

Stony Brook University



OFFICIAL COPY

The official electronic file of this thesis or dissertation is maintained by the University Libraries on behalf of The Graduate School at Stony Brook University.

© All Rights Reserved by Author.

Tell Me Something Good: Depression and the Social Sharing of Positive Life Events

A Dissertation Presented

by

Rachel Hershenberg

to

The Graduate School

in Partial Fulfillment of the

Requirements

for the Degree of

Doctor of Philosophy

in

Clinical Psychology

Stony Brook University

August 2013

Stony Brook University

The Graduate School

Rachel Hershenberg

We, the dissertation committee for the above candidate for the
Doctor of Philosophy degree, hereby recommend
acceptance of this dissertation.

Joanne Davila, Ph.D. – Dissertation Advisor
Professor and Director of Clinical Training, Department of Psychology

Daniel Klein, Ph.D. - Chairperson of Defense
Professor, Department of Psychology

Anne Moyer, Ph.D.
Associate Professor, Department of Psychology

Stephanie Brown, Ph.D.
Associate Professor, Center for Medical Humanities, Compassionate Care, and Bioethics

This dissertation is accepted by the Graduate School

Charles Taber
Interim Dean of the Graduate School

Abstract of the Dissertation

Tell Me Something Good: Depression and the Social Sharing of Positive Life Events

by

Rachel Hershenberg

Doctor of Philosophy

in

Clinical Psychology

Stony Brook University

2013

This dissertation examined the social sharing of positive life events, referred to as *capitalization*, among a sample of individuals with a range of current depressive symptomatology.

Capitalization is an interpersonal strategy that has the potential to enhance positive emotions, build cognitive resources, and strengthen relationships. Remiss in the depression research has been an examination of responses to positive life events in an interpersonal context. Some data suggests that those with depressive symptoms may be particularly responsive to the capitalization process; other data suggests that those with greater depressive symptoms may be less likely to engage in this behavior and might also experience fewer intra- and interpersonal benefits. To examine these competing hypotheses, I collected data from an ethnically diverse group of 73 females with a range of current depressive symptomatology. Questionnaire data assessed rates of capitalization (disclosing positive life events) compared to rates of social support (disclosing negative life events). Experimental data included an actual capitalization interaction in the laboratory with a highly supportive confederate. Key findings suggested that in daily life, depressive symptoms were not associated with a lower frequency of positive events or

capitalizing on those events; the whole sample on average shared about 50% of all positive events. Of note, greater depressive symptoms were associated with the perception that responses to capitalization attempts were less supportive, a variable that is closely associated with intimacy development. In contrast to positive events, depressive symptoms were significantly associated with a greater frequency of negative events across multiple domain areas. However, depressive symptoms again were not associated with greater rates of seeking social support for those events. In the lab, I found that the greater the depressive symptoms, the more likely the subject was to prefer to discuss a negative event. Nevertheless, when all participants did engage in a positive event discussion, the greater the depressive symptoms, the larger the increases in positive mood and the larger the decreases in negative mood. Implications for treatment, particularly extensions of behavioral activation, are discussed.

Dedication Page

To my mom,
who taught me how to capitalize.

To my dad,
the psychologist I strive to be.

Table of Contents

List of Tables	vii
Acknowledgments.....	viii
I. Introduction	1
Depression and emotional reactivity	2
Capitalization (in non-depressed populations)	7
Depression may be associated with deficits in the capitalization process	13
The present study	19
II. Method.....	24
Participants	24
Procedures.....	25
III. Results.....	37
Questionnaire Data	37
Interaction Data	40
IV. Discussion	47
V. Tables	63
VI. References	79
VII. Appendices	89
VIII. Appendix A. 3 Positive and 3 Negative Events for Event Discussion.....	89
Appendix B. Positive and Negative Life Events Questionnaire	91
Appendix C. Ranking Preference for Event Discussion	95
Appendix D. Feelings Toward Positive Activity Partners.....	96

List of Tables

I.	Table 1: <i>Zero-Order Correlations and Descriptive Statistics for Depressive Symptoms and Rates of Capitalization Reported in the Questionnaire Data</i>	63
II.	Table 2: <i>Zero-Order Correlations and Descriptive Statistics for Depressive Symptoms and Rates of Social Support Reported in the Questionnaire Data</i>	65
III.	Table 3: <i>Zero-Order Correlations and Descriptive Statistics Regarding Positive and Negative Events and Capitalization and Support Attempts Reported in the Questionnaire Data</i>	66
IV.	Table 4: <i>Zero-Order Correlations and Descriptive Statistics Regarding Interpersonal Benefits Reported in the Questionnaire Data</i>	68
V.	Table 5: <i>Zero-Order Correlations for Depressive Symptoms and Interpersonal Benefits from Capitalization and Support Attempts Reported in the Questionnaire Data</i>	70
VI.	Table 6: <i>Zero-Order Correlations and Descriptive Statistics Regarding Mood, Cognition, and Behavior Reported in the Interaction Data</i>	72
VII.	Table 7: <i>Zero-Order Correlations and Descriptive Statistics Regarding Interpersonal Benefits Reported in the Interaction Data</i>	73
VIII.	Table 8: <i>Zero-Order Correlations and Descriptive Statistics for Depressive Symptoms and the Three Mood Assessments Reported in the Interaction Data</i>	75
IX.	Table 9: <i>Zero-Order Correlations for Depressive Symptoms and Mood, Cognition, Behavior, and Interpersonal Benefits Reported in the Interaction Data</i>	76
X.	Table 10: <i>Multiple Regression Predicting Mood While Controlling for Significance of the Discussed Event in the Interaction Data</i>	77
XI.	Table 11: <i>Zero-Order Correlations and Descriptive Statistics for Depressive Symptoms and Interpersonal Benefits from Positive, Shared Activities</i>	78

Acknowledgments

I have been a traveler in excellent company on the road to this doctoral dissertation. I would like to extend my sincerest thank you to the following people who are dear to my heart:

To my parents, where to begin. I would not, could not be here without you. And to my sisters, who are my best friends.

To Drew Westen, Bekh Bradley, Eric Russ, Pavel Blagov, Joanne Peart, and Laura Levin. You brought me into Drew's lab, instilled in me a love for research and the science-practice gap, and launched me to Stony Brook.

To my mentor Joanne Davila who accepted me into her lab and who I continue to do my best to emulate. I owe so very much to you both professionally and personally. During our last meeting at Stony Brook, you told me that I have you for life as my mentor. I've been less afraid ever since.

To my past lab mates Kate Stroud, Melissa Ramsay Miller, Lisa Starr, and Athena Yoneda; to my current lab mates Brian Feinstein, Vickie Bhatia, Jessica Latack, and Nathalie Meuwly. You are my colleagues, my confidantes, and my friends.

To Marv Goldfried and Dina Vivian who have mentored me by choice and modeled for me the synergy of working and writing as a researcher and clinician.

To Lisa Napolitano and Annalise Caron for taking me on as an extern, nurturing my clinical growth, and helping me to connect my depression research within an overarching emotion regulation framework.

To my clients who trusted me, were patient with me, and helped fuel the hypotheses of this dissertation.

To the subjects who participated in this research. And to my fantastic research team, without whom I could not have collected this data: Amysue Hansen, Miryam Yusofov, Rebecca Ziegler, Courtney Walsh, and Jean Raimo.

To my dissertation committee, Dan Klein and Anne Moyer, from whom I have learned so much, and who have believed in me since my graduate school career began. And to Stephanie Brown who was willing to come on board, and who, with the rest of the committee, helped me to think through the potential for positive consequences in this sample.

And, last but certainly not least, Margaret Dyson, Jamie Weiss, and the rest of my support system.

I. Introduction

Depression is a mood disorder, characterized by persistent negative mood (i.e., sadness) and deficits in positive mood (i.e., anhedonia – loss of pleasure in activities typically enjoyed; American Psychiatric Association, 1994). Notably, despite the fact that depression is characterized specifically by low positive emotions, the field has largely focused on responses to negative life events, negative emotions, and engagement in problematic behaviors that erode the quality of interpersonal relationships (and exacerbate negative mood). Remiss in the psychopathology research has been a focus on responses to positive events, positive emotions, and engagement in behaviors that enhance relationship quality (and subsequently might also reduce vulnerability to negative emotions and relationship distress). This is a major omission, particularly given that interventions that enhance contact with positive and rewarding aspects of a depressed person's environment are effective treatments for depression (Cuijpers, van Straten, & Warmerdam, 2007; Dobson, et al., 2008; Sturmey, 2009).

This dissertation was designed to examine depression in the context of positive events, positive emotions, and relationship promoting behavior. Specifically, the study examined the social sharing of positive life events, referred to as *capitalization*, among a sample of individuals with a range of current depressive symptomatology. Capitalization is an interpersonal strategy that has the potential to enhance positive emotions, build cognitive resources, and strengthen relationships. As will be reviewed below, particular deficits characteristic of depression may impair the capitalization process and therefore be targeted in interventions. At the same time, given some recent data on emotional reactivity in depression, it is possible that this specific type of interpersonal behavior may be especially beneficial among depressed persons, which further highlights the importance of examining the capitalization process in depression.

I first review recent advances in the literature on depression and emotional reactivity. Doing so will (1) underscore that studying the social sharing of positive life events fills a gap in the literature to advance understanding of a depressed person's emotional responses to positive/appetitive contexts, and (2) highlight the potential for emotional benefits derived from this interpersonal process in a depressive sample. Following, I will review the literature on capitalization in normative samples to demonstrate that engaging in this behavior leads to beneficial emotional, cognitive, and relational consequences. Last, I will return to the depression literature to delineate a priori hypotheses regarding the capitalization process in a sample comprised of individuals with a range of depressive symptomatology. As will be described below, the emotional benefits may be enhanced among those with elevated depressive symptoms. At the same time, as will be reviewed, the larger depression literature also sets the stage for potential mechanisms that may impair or inhibit the willingness to engage in, or the benefits associated with, the capitalization process.

Depression and emotional reactivity.

A recent meta-analysis of emotional reactivity in depression finds support for Emotion-Context Insensitivity (ECI; Bylsma, Morris, & Rottenberg, 2008), named because, in essence, there is no differentiation between contexts ("everything is the same"). In other words, according to ECI, depressed person's negative and positive emotional responses will not vary across positive, neutral, and negative contexts, referred to as the *negative mood attenuation* and *positive mood attenuation* hypotheses, respectively. Briefly with regard to negative mood, laboratory/experimental findings find support for negative mood attenuation (i.e., meta-analytic data yielded a small to moderate effect, $d = -.25$, Bylsma, et al., 2008). For example, though on average the depressed group demonstrated significantly higher levels of sadness than a recovered

depressed and never depressed control group, depressed participants did not significantly differ in self-reported levels of sadness when comparing sadness across happy, neutral, and sad emotional contexts in which they watched both normative and idiographic film clips (Rottenberg, Gross, & Gotlib, 2005). This finding for the depressed group stood in contrast to the control group who demonstrated significantly elevated levels of self-reported sadness in response to the sad films compared to the happy and neutral films (Rottenberg, et al., 2005). The meta-analysis largely involved studies using normative (rather than idiographic) stimuli, and it is notable that findings with idiographic data similarly conform to the hypothesis (Ellis, Beevers, & Wells, 2009; Rottenberg, et al., 2005), suggesting that depressed persons are overall more negative and less positive in current emotional state but that changes in these states are not as responsive to negative environmental input as their non-depressed counterparts, particularly as depression severity increases (Rottenberg, Kasch, Gross, & Gotlib, 2002).

Positive mood attenuation? In addition to documenting a lack of differentiation across contexts in the expression of negative emotions, importantly, and most pertinent to the present study, ECI also involves the positive attenuation hypothesis – that characteristically low positive mood (i.e., anhedonia) increases vulnerability to deficits in responsiveness to appetitive stimuli. As such, hypotheses consistent with positive attenuation suggest that positive mood will not significantly increase in positive compared to neutral and negative contexts. On the one hand, the meta-analysis did find support for positive attenuation (for self-report measures, $d = -.70$; Bylsma, et al., 2008). This suggests that, consistent with the pervasive low positive emotionality characteristic of depression, depressed persons may be less responsive to positive environmental input compared to their non-depressed counterparts. Importantly, as previously stated, the studies included in this review largely involved de-contextualized experimental designs in which

subjects passively viewed standardized pictures or film clips. In contrast, the use of individualized stimuli is essential to advancing our understanding of emotional reactivity in depression because person-specific themes activate cognitive schemas characteristic of the disorder (see Wisco 2009; Rottenberg, et al., 2005).

