, please indicate this choice by choosing either “no one in particular” or “everyone”.

Check any categories that apply:

- _____ Romantic partner
- _____ Best friend
- _____ Friend
- _____ Acquaintance
- _____ Parent
- _____ Sibling
- _____ Other family member
- _____ No one in particular
- _____ Everyone

RESPONSES

Who responded to your self-disclosure? Please cut and paste the first response to your self-disclosure here:

Person A

Please answer the following questions about your relationship with this person.

Please answer the following questions by indicating:

Not much A little A great deal

1.....2.....3.....4.....5.....6.....7.....8.....9.....10

How much do you feel like being encouraging and supportive to him/her when he/she is unhappy?

How close do you feel to him/her most of the time?

How important is it to you to listen to his/her very personal disclosures?

How satisfying is your relationship with him/her?

How important is it to you that he/she understands your feelings?

How much damage is caused by a typical disagreement in your relationship with him/her?

How important is it to you that he/she be encouraging and supportive to you when you are unhappy?

How important is your relationship with him/her in your life?

Please indicate your level of agreement with the following statements:

I feel understood by this person.

Not much A little A great deal

1.....2.....3.....4.....5

I feel accepted by this person.

1.....2.....3.....4.....5

This person cares for me.

1.....2.....3.....4.....5

Modes of Communication

How often do you use the following modes of communication with this friend?

Never some of the time almost always

Face-to-face

1.....2.....3.....4.....5.....6.....7

Text

1.....2.....3.....4.....5.....6.....7

Email

1.....2.....3.....4.....5.....6.....7

Phone

1.....2.....3.....4.....5.....6.....7

Facebook

1.....2.....3.....4.....5.....6.....7

Internet Chat

1.....2.....3.....4.....5.....6.....7

Expectations

Before you received the response from Person A, what type of Facebook response did you expect from this friend? Please indicate one of the following options:

Person A:

- a. This person will comment on my post with an in-depth response or self-disclosure.
- b. This person will respond by clicking “Like”.
- c. This person will respond by commenting with some sort of acknowledgement, but not a self-disclosure.
- d. I did not expect this person to respond.

What type of message were you expecting from this friend?

- a. Expression of caring, encouragement or empathy
- b. Advice
- c. Expression of confidence or respect
- d. Negative reaction such as criticism or sarcasm
- e. Friendship/liking/belonging to a group
- f. Offers of help, assistance or resources
- g. Other _____

Did this person (Person A) only respond on Facebook to this message?

Yes /

No

Did this person also respond using some other media?

Yes / No

If yes, please indicate:

_____ Face-to-face

_____ Text

_____ Email

_____ Phone

_____ Chat

_____ Private Facebook message

Please indicate Person A's gender:

Male /

Female

Person A's age (approximately)

My relationship with this Facebook friend (circle one):

Romantic partner Best Friend Friend Acquaintance Parent Sibling Other
family

Confirmation or Disconfirmation of Expectations

How did this person respond to you?

- a. Expression of caring, encouragement or empathy
- b. Advice
- c. Expression of confidence or respect
- d. Negative reaction such as criticism or sarcasm
- e. Friendship/liking/belonging to a group
- f. Offers of help, assistance or resources
- g. Other _____

Please answer the following questions by indicating:

Not much A little A great deal

1.....2.....3.....4.....5.....6.....7.....8.....9.....10

1. Person A's response was unusual.
2. Person A's response was similar to what you would expect most people to respond.
3. Person A acted in an appropriate manner.
4. Person A responded in an undesirable fashion.

Did the quality of their response meet your expectations? Please indicate, from 1 (response was less than expected, so my expectations were not met) to 7 (response was much better than expected, so my expectations were exceeded)

	Not met			Met		
Exceeded						
Person A	1	2	3	4	5	6
	7					

If the response was unexpected, please indicate:

This person’s response was more positive than expected.

This person’s response was more negative than expected.

This person’s response was something I would rate very favorable.

This person’s response was something I would rate very unfavorable.

He/she is a rewarding person to interact with.

I don’t really enjoy my relationship with this person.

Most people would probably like having a conversation with him/her.

I don’t care about this person very much.