Notably, the use of person-centered laboratory designs yield mixed findings with regard to positive emotional reactivity. For example, consistent with the deficit model, Joormann and colleagues (2007) found that, after eliciting a sad mood, sad mood *increased* following recall of positive autobiographical memories specifically for the depressed group, whereas sad mood remained unchanged for the recovered group and decreased for the control group; however, the authors did not assess changes in positive mood, precluding a full understanding of the impact of positive idiographic stimuli on positive emotions in this context (Joormann, Siemer, & Gotlib, 2007). In contrast, in the seminal work by Rottenberg and colleagues testing the ECI hypothesis (Rottenberg, et al., 2005), ECI was supported for negative stimuli only. Despite main effects for lower mean levels of positive emotions, in response to both the normative and idiographic happy film clips, the depressed group demonstrated increases in self-reported positive emotions similar to the recovered and control groups. Similarly, Ellis, Beever, and Wells (2009) examined self-reported emotion in response to personalized feedback based on task performance and failed to find differences in increases in positive emotions between dysphoric and non-dysphoric groups in response to positive feedback.

As such, experimental findings are somewhat mixed with regard to depression and responses to positive stimuli, particularly when positive stimuli are more personally relevant to the individual. To enhance our understanding of positive emotional reactivity in depression, it is also important to consider responses to positive stimuli in everyday life; that is, responses to

positive life events. Indeed, data from daily life, which are high in external validity, complement the more tightly controlled experimental findings that are high in internal validity. Importantly, data examining responses to daily life events suggest that depressed subjects demonstrate particular benefit from positive events. For example, referred to as *mood brightening effects*, depressed subjects respond to daily positive events with either equal or larger increases in positive emotions, greater reductions in negative emotions (Bylsma, Taylor-Clift, & Rottenberg, 2011; Peeters, Nicolson, Berkhof, Delespaul, & deVries, 2003), and greater increases in self-esteem (Nezlek & Gable, 2001) compared to control subjects. These benefits are pronounced when events are viewed as important and minimized when positive events are viewed as stressful (Peeters, et al., 2003). This set of findings is inconsistent with the positive attenuation hypothesis of ECI but consistent with some of the laboratory studies that use more individualized experimental manipulations (Rottenberg, et al., 2005; Ellis, et al., 2009).

Importantly, this heightened reactivity to positive life events may help to elucidate a key mechanism involved in behavioral activation, the component demonstrated to account for the beneficial effects of cognitive behavioral treatment for depression in which depressed individuals increase contact with positive and rewarding aspects of their daily environments (Dobson, et al., 2008; Jacobson, et al., 1996); such an intervention is particularly relevant, given that depressed persons demonstrate less daily engagement in behaviors perceived as rewarding (Hopko, Armento, Cantu, Chambers, & Lejuez, 2003). It is thus essential to continue to understand and improve upon interventions directly aimed at increasing approach-related behavior to promote the experience of positive emotions (and reduce vulnerability to negative emotions). To do so, it is important to continue to examine depressed persons' responses to a range of positive stimuli and positive events and, in so doing, work to reconcile differences across types of experimental

paradigms to understand the contexts in which we can maximize depressed persons contact with and benefit from positive emotional experiences.

Overall, the literature on positive emotional reactivity in depression has a number of strengths. A small but growing body of research examines responses to positive stimuli in both experimental and daily contexts, and the experimental data include situations that are pertinent to the individual and thus have the potential to activate relevant cognitive schemas and structures. Despite these advances in the field, there is a dearth in the literature that examines responses to positive idiographic stimuli in an *interpersonal* context. As such, emotional reactivity has been exclusively studied as an intrapersonal phenomenon. This exclusion ignores a significant piece of the literature on cognition (appraisal) and emotion. As reviewed by Joormann and D'Avanzato (2010), evidence suggests that emotional events are interpreted along a number of appraisal dimensions that subsequently determine whether and which emotion(s) will be experienced. People exposed to the same event display a wide variety of emotional responses depending on their appraisals of the event, and voluntary changes of the appraisals of a situation can change the intensity of an emotional reaction. Importantly, interactions with others represent a common source of appraisal that may impact emotional responses to daily life events. Indeed, the purpose of social support is to minimize the importance of negative events and to maximize the significance of positive events (Gable & Reis, 2010). Accordingly, in the laboratory, it is important to extend experimental designs to manipulate responses from others; and in daily life, to include perceived responses from close others, to begin to elucidate the impact of interpersonal interactions on cognitive appraisal of events and on the experience and expression of positive emotions.

One particular type of interpersonal interaction that is theoretically linked to deficits characteristic of depression -- but that, like *mood-brightening effects* and personalized stimuli in the laboratory, might be especially beneficial to depressed persons -- is telling others about a personal, positive event. Conceptualized as seeking support for positive events, the process in which an individual tells someone else about a positive event, and the other person responds in an enthusiastic and supportive manner, has the potential to enhance positive emotions, enhance cognitive appraisals of the significance of the event, and enhance relationship quality (see Gable & Reis, 2010). This process is referred to as *capitalization* because, in essence, individuals capitalize on a positive event by talking about it with someone else at a later point in time, so that they can continue to reap benefits from the event (Langston, 1994).

Therefore, the purpose of the dissertation is to expand these emotional reactivity paradigms to an interpersonal context and examine depression and the social sharing of positive life events, collecting data based on “daily life” as well as a more tightly controlled experiment in the laboratory. I next review the literature on capitalization in non-depressed populations, to demonstrate that engaging in this behavior is associated with beneficial emotional, cognitive, and relational consequences.

Capitalization (in non-depressed populations)

Data from correlational and experimental methods have accumulated from a series of independent samples that support a model of the capitalization process in which sharing positive events with others (including romantic partners, friends, family members, roommates, and even strangers) and the perception that the response is supportive promotes three key outcomes: (1) positive affect (PA) (intrapersonal); (2) life satisfaction (intrapersonal); and (3) relationship well-being (interpersonal), including satisfaction, intimacy, trust, and prosocial orientation and

behavior. Further, Gable and Reis (2010) laid out a theoretical model to elucidate the mechanisms underlying these associations and have begun to empirically demonstrate that a successful capitalization attempt (1) maximizes the personal significance of the event, (2) increases memorability for the event, and (3) builds social resources by fostering perceived partner responsiveness.

Supportive responding to capitalization attempts. Adopting from the accommodation literature, Gable and colleagues (2004) defined four responses to capitalization attempts, that is, how someone responds when you tell him or her about something good that has happened to you. Specifically, among two dimensions, there are four types of responses: *active-constructive* (e.g., enthusiastic support), *passive-constructive* (e.g., quiet, understated support), *active-destructive* (e.g., quashing the event), and *passive-destructive* (e.g., ignoring the event). These four categories of responses are assessed with a reliable and valid 12-item measure (and an abridged 4-item version), the Perceived Responses to Capitalization Attempts scale (PRCA; Gable, et al., 2004); as will be discussed below, only active-constructive responses constitute supportive responses.

Intrapersonal benefits of capitalization. Using a daily diary methodology, on days when college students shared the day's most positive event with someone else, they experienced increases in PA and life satisfaction (Gable, et al., study 1, study 4), a finding that replicates with married and cohabiting couples (Hicks & Diamond, 2008). Including the composite PRCA score of the first person told about the event that day also contributed unique variance to the model, such that the more active-constructive the response, the higher the day's PA and life satisfaction (Gable, et al., 2004, study 4). Consistent with this, greater PRCA scores were associated with greater life satisfaction and PA in college students, across all types of

relationships, as well as more specifically within the parent-child relationship (see Gable & Reis, 2010).

Laboratory paradigms provide further evidence for the intrapersonal benefits of capitalization. For example, Reis and colleagues (2010, study 1) compared a capitalization condition to three different conditions: (1) writing about the event (to control for rehearsal/expressing about the event), (2) a positive mood condition (to control for mood effects), and (3) a word search puzzle (to control for time engaged in the task). Subjects listed “the three best things that happened to them in the past two years,” and were randomly assigned to one of the four experimental conditions. Following, all subjects re-rated their mood (to demonstrate changes in emotion) as well as the personal significance of the events (to demonstrate changes in cognition). Increases in mood and event significance, from before to after the experimental condition, were significantly higher in the capitalization condition compared to the other three conditions, demonstrating the unique effects of a successful capitalization attempt on emotional and cognitive changes. Importantly, this finding with study confederates replicated findings from the daily diaries reporting on capitalization with close others, suggesting that the capitalization process is not limited to close relationships. In the following study (2010, study 2), when Reis and colleagues manipulated partner responses by training and randomly assigning confederates to provide either active-constructive or passive-constructive responses to a capitalization attempt, they demonstrated that the intrapersonal benefits of capitalization were again limited to those who received active-constructive responses. Indeed, post-discussion positive increases in mood and event significance were significantly higher in the active-constructive compared to the passive-constructive condition (Reis, et al., 2010, study 2).

Intrapersonal Mechanisms. Taken together, data from correlational and experimental methods suggest that capitalization attempts, and particularly those accompanied by active constructive responses, are predictive of increases in positive emotions (and of life satisfaction in correlational studies). The theoretical model suggests that one aim of capitalization attempts is to build personal resources by maximizing the event's significance to the self; as such, a "successful" capitalization attempt should increase the personal value or significance of the event. Consistent with this, as discussed above, this hypothesized cognitive mechanism has received support, as capitalization interactions, followed by supportive responses, led to increases in the appraisal of the event's significance (Reis, et al., 2010, studies 1 and 2). A second hypothesized mechanism is that capitalization builds personal resources by increasing the memorability for the event discussed. In contrast to seeking social support for negative events, in which the function of the disclosure is to "let go" of the event (to resolve or minimize the impact of the event), the purpose of sharing a positive event is to remember and maximize the impact of the event (Gable & Reis, 2010). This hypothesized mechanism has also received support, as the greater the number of people told about each positive event during a 14-day diary study, the more likely that event was to be remembered at a surprise recall test in the laboratory on the final day of the study.

Interpersonal Benefits of Capitalization. Capitalization interactions are also associated with positive relational qualities. In the laboratory, couples participating in a positive-event discussion endorsed relatively high post-interaction ratings of love (Gonzaga, Keltner, Londahl, & Smith, 2001). Further, cross-sectional ratings of satisfaction, trust, and intimacy were positively and significantly associated with the perception that one's dating partner typically responds to capitalization attempts in an active-constructive manner (as endorsed on the

PRCA); in contrast, active-destructive, passive-destructive, and passive-constructive responses were negatively correlated with these variables (Gable, et al., 2004, study 2). Further, a composite PRCA score formed by subtracting the three negative scale scores from the active-constructive scale yielded nearly identical findings (Gable, et al., 2004). Similarly, in a daily diary study of married couples, positive and significant associations emerged between composite active-constructive scores and daily satisfaction, intimacy, and positive activities, and a negative association emerged between greater active-constructive scores and daily conflicts (Gable, et al., 2004, study 3). Consistent with this, not only were PRCA scores associated with concurrent and prospective relationship quality two months later, but they were also predictive of relationship dissolution (Bermis, 2008, as cited in Gable & Reis, 2010; Gable, Gonzaga, & Strachman, 2006).

In addition to relationship well-being, capitalization is also associated with a prosocial orientation and behavior. For example, using a daily diary methodology, sharing the day's best thing that happened with a target person selected at the beginning of study (including friends, family members, or romantic partners), and an enthusiastic response, were associated with greater willingness to sacrifice for the target, accommodation, and niceness (Reis et al., 2010, study 5). Using an experimental design in which confederates responded to subjects sharing a positive event with one of four responses (active constructive, disparaging feedback, neutral feedback, and a positive mood control condition i.e., neutral feedback and sharing a piece of candy), subjects were more likely to engage in prosocial behavior (defined as returning an "accidental" overpayment for study completion) if they received the active-constructive feedback (Reis, et al., 2010, study 4).

Interpersonal Mechanisms. Gable and Reis (2010) proposed that capitalization attempts and active-constructive responses are associated with interpersonal benefits because responses to capitalization attempts foster *perceived partner responsiveness*, a process “by which individuals come to believe that relationship partners both attend to and react supportively to central, core defining features of the self” (Reis, Clark, & Holmes, 2004, p. 203). More specifically, following self-disclosure, responses that communicate caring, understanding, and validation are central to promoting responsiveness (Laurenceau, Barrett, & Rovine, 2005; Laurenceau, Feldman-Barrett, & Pietromonaco, 1998). Accordingly, an active-constructive response essentially signals, “This is an important event for you, it makes sense that you’re excited, and I support you.” Consistently, data does suggest that, over and above perceptions of being liked, active constructive responses promote perceptions of *responsiveness*, that is, feeling understood, cared for, and validated. For example, compared to a shared, positive activity condition (participating in a game with a confederate) and a neutral condition (in which the confederate took notes on what the subject said), only the capitalization condition yielded significantly higher ratings of confederate’s responsiveness and trust; participants in the capitalization condition also rated themselves as more likely to self-disclose on high intimacy topics. These differences remained at a one-week follow-up. There were no differences in liking and feelings of closeness to the confederate between the fun and capitalization conditions. Together, these findings suggest that the capitalization process is unique to the promotion of key aspects of intimacy development and adaptive relational functioning, over and above positive, shared activities.