Indicate the type of Facebook response you received from this friend:

- a. Self-disclosure
- b. “Like”
- c. Other comment

What is your feeling about the quality of your relationship with Person A after receiving this response? Use the following scale:

Less.....Same.....More

1.....2.....3.....4.....5

Intimacy

1.....2.....3.....4.....5

Trust

1.....2.....3.....4.....5

Closeness

1.....2.....3.....4.....5

Reliance

1.....2.....3.....4.....5

Please cut and paste the second response to your self-disclosure here:

Person B

Please answer the following questions about your relationship with this person.

Please answer the following questions by indicating:

Not much A little A great deal

1.....2.....3.....4.....5.....6.....7.....8.....9.....10

How much do you feel like being encouraging and supportive to him/her when he/she is unhappy?

How close do you feel to him/her most of the time?

How important is it to you to listen to his/her very personal disclosures?

How satisfying is your relationship with him/her?

How important is it to you that he/she understands your feelings?

How much damage is caused by a typical disagreement in your relationship with him/her?

How important is it to you that he/she be encouraging and supportive to you when you are unhappy?

How important is your relationship with him/her in your life?

Please indicate your level of agreement with the following statements:

I feel understood by this person.

Not much A little A great deal

1.....2.....3.....4.....5

I feel accepted by this person.

1.....2.....3.....4.....5

This person cares for me.

1.....2.....3.....4.....5

Modes of Communication

How often do you use the following modes of communication with this friend?

Never some of the time almost always

Face-to-face

1.....2.....3.....4.....5.....6.....7

Text

1.....2.....3.....4.....5.....6.....7

Email

1.....2.....3.....4.....5.....6.....7

Phone

1.....2.....3.....4.....5.....6.....7

Facebook

1.....2.....3.....4.....5.....6.....7

Internet Chat

1.....2.....3.....4.....5.....6.....7

Expectations

Before you received the response from Person B, what type of Facebook response did you expect from this friend? Please indicate one of the following options:

Person B:

- e. This person will comment on my post with an in-depth response or self-disclosure.
- f. This person will respond by clicking “Like”.

- g. This person will respond by commenting with some sort of acknowledgement, but not a self-disclosure.
- h. I did not expect this person to respond.

What type of message were you expecting from this friend?

- a. Expression of caring, encouragement or empathy
- b. Advice
- c. Expression of confidence or respect
- d. Negative reaction such as criticism or sarcasm
- e. Friendship/liking/belonging to a group
- f. Offers of help, assistance or resources
- g. Other _____

Did this person (Person B) only respond on Facebook to this message?

Yes /

No

Did this person also respond using some other media?

Yes / No

If yes, please indicate:

_____ Face-to-face

_____ Text

_____ Email

_____ Phone

_____ Chat

_____ Private Facebook message

Please indicate Person B's gender:

Male /

Female

Person B's age (approximately)

My relationship with this Facebook friend (circle one):

Romantic partner Best Friend Friend Acquaintance Parent Sibling Other
family

Confirmation or Disconfirmation of Expectations

How did this person respond to you?

- a. Expression of caring, encouragement or empathy
- b. Advice
- c. Expression of confidence or respect
- d. Negative reaction such as criticism or sarcasm
- e. Friendship/liking/belonging to a group
- f. Offers of help, assistance or resources
- g. Other _____

Please answer the following questions by indicating:

Not much

A little

A great deal

1.....2.....3.....4.....5.....6.....7.....8.....9.....10

- 5. Person B's response was unusual.
- 6. Person B's response was similar to what you would expect most people to respond.
- 7. Person B acted in an appropriate manner.
- 8. Person B responded in an undesirable fashion.

Did the quality of their response meet your expectations? Please indicate, from 1 (response was less than expected, so my expectations were not met) to 7 (response was much better than expected, so my expectations were exceeded)

	Not met			Met		
Exceeded						
Person B	1	2	3	4	5	6
	7					

If the response was unexpected, please indicate:

This person's response was more positive than expected.

This person's response was more negative than expected.

This person's response was something I would rate very favorable.

This person's response was something I would rate very unfavorable.

He/she is a rewarding person to interact with.

I don't really enjoy my relationship with this person.

Most people would probably like having a conversation with him/her.

I don't care about this person very much.

Indicate the type of Facebook response:

- d. Self-disclosure
- e. "Like"
- f. Other comment

What is your feeling about the quality of your relationship with Person B after receiving this response? Use the following scale:

Less.....Same.....More

1.....2.....3.....4.....5

Intimacy

1.....2.....3.....4.....5

Trust

1.....2.....3.....4.....5

Closeness

1.....2.....3.....4.....5

Reliance

1.....2.....3.....4.....5

Please cut and paste the third response to your self-disclosure here:

Person C

Please answer the following questions about your relationship with this person.