In sum, disclosing a positive event to someone else is an approach-related behavior that reaps emotional, cognitive, and interpersonal benefits. If the goal of behavioral activation is to increase a depressed person’s contact with positive and rewarding aspects of his/her

environment, then (1) the capitalization process may function as a reinforcer for the contact with the appetitive stimulus (i.e., receiving a supportive response for engagement may increase the likelihood of future engagement), and (2) the capitalization process itself may constitute one particular type of behavioral activation (since the interaction itself may be experienced as rewarding). Indeed, if depressed subjects are just as responsive to personalized stimuli in the laboratory as non-depressed subjects (Ellis, et al., 2009; Rottenberg, et al., 2005) and demonstrate increases in positive emotions and decreases in negative emotions in response to daily positive events (Bylsma, et al., 2011; Peeters, et al., 2003), then depressed persons may be particularly responsive to the impact of capitalization attempts, a research question that I explored in this dissertation.

Nevertheless, there are other bodies of literature, other than emotional reactivity in depression, that suggest a more complex pattern of hypotheses in which depression may impair or inhibit the willingness to engage in, or the benefits associated with, this process, particularly since the benefits of capitalization are in part determined by the perception that the response is supportive.

Depression may be associated with deficits in the capitalization process

Depression and attention/memory. Research on attentional biases in depression suggest that depressed individuals are easily distracted by negative aspects of their environment (Siegle, Ingram, & Matt, 2002). Experimental support has been documented with the emotional Stroop task, the dot probe task, dichotic listening task, and related paradigms, demonstrating that depressed participants and participants with a history of depressive episodes exhibited greater interference specifically from negative rather than positive distracters (Gotlib & Cane, 1987; Gotlib & McCann, 1984; Gotlib, Yue, & Joormann, 2005; Ingram, Bernet, & McLaughlin,

1994; Williams & Nulty, 1986), including removing irrelevant negative material from short-term memory (Joormann, Nee, Berman, Jonides, & Gotlib, 2010). Additionally, not only do depressed individuals engage in selective attention to negative information, particularly when in a mood-congruent state, but this effect was pronounced when stimuli were presented for a longer duration (i.e., 500 or 1000ms rather than 14ms; (Bradley, Mogg, & Lee, 1997; Gotlib, Krasnoperova, Neubauer, & Joormann, 2004; Mogg, Bradley, & Williams, 1995), suggesting that once attention is allocated, it is particularly difficult to disengage from that stimuli. Further, researchers have documented a specific attentional bias toward negative interpersonal stimuli (sad faces) among clinically and formerly depressed participants, compared to never-disordered controls who exhibit a bias toward happy faces and a bias away from sad faces (Gotlib, et al., 2004; Joormann & Gotlib, 2007). This set of findings suggests that those vulnerable to depression may have difficulty disengaging from negative aspects of their environment, which could potentially interfere with their tendency to notice and then capitalize on the positive events.

Consistent with this attentional bias, as reviewed by Wisco (2009), depressed individuals also demonstrate greater memory for negative self-referential words than positive self-referential words, compared to non-depressed individuals who demonstrate the opposite pattern; notably this bias for negative words was specific to self-referential stimuli, and there were no differences between groups regarding memory for “other referential” words (see Wisco, 2009). Further, depressed individuals consistently recall more negative autobiographical memories than nondepressed individuals (see Wisco 2009). As such, these memory biases similarly suggest that when given an opportunity to discuss personally relevant information, depressed individuals may be more likely to remember, and therefore discuss, negative self-relevant information.

Depression and cognitions. In addition to attentional and memory biases, the negative cognitive biases and attributional style associated with risk for and recurrence of depression (see Alloy, et al., 1999; Mezulis, Abramson, Hyde, & Hankin, 2004) may impair the willingness to engage in capitalization attempts as well as the perception of partner responsiveness. For example, depressed subjects report significantly more negative social interactions, view ambiguous social interactions as negative, tend to make negative self-relevant attributions about interactions, and to behave consistent with these interpretations (Beck, Rush, Shaw, & Emery, 1979; Joiner & Coyne, 1999). Indeed, the negative cognitive bias characteristic of cognitive distortions in depression (e.g., mental filter, Beck, 1987) may interfere with expectations regarding the capitalization attempt (thereby predicting fewer attempts) and may interfere with a more benevolent interpretation of the response (thereby predicting less supportive perceived responses). Consistent with this, as hypothesized in Gable, et al., (2004), "...people are unlikely to share their good news if they anticipate rejection, defensiveness, or an otherwise unappreciative response" (p. 229), and so capitalization studies have focused predominantly on the perception of partner responsiveness, rather than on objectively coded behavior, largely because "an enthusiastic response is likely to benefit the recipient only if it is perceived as such" (p. 232). Thus, biases in cognition may lead to fewer attempts, as well as more negative perceptions of the response to the attempts they do make.

Consistent with findings that depression is associated with greater endorsement of, and greater memory for, more negative self-referential material, depressed persons tend to endorse more negative views of themselves, more pessimistic predictions for themselves than for others, and to choose more negative words as self-descriptive than non-depressed individuals (see Wisco, 2009). Self-verification theory elucidates that people in general seek to receive feedback

that is consistent with their self-view (i.e., schema consistent). Importantly, Swann, colleagues, and others have found that dysphoric subjects preferred unfavorable to favorable feedback, agreed more with negative feedback about their performance in social situations than nondysphorics, preferred to continue interacting with an evaluator who had praised them unfavorably (based on bogus personality ratings) and sought to receive unfavorable (self-descriptive) feedback after receiving favorable (self-discrepant) feedback (Cane & Gotlib, 1985; Giesler, Josephs, & Swann, 1996; Swann, 1992; Swann, Wenzlaff, Krull, & Pelham, 1992). As such, in depression the receipt of supportive responses to capitalization attempts may be inconsistent with the individual's self-view, viewed as inaccurate, and subsequently rejected. Moreover, cognitive appraisals of the importance of the discussed positive event may not actually increase, and may potentially decrease as a way to preserve the self-view.

Additional self-verification data also suggest that, when subjects received self-discrepant feedback that could not be dismissed, they experienced anxiety (Pinel & Swann, 1996, as cited in Swann, 1997) and showed cardiovascular responses consistent with feeling threatened (Ayduk, Gyurak, Akinola, & Mendes, 2011, as cited in Swann, 2012). This finding contrasts with the study previously discussed, in which positive emotions increased in response to positive feedback for both depressed and non-depressed subjects (Ellis, et al., 2009); at the same time, Ellis and colleagues (2009) also found a trend-level increase in positive emotion following the negative feedback condition, which is somewhat consistent with this data from Swann and colleagues. Further, also as previously discussed, Joormann, et al., (2007) found that sad mood increased after recall of positive autobiographical memories, again suggesting that data are mixed and more work is needed. Overall, the work on self-verification theory suggests an alternative to theory supporting the emotional and cognitive benefits of capitalization in

depression. Self-verification theory would suggest that receiving discrepant information may increase negative mood, result in either decreases in, or smaller increases in, positive mood, and may potentially lead to no change in, or decreases in, the importance of the event.

Depression and characteristic emotion regulation strategies. Depression is robustly associated with rumination, an emotion-regulation strategy in which individuals respond to negative emotions with repetitive and passive focusing on the symptoms of the distress and its causes and consequences, which in turn maintains dysphoric mood and cognitions (Nolen-Hoeksema, Wisco, & Lyubomirsky, 2008). For example, dysphoric participants induced to ruminate experienced sad mood (Nolen-Hoeksema & Morrow, 1993), retrieved more negative memories and recalled negative events as having occurred more frequently (Lyubomirsky, Caldwell, & Nolen-Hoeksema, 1998), spontaneously talked about troubling problems (Lyubomirsky, Tucker, Caldwell, & Berg, 1999), had lower expectations for positive events (Lyubomirsky & Nolen-Hoeksema, 1995), and were less willing to engage in pleasant activities to lift their moods when given the chance (Lyubomirsky & Nolen-Hoeksema, 1993). This ruminative style may thus reduce motivation as well as opportunities to engage in capitalization.

Not only is depression associated with ruminative responses to negative emotions, but it is also associated with deficits in positive emotion regulation strategies. For example, depression was positively associated with strategies used to decrease positive mood states (dampening; Feldman, Joormann, & Johnson, 2008). Depression was also negatively associated with positive beliefs about savoring (i.e., generating, intensifying, and sustaining positive mood states; Bryant, 2003) as well as with dispositional gratitude (i.e., individual differences in the frequency and intensity of the emotional experience of gratitude or “counting blessings”; Wood,

Maltby, Gillett, Linley, & Joseph, 2008). Notably, greater levels of trait gratitude predicted lower levels of depression over the course of a semester (Wood, et al., 2008), suggesting that positive emotion regulation strategies are protective and may reduce vulnerability to depression. This burgeoning literature on positive emotion regulation suggests the depressive symptoms and the tendency to capitalize will be inversely associated with one another.

Depression and social interactions. Finally, the emotional content of interpersonal discussion tends to be significantly more negative and less positive among depressed subjects. For example, depression is associated with co-rumination, an interpersonal variant of rumination that involves excessively discussing personal problems and focusing on negative feelings (Rose, 2002). Consistent with this, depressed people were more likely to self-disclose more negative (Jacobson & Anderson, 1982; Segrin & Flora, 1998) and less positive (Burchill & Stiles, 1988) self-relevant information and rate negative topics (i.e., topics that independent judges think would lead to feeling unhappy and uncomfortable and lead to negative social interaction) as more appropriate for discussion than non-depressed subjects (Kuiper & McCabe, 1985).

Not only is the content of depressed individuals' discussion more negative and less positive, but depression is also associated with expressing less positivity and more negativity nonverbally. As reviewed by Segrin (2000), when speaking about a range of emotional topics or being captured speaking spontaneously, depressed subjects speak in a more monotonous tone, speak less, speak more slowly, and have greater pause duration and more silences. As well, their voice quality tends to be perceived by others as sad and tense, and when sharing sad, happy, and angry experiences, their voices differentiate only the sad but not between happy and angry experiences. Consistent with this, compared to non-depressed subjects, depressed subjects are

less facially animated (except when conveying sadness), make less eye contact, and engage in significantly less gesturing, head-nodding, and smiling (see Segrin, 2000).

Together, this data suggests that depressed persons are more likely to share negative personal information (e.g., co-ruminate); consistent with this, they rate negative topics as more appropriate, and they are most adept at communicating sadness but tend to have deficits communicating positivity. As such, depression may again impair the tendency to engage in capitalization attempts, as well as impair the quality of the capitalization attempts themselves. For example, less positivity conveyed during the interaction could make it harder for the interaction partner to respond in an enthusiastic and supportive manner.

The present study

The purpose of the dissertation was to examine capitalization -- the social sharing of positive life events -- among a sample of individuals with a range of current depressive symptomatology. Capitalization has the potential to enhance positive emotions, build cognitive resources, and strengthen relationships, and depressed persons may be particularly responsive to these benefits. At the same time, certain deficits characteristic of the disorder may interfere with the willingness to engage in, or the benefits derived from, this behavior. This dissertation used questionnaire data based on recent experiences to understand, in an ecologically valid manner, the rate and interpersonal benefits of capitalization in daily life within existing relationships. I also assessed pre- and post-ratings of a capitalization interaction that took place in the laboratory, in which I examined changes in emotion and cognition as well as post-interaction feelings toward the person with whom the event was shared. Measuring these variables following an interaction in the laboratory, in which the response of the partner was held constant (and

maximized in level of supportiveness), allowed a more tightly controlled examination of the potential for positive consequences.

Hypotheses: Questionnaire Data. Assessing capitalization in existing relationships over the past two weeks.

1. *Are depressive symptoms associated with the proportion of capitalization attempts?* I

predicted that the greater the depressive symptoms, the lower the number of capitalization attempts (relative to the total number of positive events experienced) over the past two weeks.

2. *Are depressive symptoms associated with less interpersonal benefit from capitalization*

attempts? Based on the literature on attention, memory, and cognition, I hypothesized that greater depressive symptoms would be associated with more negative perceptions of responses to capitalization attempts that have taken place over the past two weeks.

Specifically, greater depressive symptoms would be negatively associated with composite active-constructive scores. Further, I also hypothesized that depressive symptoms would be associated with feeling less support, closeness, perceived partner responsiveness (feeling validated, cared for, and understood) and prosocial orientation toward the interaction partner

Tests of specificity. Comparing the social sharing of positive events (*capitalization*) to the social sharing of negative events (*traditional social support*).

3. *Are depressive symptoms associated with the proportion of support attempts?* I expected

that depressive symptoms would be specifically associated with a lesser tendency to share *positive* information. As such, it was important to rule out the alternative explanation that depressive symptoms were merely associated with a tendency to self-disclose less

information overall, including both negative and positive self-relevant information. Accordingly, I simultaneously assessed the frequency and tendency to disclose negative events over the same two-week period. I hypothesized that greater depressive symptoms would be positively associated with a *greater* proportion of support attempts (relative to the total number of negative events experienced).

Hypotheses: Experimental (Interaction) Data

4. *Are depressive symptoms associated with less willingness to share a positive event?* I hypothesized that, when given the opportunity to discuss either a positive or negative event fresh in their memory, depressive symptoms would be associated with a greater willingness to rate a negative event as the preference for discussion.
5. *Are depressive symptoms associated with changes in positive and negative mood before and after the interaction?* Based on the literature on emotional reactivity in depression, it was possible that the emotional benefits would be enhanced among those with elevated depressive symptoms, particularly since mood-brightening effects are pronounced when events are viewed as important (which the highly supportive confederate communicated). Thus, I hypothesized that depressive symptoms would be associated with greater increases in positive mood and larger decreases in negative mood. At the same time, sad mood increases following recall of positive autobiographical memories, and highly supportive responses may be somewhat self-discrepant and therefore uncomfortable; as such, I examined the alternative hypothesis that the opposite pattern of associations would emerge, in which depressive symptoms would be associated with larger increases in negative mood and larger decreases in positive mood.

6. *Are depressive symptoms associated with changes in event significance before and after the interaction?* Similar to the hypotheses for changes in self-reported emotions, I hypothesized that depressive symptoms might be significantly associated with cognitive benefits, defined as increases in event significance following the interaction; alternatively, in light of the self-verification literature, it was also possible that depressive symptoms would be associated either with no changes in, or even *decreases* in, the importance of the event. Competing hypotheses were examined.
7. *Are depressive symptoms associated with perceived accuracy of the interviewer's response?* Following self-verification theory, I hypothesized that the greater the depressive symptoms, the lower the perceived level of accuracy of the interviewer's response. Alternatively, because self-esteem is variable in depression and increases following positive events, I also examined the alternative hypothesis that, because supportive responses may actually be viewed as accurate, there would not be a significant association between depressive symptoms and perceived accuracy.
8. *Are depressive symptoms associated with less interpersonal benefit from the capitalization interaction?* Like the hypotheses for the questionnaire data based on existing relationships, I hypothesized that the greater the depressive symptoms, the lower the perception of interpersonal benefits, including less active-constructive composite scores, less feelings of support, liking, perceived partner responsiveness, prosocial orientation, and willingness to disclose future events to the confederate. Alternatively, because I maximized the level of supportiveness of the confederates, I also examined the competing hypothesis that there would not be a significant association between depressive symptoms and the interpersonal variables.

9. *Are depressive symptoms associated with less expressions of positivity during the capitalization interaction?* Because depression is associated with expressing less positivity and more negativity nonverbally, I hypothesized that there would be an inverse association between depressive symptoms and expressed positivity conveyed by the participant during the interaction.
10. *Are depressive symptoms associated with a negative impact on the confederate?* Despite training all confederates to respond in an enthusiastic and supportive manner, I expected that variability from subjects might lead to subjective (non-expressed) differences on behalf of the confederates. As such, I hypothesized that subjects' greater depressive symptoms would be positively associated with the extent to which the confederate felt that they were "pulling teeth" to "pull for the positive" from the subject.

Tests of specificity. If capitalization interactions were viewed positively by all subjects (and not less so as depressive symptoms increased), it would be important to assess if this effect was reflecting positive ratings due to a mood boost, rather than reflecting benefits specifically from the capitalization process. As such, following the interaction, I included questions regarding a different type of positive interaction with another person: participating in a positive, shared activity with one other person. If greater depressive symptoms were negatively and significantly associated with interpersonal benefits from participating in positive, shared activities, but not associated with fewer benefits from the capitalization interaction, then this would suggest that those with greater depressive symptoms specifically benefitted from the capitalization interaction.

11. *Are greater depressive symptoms associated with feeling less support, less perceived partner responsiveness, and less willingness to engage in prosocial behavior in response to*

participating in fun, positive activities with others? Similar to the deficit model of the self-report data, I hypothesized that depressive symptoms would be inversely associated with these interpersonal benefits when thinking about participating in fun, positive activities with others over the past two weeks.

II. Method

Participants

Recruitment. Seventy-three female Stony Brook University students were recruited from the psychology department research participant pool and another Stony Brook University Department of Psychology IRB approved study. Potential participants first completed The Quick Inventory of Depressive Symptomatology (QIDS-SR16; Rush, et al., 2003) online, which allowed me to screen individuals based on level of current symptomatology. To maximize the rate of subject recruitment, all individuals who completed the QIDS were invited to participate. Specifically, participants who completed the QIDS were contacted by a member of the study team, and interested participants signed up for a two-hour lab session at Stony Brook University, for which they received 2 course credits or \$20. Participants were excluded from the study if they were less than 18 years of age or if they had reading, vision, or motor problems that would preclude completion of study tasks. All subjects were females; the mean age of the sample was 19.61 (SD = 1.92; range = 18-27). Forty-seven percent of participants reported their ethnicity as Caucasian, 39% as Asian, 5% as Latina, 3% as African American, 2% as Middle Eastern, and 4% as other. This research was approved by the Stony Brook University Committee on Research Involving Human Subjects.

Procedures

Overview. At the beginning of the two-hour lab visit, written consent was obtained. Following, participants listed the three best and worst events that occurred to them over the past two years and then completed a measure assessing depressive symptomatology. Depressive symptoms collected the day of the lab visit were used in all analyses. Following, subjects completed online questionnaires using the program PsychData assessing demographic information, positive and negative events experienced over the past two weeks, rates of disclosure of positive events (capitalization attempts), rates of disclosure of negative events (traditional social support attempts), and feelings toward interaction partners (interpersonal benefits). Following questionnaire completion, all participants participated in the quasi-experimental component of the study that involved (1) mood rating, (2) ranking of preference for topic discussion, (3) topic selection, (4) mood rating, and (5) an 8-minute video-taped capitalization interaction with a study confederate. Then, (6) all participants completed a brief set of measures after the interaction, assessing mood, event significance, feelings toward the confederate, as well as feelings toward people with whom they have participated in positive activities over the past two weeks. Finally, all participants were debriefed, provided with a list of counseling referrals, and received either 2 course credits or \$20. Maximum time to complete the study was 2 hours.

Initial Questionnaires.

Positive events. Following the procedures of Reis, et al., (2010, study 1), participants were asked to write down the best things that happened to them in the past two years. They read the following instructions: “Please take a moment to think about the things that have made you happiest within approximately the last two years. These can include concrete events such as going on vacation, getting a date with someone you like, and so on. They can also include states

of mind such as connecting with God or some higher power, and so on. Please list below three of these positive events or states of mind that stand out to you.” See appendix A. Participants were then asked to rate the significance of each event (see below).

Positive events significance ratings. Participants rated their current feelings about each event by placing an X along a horizontal 6.75 inch (17.10 cm) line with anchors at the beginning (*pretty good*), middle (*great*), and end (*the best thing that ever happened to me*). This method was used to prevent participants from remembering their initial responses when rerating their events after the experiment. See appendix A.

Negative events. Next, participants were asked to name the three worst things that have happened to them in the past two years. They read the following instructions: “Please take a moment to think about the things that have made you most upset or stressed out within approximately the last two years. These can include concrete events such as losing a relationship, getting rejected from something you applied for, getting physically injured or sick, and so on. They can also include states of mind such as a loss of spirituality, feeling confused about your future, and so on. Please list below three of these negative events or states of mind that stand out to you.” Participants were asked to rate the significance of each event. See appendix A. For all participants, the most positive events were asked before the negative events, and both of these events were queried before the depression questionnaire. This was done so that the conjuring of negative events did not impair the ability to conjure positive events among the dysphoric group (i.e., mood-congruent recall).

Negative events significance ratings. Participants rated their current feelings about each event by placing an X along a horizontal 6.75 inch (17.10 cm) line with anchors at the beginning

(*sort of bad*), middle (*very bad*), and end (*the worst thing that ever happened to me.*) See appendix A.

Demographics. Basic demographic information to assess age and ethnicity were collected.

Depressive symptoms. Current depressive symptoms in the laboratory were assessed with the Inventory of Depressive Symptomatology, 30-item, Self-Report (IDS-SR30; Rush, Gullion, Basco, Jarrett, & Trivedi, 1996). Items were designed to assess the severity of depressive symptoms and assess the nine criterion symptom domains to diagnose a major depressive episode according to the Diagnostic and Statistical Manual of Mental Disorders - 4th edition (DSM-IV; American Psychiatric Association, 1994), including 1) sad mood; 2) concentration; 3) self-criticism; 4) suicidal ideation; 5) interest; 6) energy/fatigue; 7) sleep disturbance 8) decrease or increase in appetite or weight; and 9) psychomotor agitation or retardation. The total IDS score typically ranges from 0 to 84; however, in this study, the item pertaining to suicidality was eliminated, and so the maximum score was an 81. Symptoms were rated over the prior 7 days with a scale ranging from 0 to 3. Psychometric properties have been well-established (Rush, et al., 1996; Rush, et al., 2003) and compared to scores on the Hamilton Rating Score for Depression (HAM-D; Hamilton, 1960; Hamilton, 1967). In the present study, cronbach alpha for the IDS-SR30 was .90. The mean level of depressive symptoms was 20.3 (SD=12.25, range 0 to 51); notably, the sample comprised a range of severity. Specifically, the sample included subjects with 0/*no depressive symptoms* (n=28), 1/*mild* (n=23), 2/*moderate* (n=16), 3/*severe* (n=6), and 4/*very severe* (n=1). As a further validity check that my sample represented subjects ranging in level of current depressive symptomatology, a one-way ANOVA was used to compare current mood state collected after questionnaire completion and

before the quasi-experimental portion of the study. As would be expected, there was a main effect for group with regard to negative mood ($F(4, 68) = 10.45, p < .001$) and positive mood ($F(4, 68) = 2.64, p = .04$), such that the moderate ($M = 2.35$), severe ($M = 2.33$), and very severe groups ($M = 2.33$) had higher levels of negative mood than the none ($M = 1.25$) and mild ($M = 1.67$) groups ($t = -3.64, p = .001$); similarly, the moderate ($M = 2.00$), severe ($M = 1.83$), and very severe ($M = 1.33$) groups had lower levels of positive mood than the none ($M = 2.44$) and mild ($M = 2.32$) groups ($t = 2.79, p = .007$).

Recent events and feelings toward interaction partners (See appendix B). Participants reported on up to ten positive and ten negative events they recently experienced using a questionnaire designed for this study. To ensure a range of both major and minor daily events with ecological validity for this sample, major domains were based on the daily events that college students reported in Reis, et al., (2010). Specifically, the questionnaire assessed the frequency of positive and negative events over the past two weeks that occurred in social relationships, schoolwork, job, health and body, and other activities; a two-week window was chosen to maximize recall. For primary analyses, variables were averaged across event domains to yield overall responses to positive events and overall responses to negative events. Means, standard deviations, and ranges for the number of positive and negative endorsed events are included in Tables 1 and 2, respectively.

Participants were queried if a positive or negative event occurred in a domain. If a positive or negative event was selected as having occurred, participants were prompted to rate the significance and level of positivity or negativity of each event, using a 1 (*not at all*) to 4 (*incredibly*) scale. In addition, for both positive and negative events, participants were then asked if they told anyone about this event.

If they indicated that they told someone about the event, they were asked a series of follow-up questions including who they told about the event (friend/roommate/sibling/parent/romantic interest or partner/other), and a series of items pertaining to their feelings toward the first person they told about the event. As shown in appendix B, for both capitalization and support attempts, using a 0 (*not at all*) to 5 (*a great deal*) scale, participants indicated their level of perceived partner responsiveness (extent to which they felt understood, validated, accepted, and cared for; Laurenceau 2005; $\alpha_{\text{capitalization}} = .93$, $\alpha_{\text{support}} = .94$), feelings of closeness ($\alpha_{\text{capitalization}} = .85$, $\alpha_{\text{support}} = .82$), support ($\alpha_{\text{capitalization}} = .75$, $\alpha_{\text{support}} = .42$), and the extent to which they experienced a prosocial orientation toward that person ($\alpha_{\text{capitalization}} = .92$, $\alpha_{\text{support}} = .97$), comprised of three items assessing willingness to sacrifice, going out of the way to do something nice, and willingness to put aside hurt feelings (Reis et al., 2010 study 5). Because all positive and negative ratings were averaged across (an unequal number of) events per subject, it is not surprising that some alphas were poor, given that each event could theoretically be rated differently by participants.

Specifically for positive events, subjects also completed the four-item version of the PRCA (Gable, et al., 2004, studies 2 and 3), which includes one item from each of the four scales. As shown in appendix B, participants indicated, using five-point scales, whether the other person “reacted enthusiastically to my good event” (active–constructive (AC); $\alpha = .75$), “pointed out the potential problems or down sides of the good event” (active–destructive (AD); $\alpha = .61$), “said little, but I knew he/she was happy for me” (passive–constructive (PC); $\alpha = .76$), or “seemed disinterested” (passive–destructive (PD); $\alpha = .57$). Composite active-constructive scores were also formed by subtracting the PC, PD, and AD scores from the AC scores, such that greater scores represented more AC and less PC, PD, and AD responses ($\alpha = .75$). Again,

because ratings were averaged across (an unequal number of) events per subject, it is not surprising that some alphas were poor, given that each event could theoretically be rated differently by participants.