Please answer the following questions by indicating:

Not much A little A great deal

1.....2.....3.....4.....5.....6.....7.....8.....9.....10

How much do you feel like being encouraging and supportive to him/her when he/she is unhappy?

How close do you feel to him/her most of the time?

How important is it to you to listen to his/her very personal disclosures?

How satisfying is your relationship with him/her?

How important is it to you that he/she understands your feelings?

How much damage is caused by a typical disagreement in your relationship with him/her?

How important is it to you that he/she be encouraging and supportive to you when you are unhappy?

How important is your relationship with him/her in your life?

Please indicate your level of agreement with the following statements:

I feel understood by this person.

Not much A little A great deal

1.....2.....3.....4.....5

I feel accepted by this person.

1.....2.....3.....4.....5

This person cares for me.

1.....2.....3.....4.....5

Modes of Communication

How often do you use the following modes of communication with this friend?

Never some of the time almost always

Face-to-face

1.....2.....3.....4.....5.....6.....7

Text

1.....2.....3.....4.....5.....6.....7

Email

1.....2.....3.....4.....5.....6.....7

Phone

1.....2.....3.....4.....5.....6.....7

Facebook

1.....2.....3.....4.....5.....6.....7

Internet Chat

1.....2.....3.....4.....5.....6.....7

Expectations

Before you received the response from Person C, what type of Facebook response did you expect from this friend? Please indicate one of the following options:

Person C:

- i. This person will comment on my post with an in-depth response or self-disclosure.
- j. This person will respond by clicking “Like”.
- k. This person will respond by commenting with some sort of acknowledgement, but not a self-disclosure.
- l. I did not expect this person to respond.

What type of message were you expecting from this friend?

- a. Expression of caring, encouragement or empathy
- b. Advice
- c. Expression of confidence or respect
- d. Negative reaction such as criticism or sarcasm
- e. Friendship/liking/belonging to a group
- f. Offers of help, assistance or resources
- g. Other _____

Did this person (Person C) only respond on Facebook to this message?

Yes /

No

Did this person also respond using some other media?

Yes / No

If yes, please indicate:

_____ Face-to-face

_____ Text

_____ Email

_____ Phone

_____ Chat

_____ Private Facebook message

Please indicate Person C's gender:

Male /

Female

Person C's age (approximately)

My relationship with this Facebook friend (circle one):

Romantic partner Best Friend Friend Acquaintance Parent Sibling Other
family

Confirmation or Disconfirmation of Expectations

How did this person respond to you?

- a. Expression of caring, encouragement or empathy
- b. Advice
- c. Expression of confidence or respect
- d. Negative reaction such as criticism or sarcasm
- e. Friendship/liking/belonging to a group
- f. Offers of help, assistance or resources
- g. Other _____

Please answer the following questions by indicating:

Not much A little A great deal
 1.....2.....3.....4.....5.....6.....7.....8.....9.....10

- 9. Person C’s response was unusual.
- 10. Person C’s response was similar to what you would expect most people to respond.
- 11. Person C acted in an appropriate manner.
- 12. Person C responded in an undesirable fashion.

Did the quality of their response meet your expectations? Please indicate, from 1 (response was less than expected, so my expectations were not met) to 7 (response was much better than expected, so my expectations were exceeded)

	Not met			Met		
Exceeded						
Person C	1	2	3	4	5	6
	7					

- If the response was unexpected, please indicate:
- This person’s response was more positive than expected.
 - This person’s response was more negative than expected.
 - This person’s response was something I would rate very favorable.
 - This person’s response was something I would rate very unfavorable.
 - He/she is a rewarding person to interact with.

I don't really enjoy my relationship with this person.

Most people would probably like having a conversation with him/her.

I don't care about this person very much.

Indicate the type of Facebook response:

- g. Self-disclosure
- h. "Like"
- i. Other comment

What is your feeling about the quality of your relationship with Person C after receiving this response? Use the following scale:

Less.....Same.....More

1.....2.....3.....4.....5

Intimacy

1.....2.....3.....4.....5

Trust

1.....2.....3.....4.....5

Closeness

1.....2.....3.....4.....5

Reliance

1.....2.....3.....4.....5

End of the survey. Thank you very much for your participation.