Experimental Procedure

Mood. Six theoretically relevant, face valid items from the Brief Mood Introspection Scale (BMI; Mayer & Gaschke, 1988) and the Positive and Negative Affect Scale (PANAS; Watson, Clark, & Tellegen, 1988) were chosen to measure current ratings of positive and negative mood. Both the PANAS and the BMI have been used in the experimental and correlational studies described above (Gable, et al., 2004; Reis, et al., 2010). Six items were chosen to limit participant burden, since current mood was measured three times throughout the study. Specifically, the items included three positive mood adjectives (happy [BMI], enthusiastic [PANAS], proud [PANAS]) and three negative mood adjectives (sad [BMI], upset [PANAS], distressed [PANAS]). Consistent with Reis, et al., (2010, study 1), items were scored from 1 (*definitely do not feel*) to 4 (*definitely feel*). The three positive and three negative items were averaged separately to form composite positive and negative mood ratings at each of the three mood assessments ($\alpha_{\text{time 1 positive}} = .70$; $\alpha_{\text{time 2 positive}} = .81$; $\alpha_{\text{time 3 positive}} = .80$; $\alpha_{\text{time 1 negative}} = .81$; $\alpha_{\text{time 2 negative}} = .86$; $\alpha_{\text{time 3 negative}} = .77$).

Interaction preference. Participants rated their current mood (time 1 mood). Then, participants were told by the research assistant that they would be getting ready to have a videotaped interaction with an interviewer in training that would take approximately five minutes. Following the procedure of Reis, et al., (2010, study 1), they were told that they were doing so because the member of the team was undergoing training for a future project in which they would conduct interviews about positive (and negative) events. As shown in appendix C,

participants were provided with their list of six major positive and negative events (without significance ratings) and asked to rank order the events based on their preference for which they would most like to discuss them. Event preference was defined as the event they listed as their number one choice, and the first event was coded as either a positive or negative event.

Interaction selection. Participants were then told the following: “All subjects participating in this experiment have been asked to list their discussion preference because we want to learn what you would be most interested in sharing with an interviewer in training. To test our hypothesis, which we can tell you more about when the experiment ends, we actually need to randomly assign our participants to one of two conditions – half of our subjects actually get to discuss their top choice, and half of our subjects will have their event topic randomly selected. Let me check my list and see which condition you’ve been assigned to.” The research assistant then “checked their list” of the “counterbalanced order,” and they informed the subject that they had been assigned to the random event condition.

To pick their event “at random,” subjects were asked to randomly pull one of their six events from a fishbowl. In reality, only certain events were included on the six slips of folded paper: only positive events were included, and all three negative events were excluded. Further, following Reis, et al., (2010), study 1, the positive event that received the highest significance rating was excluded to prevent ceiling effects. Each of the remaining two positive events was written on three slips of paper (so that there were a total of six pieces of paper in the fishbowl). After the selection was made, participants rated their current mood (see above), which served as the mood rating immediately prior to the capitalization interaction (time 2 mood).

Capitalization interaction. The research assistant told the participant that next they would be introduced to the interviewer in training. Their instructions were (1) to tell the interviewer about the selected event, (2) the interview would take about five minutes, and (3) the interviewer would let them know when the time was up. Participants remained in the room, and the experimenter instructed the confederate to enter the room. Following the procedure of Reis, et al., (2010, studies 1 and 2), all confederates were trained to “respond with enthusiastically positive verbal and nonverbal feedback, including making statements such as ‘I’m really happy for you’ or ‘that’s great,’ while smiling, nodding, making eye contact with the participant and keeping an open posture.” Confederates probed about the positive event by asking descriptive questions, as well as questions about the meaning and implications of the event. I trained all confederates to provide active-constructive feedback by observing and listening to recordings of them practice with other members of their peer group. Interviewers were trained to ask enough questions to keep the interaction going for the full amount of time, as it was expected that there would be variability in the spontaneity of the subjects. Confederates were blind to the purpose of the study and specific study hypotheses. Because all subjects were female, all confederates were matched to participant gender and were female.

Post-interaction measures

Mood. Following the interaction, mood (time 3) was assessed as described earlier. Consistent with Reis, et al., (2010), I computed change scores for positive and negative mood by subtracting positive and negative mood prior to the interaction (time 2 mood) from positive and negative mood following the interaction (time 3 mood), respectively.

Event significance. Participants re-rated the significance of all six events using the two scales listed above. Like the mood variables, I computed a change score for the significance of

the discussed event by subtracting event significance prior to the interaction from event significance following the interaction.

Perceived response to the capitalization attempt. Following the interaction, all participants rated the interviewer with the 12-item PRCA (Gable, et al., 2004). Each response type was rated from 1 (*not at all true of our interaction*) to 7 (*very true of our interaction*). Scores were computed for active-constructive responses ($\alpha = .54$), passive-constructive ($\alpha = .76$), active-destructive ($\alpha = .43$), and passive-destructive ($\alpha = .73$). A composite AC score was also formed by subtracting each person's PC, AD, and PD scores from the AC total score. It is important to note that the cronbach alpha values for the AC and AD scores are in the unacceptable to poor range. Interestingly, Reis, et al., (2010) did not report alphas for the PRCA, and it is possible that they may have run into the same methodological issue. When I ran the reliability and examined the alpha if each item was deleted from the AD scale, alpha did not exceed .43 for the total scale. For the AC scale, the scale would improve to alpha of .71 if the item "I sometimes got the sense that the interviewer was even more happy and excited than I am" was deleted. The analysis with the AC score analyzed below (see Table 9) was re-conducted using only the two items, and null results remained unchanged.

Perceived accuracy of the response. To assess how self-confirming (i.e., subjectively accurate) the interviewer's response was perceived to be, participants rated the accuracy of the interviewer's response: "How accurate was the interviewer's response?" The item was rated from 1 (*not at all*) to 9 (*very much*) (Giesler, et al., 1996).

Support. A face valid item was used to assess how supported the subject felt by the confederate: "How supported did you feel by the interviewer?" The item was rated from 1 (*very little*) to 9 (*a great deal*).

Enjoyment. A face valid item (adapted from Reis et al., 2010, study 3) was used to assess how much the subject enjoyed the interaction with the confederate: “I enjoyed my interaction with the interviewer.” The item was rated from 1 (*strongly disagree*) to 9 (*strongly agree*).

Liking for confederate. Adapting from Reis, et al., (2010, study 3) to measure liking, four items were combined: (“I liked the interviewer”; “I would like to interact with the interviewer again”; “The interviewer is someone I could see having as a friend”; “The interviewer was warm”). These items were rated from 1 (*strongly disagree*) to 9 (*strongly agree*) ($\alpha = .92$).

Closeness. The Inclusion of Other in the Self Scale (Aron, Aron, & Smollan, 1992) was used to measure the subjective experience of closeness with the confederate. Participants chose one of seven increasingly overlapping circle pairs that depict the self and the interaction partner. The least overlapping pair of circles was coded 1; the most overlapping pair was coded 7.

Responsiveness. An 18-item scale (Reis, 2007) was used to measure perceptions of the confederate’s responsiveness. This measure assesses perceived validation (e.g., “This person values and respects the whole package that is the ‘real’ me”) and understanding (e.g., “This person is aware of what I am thinking and feeling”), and was scored from 1 (*not at all true*) to 9 (*completely true*) ($\alpha = .94$).

Self-disclosure. To measure participants’ willingness to continue to share personal details with the confederate, participants were asked, “How willing would you be to discuss another topic with this interviewer that is positive?” and “How willing would you be to discuss another topic with this interviewer that is negative?” These items were rated from 1 (*not at all willing*) to 9 (*incredibly willing*). A mean rating of disclosure was computed ($\alpha = .77$).

Prosocial orientation. Adapting from Reis et al., (2010, study 5), and mirroring the questionnaire portion of the study, participants were asked, “To what extent would you consider giving up something important to yourself to help the interviewer do something important for him/her?”, “If the interviewer had done something rude or unpleasant (intentionally or unintentionally), to what extent would you have been willing to put aside your hurt feelings and respond nicely?”, and “To what extent would you go out of your way to do something nice for him/her?” Items were rated on a 1 (*very little*) to 9 (*a great deal*) scale, and a mean rating was used to form a single index of prosocial orientation ($\alpha = .73$).

Recent events and feelings toward activity partners. Finally, as a test of specificity, participants were asked to list up to three positive events they participated in over the past two weeks with one other person (see appendix D). Feelings toward activity partners were averaged across activities. After specifying what type of relationship they had with the activity partner (friend/roommate/sibling/parent/romantic interest or partner/other), a parallel series of questions as in the first part of the study was asked regarding the significance and level of positivity of the event and feelings toward the activity partner, including perceived partner responsiveness ($\alpha = .91$), support ($\alpha = .62$), closeness ($\alpha = .49$), and a prosocial orientation ($\alpha = .84$). As before, it is not surprising that alphas were so low, given that items were averaged across multiple events.

Post Study Discussion Coding.

Expressed positivity. Adapting from the procedure of Reis, et al., (2010, study 1), the interviewer (study confederate) and two independent coders rated participants’ expressions of happiness and liveliness from 0 (*absent*) to 4 (*extreme*). All coders were blind to participant depressive symptomatology. I computed two composite variables: the first was an average score derived from the two objective raters, and the second was an average score derived from the two

objective raters and the confederate's rating. Because these two ways of computing the expressed positivity were highly correlated ($r = .91, p < .001$), I used the composite derived from the three coders in subsequent analyses.

"Pulling teeth." To assess the potential for the participant to have a negative impact on the confederate, the confederate made a subjective rating of the extent to which she felt that she was "pulling teeth" to "pull for the positive." Ratings ranged from 0 (*no difficulty; eight minutes flew by*) to 4 (*great difficulty; interview was painful/difficult to conduct*).

Manipulation check – confederate responses. Following study completion, two independent coders rated the confederate's level of responsive feedback using the PRCA. Scores were averaged to form active-constructive ($M = 6.79$), passive-constructive ($M = 1.19$), active-destructive ($M = 1.01$), and passive-destructive ($M = 1.00$) scores. Recalling that the scale ranged from 1 (*not at all true of our interaction*) to 7 (*very true of our interaction*), I expected and found that AC scores were significantly greater than 5 ($t(70) = 66.38, p < .001$), and PC ($t(70) = -28.80, p < .001$), AD ($t(70) = -193.90, p < .001$), and PD (t -value cannot be computed because there was no variance) scores were significantly lower than 2. Consistent with objective raters, subjects also viewed the confederates as more active-constructive ($M = 6.02$) and less passive constructive ($M = 3.64$), active-destructive ($M = 1.28$), and passive destructive ($M = 1.09$). Specifically, AC scores were significantly greater than 5 ($t(73) = 10.35, p < .001$), and PC ($t(73) = 8.92, p < .001$), AD ($t(73) = -11.19, p < .001$), and PD ($t(73) = -29.11, p < .001$) scores were significantly lower than 2. Notably, mean ratings from study subjects mirrored those reported by subjects in the Reis, et al., (2010) study from which the present study replicates ($M_{AC} = 6.04, M_{PC} = 2.17, M_{AD} = 1.22, M_{PD} = 1.20$), further lending validity to the key experimental manipulation (i.e., providing highly supportive feedback).

Event coding. Two independent coders rated the objective level of significance of each participant's discussed event by rating how positive the event was on a scale from 0 to 3 (0 = *not at all positive*, 1 = *a little positive*, 2 = *moderately positive*, and 3 = *incredibly positive*). Coders were blind to participant depressive symptomatology, and scores between the two raters were averaged to form a composite score for level of objective positivity of each event ($\alpha = .80$, $M = 2.04$, $SD = .67$, range = .5-3). This significance of the discussed event rating was used as a control variable in regression analyses with the interaction data.

III. Results

To maximize power, primary analyses were conducted dimensionally. After examining zero-order correlations, I reconducted analyses using multiple regression so that, as a more conservative test of associations, I could also control for the total number of negative events (for positive event analyses), the total number of positive events (for negative event analyses), and the level of positivity/negativity of events. Following, secondary group comparisons between levels of depressive symptom status were made by conducting one-way Analysis of Variance (ANOVAs) with planned contrasts. The sample included subjects who could be categorized as (0) *no depressive symptoms*, (1) *mild*, (2) *moderate*, (3) *severe*, and (4) *very severe*; I combined the 3 (*severe*) and 4 (*very severe*) severity groups because there was only one subject in the 4 (*very severe*) cell. For contrasts, the 2 (*moderate*) and 3 (*severe*) groups were hypothesized to be significantly different than the 0 (*no depressive symptoms*) group (-.5, 0, .5, .5).

Questionnaire Data

Descriptive data. Means, standard deviations, ranges, and zero-order correlations for rates of positive and negative events and capitalization and social support attempts are presented in Table 3. Means, standard deviations, ranges, and zero-order correlations for the interpersonal

benefit variables are presented in Table 4. Regarding the interpersonal benefits, consistent with Gable, et al., (2004), perceptions that others responded in a more active-constructive and less passive and destructive manner to capitalization attempts were positively and significantly associated with a host of the interpersonal benefits, including feelings of perceived partner responsiveness, closeness, and support.

Hypothesis 1: Are depressive symptoms associated with the proportion of capitalization attempts? The proportion of capitalization attempts for each individual was computed by dividing the sum total of capitalization attempts across all positive event domain areas by the sum total of positive events. I predicted that the greater the depressive symptoms, the lower the proportion of capitalization attempts over the past two weeks. Contrary to hypotheses, as shown in Table 1, greater depressive symptoms were not significantly associated with the proportion of capitalization attempts made over the past two weeks. This association did not change in regression analyses when controlling for the total number of negative events and the level of positivity of events, nor when examining individual positive event domains separately.

As shown in Table 1, as a post-hoc analysis, I also examined if depressive symptoms were associated with the average total number of positive events endorsed, or with the total number of people told about each event (i.e., on average, how many people does a person capitalize with). Depressive symptoms were not associated when conducting these analyses dimensionally or categorically.

Hypothesis 2: Are depressive symptoms associated with less interpersonal benefit from capitalization attempts? I hypothesized that the greater the depressive symptoms, the lower the perceived level of interpersonal benefits. Consistent with hypotheses, I found that depressive symptoms were significantly inversely associated with active-constructive composite ratings (see

Table 5), suggesting that responses to capitalization attempts are viewed as less supportive overall. Additionally, passive destructive scores were significantly and positively associated with greater depressive symptoms (see Table 5), but this finding should be interpreted with caution given the low alpha for this variable. Contrary to hypotheses, depressive symptoms were not associated with less perceived partner responsiveness, feelings of closeness or support, or a prosocial orientation, though correlations were in the expected direction (see Table 5).

Differences did not emerge when conducting between-group categorical analyses.

Hypothesis 3: Are depressive symptoms associated with the proportion of support attempts? The proportion of support attempts for each individual was computed by dividing the sum total of support attempts across negative event domains by the sum total of negative events endorsed. Contrary to hypotheses, greater depressive symptoms were not significantly associated with a greater proportion of support attempts made over the past two weeks (see Table 2). Interestingly, when analyzing specific domains, a positive and significant association emerged for seeking support for events occurring at one's job (see Table 2). Other than seeking support for events occurring in one's job, null findings remained when controlling for the total number of positive events and the level of negativity of events, and group differences did not emerge when analyzing data categorically.

As shown in Table 2, as a post-hoc analysis, I also examined if depressive symptoms were associated with the total number of negative events reported, as well as the average number of people told about each negative event (i.e., on average, how many people does a person share the event with). Similar to capitalization, depressive symptoms were not associated with the average number of people told about each event. However, as shown in Table 2, depressive symptoms were positively and significantly associated with a greater number of endorsed

negative events across all domains, as well as specifically in the areas of social events, classes, and health. When conducting an ANOVA with planned contrasts, differences remained when comparing the moderate and severe groups with the no depressive symptoms group for all negative events ($F(3,70) = 5.79, p = .001$), social events ($F(3,70) = 6.44, p = .001$), classes ($F(3,70) = 2.68, p = .05$), and health ($F(3,70) = 7.21, p < .001$).

Finally, though not a main research question, I also examined if depressive symptoms were associated with perceiving less interpersonal benefit from support attempts; significant associations did not emerge (see Table 5). Further, paired samples t -tests revealed that interpersonal benefits from capitalization were not significantly different than the interpersonal benefits from traditional social support attempts with regard to feelings of closeness ($t(54) = -.79, p = .43$), support ($t(54) = -.98, p = .33$), perceived partner responsiveness ($t(54) = -.39, p = .70$), and prosocial orientation ($t(54) = -1.90, p = .06$).

Overall, results from the questionnaire data suggested that depressive symptoms were not associated with differences in the total number of positive events endorsed, but they were associated with a greater total number of negative events. Second, depressive symptoms were not associated with the tendency to engage in capitalization or social support attempts. However, when capitalization attempts did take place, the responses were perceived to be, overall, less enthusiastically supportive.

Interaction Data

Means, standard deviations, and zero-order correlations for the emotional (change in mood), cognitive (change in event significance; perceived accuracy), and behavioral (expressed positivity) interaction variables are presented in Table 6. It is notable that the extent to which subjects viewed the interviewer as more accurate was significantly and positively associated with

the subjects' increases in positive mood and decreases in negative mood; more expressed positivity from the participants (as coded by objective raters and the confederate); less of a negative impact on the confederate (the extent to which she felt like she was pulling teeth); and the extent to which independent raters viewed the event as significant. It is similarly notable that the level of behaviorally coded expressed positivity was also inversely associated with the pulling teeth variable. These associations indicate that subjects who conveyed more positivity and believed that the interviewer's response was more accurate were similarly rated by the confederate as fairly easy to interview, suggestive of reciprocity and the potential for reinforcing the other in the interaction (which could potentially also account for the association between perceived accuracy and change in both the mood variables). I also found that as the importance of the discussed event increased (based on objectively coded level of significance), the participants increased in viewing the response as accurate, expressed more positivity, and were also viewed more positively by the confederates. Together, this suggests that not only may perceived accuracy be an important mechanism of the capitalization process, but the more positive the event, the easier it may be to accept the responsive feedback. Finally, not surprisingly, the extent to which positive mood increased was significantly associated with the extent to which negative mood decreased.

Means, standard deviations, and zero-order correlations for the interpersonal benefits from the capitalization interaction are presented in Table 7. Consistent with the questionnaire data, the more active-constructive the participants viewed the response, the more they endorsed greater support, liking, responsiveness, and willingness to engage in prosocial behavior toward the confederate.

The zero-order correlations between depressive symptoms and the capitalization interaction data are presented in Tables 8 and 9. Note that the objectively rated significance of the discussed event was not associated with depressive symptoms (see Table 9), suggesting that there were not significant differences in the level of positivity of the discussed event driven by depressive status.

Hypothesis 4: Are depressive symptoms associated with less willingness to share a positive event? I hypothesized that, when given the opportunity to discuss either a positive or negative event fresh in memory, depressive symptoms would be associated with a greater willingness to rate a negative event as the preference for discussion. Accordingly, I first used a logistic regression to examine the hypothesis that greater depressive symptoms would be associated with a greater likelihood of selecting a negative event as the first choice to discuss during interaction. Consistent with this, the greater the depressive symptoms, the greater the likelihood of endorsing a negative event as the preference ($X^2 = 5.50, p = .02, B = .05, \text{Exp}(B) = 1.06, p = .02$). Next, I examined event preference (positive or negative) as the grouping variable and conducted an independent-samples *t*-test with depressive symptoms as the outcome. Consistent with the logistic regression, those who chose a negative ($M = 26.69, SD = 13.43$) event had significantly greater depressive symptoms than those who chose a positive ($M = 18.53, SD = 11.40$) event, $t(72) = -2.43, p = 0.02$. Thus, findings suggest that greater depressive symptoms were associated with greater willingness to share a negative event; or, put differently, less willingness to share a positive event, when both positive and negative events were equally fresh in memory.

Hypothesis 5: Are depressive symptoms associated with changes in positive and negative mood before and after the interaction? I had hypothesized that, on the one hand, the highly

supportive response may be somewhat “aversive” and therefore greater depressive symptoms would be positively associated with increases in negative mood and decreases in positive mood; at the same time, in line with the emotional reactivity literature, particularly mood-brightening effects, I alternatively hypothesized that greater depressive symptoms would be positively associated with increases in positive mood and decreases in negative mood. Consistent with the mood-brightening hypothesis (see Table 9), greater depressive symptoms were positively and significantly associated with change in positive mood, indicative of increases from before to after the interaction. Depressive symptoms were also significantly and negatively associated with change in negative mood (see Table 9), indicative of decreases in negative mood from before to after the interaction. As shown in Table 10, these associations held when the significance of the discussed event was controlled. These differences in change in mood also emerged when examining the data categorically. Specifically, as predicted with regard to positive mood ($F(3,69) = 6.06, p = .001$), the moderate ($M = .54$) and severe ($M = .86$) groups demonstrated significantly greater increases in positive mood than the no depressive symptom group ($M = .21$), $t(69) = -3.31, p = .001$. Additionally, as predicted with regard to negative mood ($F(3,69) = 6.18, p = .001$), the moderate ($M = -.33$) and severe ($M = -.81$) groups demonstrated significantly greater decreases in negative mood than the no depressive symptom group ($M = -.06$), $t(42.02) = 4.59, p < .001$, (note the lower degrees of freedom because Levene’s test was significant and equal variances were not assumed).

One additional way to consider this question is to examine if group differences remained in level of positive and negative mood at the end of the interaction, given that at the beginning of the experimental portion of the study, there were main effects for group with regard to both negative and positive mood (see Methods section). At the end of the study (mood time 3 – i.e.,

post capitalization mood measurement), the difference between severity groups disappeared for ratings of positive mood ($F(3,69) = 1.12, p = .35$; $M_{\text{no severity}} = 2.94, M_{\text{mild}} = 3.17, M_{\text{moderate}} = 2.92, M_{\text{severe}} = 2.67$). Considered dimensionally, as shown in Table 8, time 3 positive mood was no longer significantly associated with depressive symptoms (in contrast to the significant inverse associations at the time 1 and time 2 mood assessments, both of which were collected prior to the interaction). A somewhat different pattern emerged with regard to negative mood. Mean levels of negative mood decreased across groups at the time 3 mood assessment ($M_{\text{no severity}} = 1.07, M_{\text{mild}} = 1.23, M_{\text{moderate}} = 1.67, M_{\text{severe}} = 1.43$) and dimensionally, the magnitude of the association significantly decreased ($z = 2.27$). However, categorically, depressive symptoms still distinguished the groups from one another ($F(3,69) = 6.00, p = .001$) at the end of the study.

In sum, when considering change in mood rating as the dependent variable, depressive symptoms were associated with larger increases in positive mood and larger decreases in negative mood. However, there was some degree of specificity, as depressive symptoms no longer distinguished subjects on their level of positive mood following the interaction, a finding that did not replicate with negative mood.

Hypothesis 6: Are depressive symptoms associated with changes in event significance before and after the interaction? Unlike change in mood, depressive symptoms were not associated with change in event significance when analyzing data dimensionally (see Table 9) nor when controlling for the objective level of positivity of the discussed event in a regression analysis. Similarly, the ANOVA was not significant ($F(3,70) = 2.14, p = .10$) in establishing an overall difference between the no ($M = .53$), mild ($M = 1.14$), moderate ($M = 1.23$), and severe ($M = .78$) groups. For the whole sample, the average increase in event significance was .9 inches.

Hypothesis 7: Are depressive symptoms associated with less perceived accuracy of the interviewer's response? Consistent with the self-verification literature, I hypothesized that, on the one hand, the highly supportive feedback may be viewed as self-discrepant among those with greater depressive symptoms and, as such, there would be an inverse association between depressive symptoms and perceived accuracy. However, because of the variability in self-esteem associated with depression, which may increase following responsive feedback to a positive event disclosure, I alternatively hypothesized that there would be no significant association between depressive symptoms and perceived accuracy. Consistent with the latter, I did not find a significant association between depressive symptoms and perceived accuracy (see Table 9), nor when controlling for the objective level of positivity of the discussed event in the regression analysis. Similarly, the ANOVA was not significant ($F(3,70) = 1.70, p = .17$) in establishing an overall difference between the no ($M = 7.39$), mild ($M = 7.61$), moderate ($M = 7.13$), and severe ($M = 8.43$) groups. For the whole sample, the average level of perceived accuracy was high ($M = 7.5$, range = 4-9).

Hypothesis 8: Are depressive symptoms associated with less perceived interpersonal benefits from the capitalization interaction? Similar to the questionnaire data, I expected that greater depressive symptoms would be associated with fewer perceived interpersonal benefits. Alternatively, because I controlled the response of the interviewer (i.e., confederates were trained to respond with enthusiastically positive verbal and nonverbal feedback), I also examined the hypothesis that there would not be a significant association between depressive symptoms and supportiveness during the interaction (PRCA scores), as well as general feelings of support, enjoyment, liking, closeness, perceived partner responsiveness, willingness to self-disclose, and a prosocial orientation toward the confederate. Consistent with the latter, when analyzing data

dimensionally (see Table 9) and secondarily controlling for the importance of the discussed event, no associations emerged. When examining data categorically, the only group difference that emerged was for viewing responses as passive-destructive ($F(3,70) = 3.33, p = .02$). However, the planned contrasts analysis was not significant; a visual inspection of the means suggested that the moderate group ($M = 1.27$) viewed the response as more passive-destructive than the no ($M = 1.05$), mild ($M = 1.06$), and severe ($M = 1.00$) groups. Overall, the whole sample viewed the confederates as highly supportive and reported high levels of interpersonal benefits (see Table 9).

Hypothesis 9: Are depressive symptoms associated with less expressions of positivity during interaction? Because depression is associated with expressing less positivity and more negativity nonverbally, I hypothesized that there would be an inverse association between depressive symptoms and expressed positivity conveyed by the participant during the interaction. Contrary to predictions, significant associations did not emerge dimensionally (see Table 9). Similarly, the ANOVA was not significant ($F(3,70) = .73, p = .54$) in establishing an overall difference between the no ($M = 2.43$), mild ($M = 2.36$), moderate ($M = 2.16$), and severe ($M = 2.09$) groups.

Hypothesis 10: Are depressive symptoms associated with a negative impact on the confederate? All confederates were trained to provide highly supportive responses; nevertheless, I expected that there would be variability in the extent to which participants would make this job easier or more difficult for the confederate. I hypothesized that the extent to which the confederate felt that they were “pulling teeth” to “pull for the positive” would be significantly associated with the level of participants’ depressive symptoms. Significant associations did not emerge dimensionally (see Table 9). Moreover, the ANOVA was also not significant ($F(3,63) =$

.76, $p = .52$) in establishing an overall difference between the no ($M = .96$), mild ($M = 1.04$), moderate ($M = 1.50$), and severe ($M = 1.43$) groups.

Hypothesis 11: Are the associations between depressive symptoms and capitalization specific to capitalization or do they extend to other positive interpersonal activities such as shared experiences? Because depressive symptoms were not significantly associated with feelings toward the interaction partner (and the overall sample reported, on average, very high level of benefits), which could be interpreted to mean that more dysphoric subjects do receive benefits, I wanted to rule out the alternative hypothesis that this is just a positive mood effect and demonstrate that these benefits would not extend when thinking about having participated in positive activities with another person (completed following the mood boost from the interaction). Significant associations did not emerge, either dimensionally or categorically (see Table 11). Again, the overall sample reported, on average, very high level of interpersonal benefits. Interestingly, paired samples t -tests were significant when comparing benefits from the laboratory capitalization interaction to benefits from the shared activity. Specifically, benefits were higher from capitalization in reported support ($M(SD)_{\text{capitalization}} = 7.76(1.47)$, $M(SD)_{\text{activities}} = 5.38(.72)$, $t(69) = -13.59$, $p < .001$), perceived partner responsiveness ($M(SD)_{\text{capitalization}} = 6.10(1.32)$, $M(SD)_{\text{activities}} = 5.32(.73)$, $t(69) = -5.15$, $p < .001$), and prosocial orientation ($M(SD)_{\text{capitalization}} = 5.70(1.48)$, $M(SD)_{\text{activities}} = 5.08(.83)$, $t(69) = -3.51$, $p = .001$); benefits could not be compared for closeness because different measures were used.

IV. Discussion

The dissertation was designed to examine the social sharing of positive life events among a sample with a range of current depressive symptomatology. I examined rates of capitalization and the interpersonal benefits of doing so in daily life, as well as a capitalization interaction that

took place in the laboratory, in which the response of the interaction partner was maximally supportive. Holding the response of the interaction partner constant, and training interaction partners to be so supportive, allowed for a more tightly controlled examination of the potential for positive intra- and interpersonal consequences. I first discuss results from the questionnaire data, followed by the results from the interaction in the laboratory.

Descriptive data from the questionnaire revealed that depressive symptoms were not associated with a lower mean number of positive events endorsed over a two-week period across domain areas, including social events, classes, job, health, and other activities. Next, contrary to a priori hypotheses, there was not a significant (and inverse) association between depressive symptoms and the number of capitalization attempts made over the past two weeks, relative to the total number of positive events experienced. In this sample, on average, individuals capitalized on half (about 50%) of all positive events experienced, and, when someone did capitalize about a positive event, the average number of people capitalized with was two people. When capitalization attempts did occur, the average level of perceived interpersonal benefits were quite high with regard to perceived partner responsiveness, feelings of closeness and support, and a prosocial orientation. Further, contrary to hypotheses, these perceived benefits did not decrease as depressive symptoms increased.

One notable exception emerged that was consistent with hypotheses. Specifically, when capitalization attempts did occur, there was a significant association between depressive symptoms and viewing the response as less supportive overall (lower active-constructive composite ratings), as well as a positive and significant association with perceiving responses as more quiet and understated (passive-destructive). However, the strength of this effect was not

robust, as group differences did not emerge with planned contrasts comparing the moderate and severe groups with the no depressive symptoms group.

Parallel analyses were conducted in response to negative life events to allow for tests of specificity. Descriptive data revealed that as depressive symptoms increased, subjects endorsed a greater number of negative events collapsed across all domains, as well as specifically in the areas of social events, classes, and health. Next, I explored if depressive symptoms were associated with seeking more support for negative events, hypothesizing that rates of self-disclosure would be lower specifically for positive events (i.e., lower proportion of capitalization attempts), but that rates of self-disclosure for negative events might actually be higher as depressive symptoms increased. Hypotheses were not supported. Specifically, in this sample, the only type of support that was positively associated with depressive symptoms was seeking support for events occurring at one's job. Largely similar to rates of capitalization attempts, the average proportion of traditional social support attempts was about 40% of all negative events experienced, and when someone did seek support for a negative event, the average number of people disclosed to was again two people. Here too, overall benefits from seeking support were fairly high across the sample, and the extent to which subjects perceived these benefits did not differ as a function of increasing depressive symptoms.

In sum with regard to the questionnaire data, on the one hand, the finding that rates of negative events were significantly higher, but rates of positive events did not differ, among those with greater depressive symptoms is consistent with previous research (Bolger & Schilling, 1991; Nezlek & Gable, 2001; Steger & Kashdan, 2009) and lends validity to the questionnaire (though see Bylsma, et al., 2011 for an exception in which depressed subjects reported significantly fewer positive social events). Thus, it was surprising and contrary to predictions

that rates of disclosure about these events did not increase or decrease as depressive symptoms increased. Given that co-rumination is associated with depression (Rose, 2002), and depressed subjects view negative self-relevant topics as more appropriate for discussion (Kuiper & McCabe, 1985), I expected that depressive symptoms would be significantly and positively associated with rates of traditional social support and significantly and negatively associated with rates of capitalization. On the one hand, this lack of an association could be due to sampling and methodological limitations, given that the sample was non-clinical and the reports are based on a one time recall of the past two weeks rather than a daily assessment, both of which could reduce the strength of the association. On the other hand, it is possible that, within existing relationships, there really are no differential associations between depressive symptoms and rates of support. However, as will be discussed below, there was a meaningful difference in preference for event discussion during the actual experiment, which could again suggest that (a) the study was underpowered to detect the effect, or (b) there are differences with strangers and existing relationships, a point to which I return.

Next, it was notable that this sample as a whole reported very high interpersonal benefits from seeking support for both positive and negative events; on 0 to 5 scales, average benefits ranged from 4.5 to 4.8 for ratings of perceived closeness, support, prosocial orientation toward the partner, and perceived partner responsiveness; further, the benefits from support for capitalization attempts did not significantly differ from the benefits from traditional social support. This was also especially the case when responses to capitalization attempts were viewed as more enthusiastically supportive; consistent with Gable and colleagues (2004), only active-constructive composite scores were significantly and positively associated with these positive relational variables.

In light of the consistently replicated effect of the importance of perceptions of active-constructive responding (see Gable & Reis, 2010), it is notable that an association emerged between depressive symptoms and viewing responses as less active-constructive. As will be reviewed below, potential mood-brightening effects may only be relevant under optimal conditions. Indeed, it is possible that in daily life, individuals with greater depressive symptoms may select individuals who respond less supportively, or they may perceive responses from existing relationship partners as less supportive. As a consequence, rather than functioning as a maximizing strategy, the capitalization process could potentially perpetuate depressogenic affect and cognitions. Thus, continued research is needed to integrate this daily experience finding with the laboratory findings, particularly to elucidate the conditions that enable capitalization interactions to lead to positive intra- and interpersonal consequences.

One final implication with regard to the questionnaire data is that, though depressive symptoms were associated with greater mean number of negative life events over the past two weeks, symptoms were not associated with decreased number of positive life events. Thus, though negative events may perhaps be more salient (and thus provide more prompting events to discuss with others), this study conforms to other studies that have suggested that there are just as many opportunities, at least in theory, to capitalize about the positive (and, as a first examination in this study, the subjects actually did). As such, continuing to examine factors that increase the likelihood of capitalization, as well as cognitive and relational variables that lead to perceptions of supportive responding, will continue to increase the potential for capitalization to function as an approach-oriented behavior that reaps intra- and interpersonal benefits.

Next, all subjects completed the quasi-experimental portion of the study. Participants had listed three positive and three negative events that occurred over the past two years and were

asked to rank order them, based on their preference for discussing one with an interviewer in training. As predicted, the greater the depressive symptoms, the more likely subjects were to rank order a negative event as their number one preference. Consistently, those who ranked a negative event as number one had significantly greater depressive symptoms than those who ranked a positive event as number one. This finding conformed to the overarching research question that, when given an opportunity to discuss self-relevant information, those with depressive symptoms would be less willing to capitalize.

More broadly considering factors that contribute to depression maintenance, particularly depression as a deficit in approach motivation (see, e.g., Grey, 1994; Strauman, 2002), the finding that those with depressive symptoms were less willing to capitalize may be reflective of this deficit. Alternatively, rather than conceptualizing the selection of a negative event as reflective of low approach motivation, the ranking of the negative event may be more reflective of an activation of inhibitory or prevention-focused responding. Recall that when subjects were asked to conjure events, they conjured both positive and negative life events. Thus, the recall of negative autobiographical memories may have activated prevention-focused goals and security motives. This interpretation would also fit within an attachment theoretical framework (Bowlby, 1988 a,b), as it may be the case that when needs for safety and security are activated, traditional social support is a necessary prerequisite before seeking out additional, reward focused goals.

Whether reflective of deficient BAS or activated BIS, that greater dysphoria predicted less willingness to share a personal, positive event is a key finding. The next key finding emerged when all subjects were led to believe that their event would actually be randomly selected, and they “randomly” selected one of their positive events from the fishbowl. Despite the fact that the greater the depressive symptoms, the lower the preference to discuss a positive

event, when all subjects engaged in the task of sharing a positive life event, emotional reactivity data conformed to the mood-brightening hypothesis (Bylsma, et al., 2011; Peeters, et al., 2003). Specifically, as depressive symptoms increased, the difference from pre to post interaction positive mood increased, and the difference from pre to post interaction negative mood decreased. In other words, not only did the whole sample, on average, increase in positive mood and decrease in negative mood following the capitalization interaction with a highly supportive confederate, but the greater the depressive symptoms, the more pronounced the change. This finding was not driven by differences regarding the type of event that was discussed; consistent with Joormann, et al., (2007), I also did not find differences in the level of objectively rated positivity of the discussed event.

This change in mood finding is consistent with the emotional reactivity literature documenting heightened reactivity to positive life events (Bylsma, et al., 2011; Nezlek & Gable, 2001; Peeters, et al., 2003) and is consistent with the hypothesized mechanism of behavioral activation – that is, though depressed persons demonstrate less daily engagement with behaviors perceived as rewarding (consistent with their lower preference to capitalize), when prompted to do so, they actually derived emotional benefits. This finding stands in contrast to the Joormann, et al., (2007) finding in which sad mood increased following recall of positive memories, suggesting that, indeed, interpersonal interaction may provide a source of cognitive appraisal that subsequently determines either which, or how much, of emotion(s) will be experienced (Joormann & D’Avanzato, 2010). Perhaps if the more dysphoric subjects in this study had merely discussed their event with a neutral interviewer, sad mood would have increased; as such, the present findings suggests that dysphoria may be associated with increased emotional reactivity to positive emotions, particularly when individuals receive clear and supportive

appraisals from others. Indeed, I found a significant association between depressive symptoms and lower perceptions of support when participants reported on their existing relationships, further suggesting that it may be essential to teach dysphoric individuals to either seek out supportive capitalization partners or to “catch” cognitive biases that may interfere with perceptions of capitalization support.

I conducted the main analysis for mood as a change score to replicate previous research (Reis, et al., 2010) and to focus on the relative difference in mood following the interaction as the key outcome. It is important to note limitations inherent in change scores, particularly that they increase the potential for type I error. That being said, the increase in magnitude between depressive symptoms and positive mood and decrease in magnitude between depressive symptoms and negative mood is consistent with the change score finding. Also consistent was the finding that considered categorically, depressive groups were no longer significantly different from one another on level of positive mood at the end of the study. Thus, considering the data in these ways points toward a consistent finding that more dysphoric subjects started the study with less positive and more negative mood, they preferred to discuss a negative event, and when they were led to discuss a positive event with a supportive interaction partner, they left the study, while still a little more negative than their non-dysphoric counterparts, just as high in positive mood. No study has previously examined the preference, or the consequences, of discussing positive life events with others among those with a range of depressive symptomatology, and these results suggest that doing so may have the potential to be very emotionally rewarding, again, at least under optimal levels of support.

Benefits abounded in this study beyond mood for all subjects. Contrary to hypotheses, mood was the only variable for which depressive symptoms predicted greater reactivity. For

change in cognition regarding the event – that was, measuring how much more or less significant the discussed event was rated to be for the participants following the interaction -- the sample as a whole increased about 13%. This finding stands in contrast to the self-verification literature, which set up the prediction that highly supportive feedback could be self-discrepant and therefore rejected. Also inconsistent with self-verification, the highly supportive confederate responses were viewed as highly accurate by the sample on average. These findings suggest that, at least in this sample, supportive feedback was not viewed among those with greater depressive symptoms as inconsistent and therefore rejected, which may, in part, be due to the non-clinical nature of the sample. On the other hand, the self-verification process may not be as prominent in capitalization. For example, self-verification methodologies have largely involved receiving feedback about global aspects of personality and self-concept, whereas capitalization involved engaging the confederate in discussion regarding a specific, concrete personal experience. As such, because self-verification involves a larger sense of self-concept rather than a specific occurrence, capitalization may be less threatening for dysphoric persons than the self-verification paradigms, which could account for the lack of associations in this framework. On the other hand, again, it may be a methodological issue regarding diagnostic status and the extent to which the confederates were well-trained that contributed to the lack of associations between depressive symptoms and these intrapersonal benefits. Differences may emerge in daily life or with less overtly supportive responses. As previously stated, a limitation of the current study is that it is impossible to tell if the lack of differentiation among those with greater depressive symptoms is because of a lack of a true effect, or if the differences were not captured with this sample.

With regard to interpersonal benefits from the capitalization attempt, I had hypothesized that perhaps the perceived benefits might decrease as depressive symptoms increased;

alternatively, because the response from the interviewer was controlled, and there were no expectations for the confederate's response based on previous history, then I also examined the competing hypothesis that these variables would not demonstrate an association. Consistent with the latter, again the overall sample reported very high reports of positive feelings toward the interviewer, including viewing the actual confederate to be enthusiastic and positive (active-constructive), less passive and destructive (active-destructive, passive-destructive, passive-constructive), as well as reported feeling supported, enjoying the interaction, liking the confederate, feeling close to her, experiencing greater perceived partner responsiveness, willing to self-disclose to this confederate in the future, and willing to sacrifice for her (prosocial orientation). Again, integrating this finding with the questionnaire data further highlights the need to continue to assess the contexts under which capitalization outcomes will be maximized.

Moreover, it will be elucidating to continue to examine this research question in a clinical sample. Is it that the confederates were so well trained that they made everyone feel good, or would the most depressed subjects demonstrate ECI in this positive context even with such a supportive confederate response (e.g., Rottenberg, et al., 2002)? At least in this sample, findings suggest that the dysphoric subjects were quite responsive to the emotional, cognitive, and interpersonal benefits that sharing a personal, positive event with someone else, along with their supportive and enthusiastic response, led to.

In addition to considering outcomes from the participant's perspective, I also considered (a) how independent coders would view the subjects in demonstrating positive emotional displays, and (b) what type of impact the subject had on the confederate, hypothesizing that as depressive symptoms increased, expressed positivity during the interaction would decrease and the confederate's gestalt take-away that they were "pulling teeth" during the interaction to

discuss positive content and keep the interaction going for the full eight-minutes would increase. Perhaps due to the relatively small sample, significant associations did not emerge for expressed positivity (conceptualized as observed happiness and liveliness) or for the confederate's report of "pulling teeth." As a coder, it was clear that there was variability in the subjects' abilities to demonstrate positive emotion regulation skills. Accordingly, future research will benefit from continuing to examine (1) predictors of these deficits, (2) a more micro-level coding system with a larger range (as the macro may have obscured differences and the range was restricted from 0 to 4), and (3) including more questions directed to the confederate to understand more fully the potential interpersonal deficits that those with greater levels of depressive symptoms introduced to the capitalization interaction.

Regarding associations between the interaction partners, it was notable that greater expressed positivity, greater perceived accuracy, greater significance of the discussed event, and less perception of pulling teeth were all associated with one another. Though more research will need to test for causal associations, these findings introduce two tentative interpretations. First, perceived accuracy may be a key cognitive variable that allows individuals to participate in capitalization interactions in ways that convey greater positivity and, perhaps consequently, make the job easier for the interaction partner. In other words, these associations suggest that there may be reciprocity in the interaction such that the more the discloser feels like this person is accurate and "gets them," the more positivity they may express, and the more naturally engaged the interaction partner may feel in turn (which could potentially lead them to provide more support). Secondly, that greater event significance was also associated with these variables suggests that it may be easier to perceive supportive responses as accurate, and to engage in these beneficial cyclical interactions, for events of higher import.

Last, I included a parallel set of questions from the questionnaire data to assess participating in positive, interpersonal activities with another person. Because subjects completed these questions following the capitalization interaction, the idea was that if dysphoria was *not* associated with deriving fewer interpersonal benefits from the capitalization interaction, then I would rule out an alternative hypothesis that ratings merely reflected a mood boost. Therefore, when thinking about a different type of positive, interpersonal interaction, it would help to show that dysphoria was again associated with lower perceived benefits from engaging in that type of interaction (though not from the capitalization process). Nevertheless, and consistent with the questionnaire data and the capitalization interaction, again, this sample reported very high level of perceived interpersonal benefits when considering perceived partner responsiveness, support, closeness, and a prosocial orientation. However, effects were in the expected direction, which could suggest that I was merely underpowered to detect the effect. Future research would benefit from assigning half of the participants to actually engage in a positive, fun activity, similar to Reis, et al., (2010) to better demonstrate specificity regarding the capitalization interaction and benefits associated with intimacy development. Again, here it is not possible to discern if the lack of effect was a reflection of the non-clinical participants, or if there really is not a true difference, which future research will need to address.

It is also worth noting that paired samples *t*-tests revealed that individuals in this sample reported greater interpersonal benefits from the capitalization interaction than from these shared activities, which again highlights the beneficial aspects of engaging in capitalization for all subjects across levels of depressive symptomatology.

Taken together, the entirety of the results suggests that, considering a sample with a range of current depressive symptomatology, there are opportunities to capitalize on positive events

that occur across social, academic, vocational, health, and other domains, and this dysphoric sample capitalized at nearly the same rate as they sought support for negative events, and at the same rate as their non-dysphoric counterparts. However, depressive symptoms were associated with viewing the responses to the capitalization attempts as less enthusiastic and supportive, and it is this type of perception that is closely associated with additional interpersonal benefits associated with intimacy development. On the other hand, in the quasi-experimental portion of the study, those with greater depressive symptoms demonstrated enhanced emotional benefits when interacting with a highly supportive confederate. Thus, for those with depressive symptoms, it will be especially important to consider *who* to capitalize with. Indeed, the greater tendency to perceive non-supportive responses may not only fail to help the individual savor the positive but may actually create a new punisher in the environment and inadvertently perpetuate a depressive cycle.

As previously stated, future work will benefit from the utilization of a more clinical sample to tease apart if the lack of differentiation is because those who are dysphoric are really benefitting, or if benefits would be limited among those with greater depressive symptoms. Moving forward, this sample also included college-aged females, and so it will also be important to replicate with a more developmentally and gender-mixed sample. Further, Reis and colleagues have already demonstrated that the intra- and interpersonal benefits are specific to responses that are viewed as active-constructive; as such, continuing to manipulate the response of the confederate, especially to make the response more ambiguous, may shed more light into mechanisms that could potentially increase the association between dysphoria and viewing responses as less enthusiastically supportive (active-constructive). Examining these processes in

a daily basis and in a more depressed sample would similarly refine our understanding of the contexts in which this process may have the potential for positive consequences.

Further, in addition to considering depressive symptoms as the grouping variable, future research would also benefit from considering a broader trans-diagnostic emotion regulation perspective. For example, is it really that depression should be inversely associated with capitalization, or that individuals across diagnostic categories (e.g., depression and anxiety) who over-rely on dampening strategies in response to positive emotions and ruminative strategies in response to negative emotions will demonstrate the least willingness, and the least responsiveness, to capitalization attempts.

Considering implications for treatment, rates of capitalization can be examined as both an outcome and as a predictor. Regarding the former, one could examine if, as depression lifts, rates of capitalization naturalistically increase, suggesting that this approach-related behavior may increase as current depression decreases. Perhaps even more importantly, capitalization could be considered an adjunct to treatment, playing a causal role in amelioration of current depression. First, one could examine the following research question: if a client increases his/her rate of capitalization, does his/her depression also improve? The current findings suggest that this might indeed be the case. Next, one could also explore capitalization as one method to increase the likelihood of compliance with idiographic behavioral activation targets. For example, as “homework,” one could assign the client to engage in behavioral activation and *then* to tell someone else about it. Then, in an A/B/A/B design, one could explore if (1) engagement in behavioral activation targets increases on weeks when clients capitalize on this engagement, and (2) if greater engagement in behavioral activation leads to greater reductions in symptomatology. I hypothesize this would be the case; indeed, though empirical research on the process of change

in behavioral activation is still in its infancy, it has been suggested that “affective change in activation treatments is directly attributable to relative increases in reinforcement for healthy versus depressive behavior” (p.707, Hopko, et al., 2003). Again, capitalization may function as a direct reinforcer for the “positive opposite” of depressive behavior. As such, opportunities to explore capitalization as an adjunct to treatment abound. Further, it will be important and beneficial to continue to examine not only change in symptoms as a function of capitalization (including cognitive and emotional correlates), but also the positive impact on interpersonal relationships (e.g., aspects of intimacy development), as both types of outcomes are closely associated with this behavior and serve as exciting opportunities for future research.

This study was the first to examine responses to positive stimuli in an interpersonal context in the study of depression. Consistent with those that have used more idiographic stimuli (Ellis et al., 2009; Rottenberg et al., 2005) and daily experience studies (Bylsma, et al., 2011; Nezlek & Gable, 2001; Peeters, et al., 2003), I too found that, despite beginning the study with significantly more negative and less positive mood, the opportunity to engage in a positive event discussion with a supportive and enthusiastic interaction partner led to increases in positive mood and decreases in negative mood, particularly among those with greater depressive symptoms. This study fills a gap in the literature by considering emotional reactivity within an interpersonal context, and lays future hypotheses to test that may help to reconcile discrepant findings (i.e., perhaps Joormann, et al., 2007 found increases in sad mood following recall of positive memories only in the absence of appraisals deriving from the interpersonal interaction).

One final note is with regard to the general importance of the continued need for more work on depression in the context of positive life events, positive emotions, and relationship promoting behavior. It is perhaps a reflection of the field that it was virtually impossible to

obtain a pre-existing questionnaire that assessed ecologically valid positive life events. The field has been consumed with negative stressors and negative emotion regulation, and there is a major dearth in the literature, including the measures to assess, these orthogonal constructs. Given that depression is characterized specifically by low positive emotions, and interpersonal behaviors both cause and exacerbate depression, it is imperative that the field move toward an examination of responses to positive life events, opportunities for positive emotions, and relationship promoting behavior that enhance relationship quality, reduce vulnerability to negative emotions, and promote positive emotions.

Table 1.

Zero-Order Correlations and Descriptive Statistics for Depressive Symptoms and Rates of Capitalization Reported in the Questionnaire Data

	Depressive Symptoms	Mean (SD)	Range
1. Proportion capitalization attempts – aggregate	-.00	.53(.22)	.03-1
2. Proportion capitalization attempts – social	-.03	.65(.29)	0-1
3. Proportion capitalization attempts – classes	.06	.51(.36)	0-1
4. Proportion capitalization attempts – job	.10	.58(.36)	0-1
5. Proportion capitalization attempts – health	-.10	.40(.36)	0-1
6. Proportion capitalization attempts – activities	-.08	.49(.35)	0-1
7. Average number people capitalize with	.10	2.07(.68)	.5-4
8. Total positive events – aggregate	-.01	13.58(6.46)	3-33
9. Total positive events – social	-.00	4.40(2.22)	0-10
10. Total positive events – classes	-.07	2.84(1.84)	0-10
11. Total positive	.20	.85(1.52)	0-7

events – job			
12. Total positive	-.07	2.01(1.87)	0-10
events -			
health			
13. Total positive	-.05	3.47(2.17)	0-10
events -			
activities			

Table 2.

Zero-Order Correlations and Descriptive Statistics for Depressive Symptoms and Rates of Social Support Reported in the Questionnaire Data

	Depressive Symptoms	Mean (SD)	Range
1. Proportion support attempts – aggregate	.03	.40(.30)	0-1
2. Proportion support attempts – social	-.07	.51(.42)	0-1
3. Proportion support attempts – classes	.01	.33(.38)	0-1
4. Proportion support attempts – job	.51*	.59(.46)	0-1
5. Proportion support attempts – health	.03	.35(.39)	0-1
6. Proportion support attempts – activities	-.06	.42(.42)	0-1
7. Average number people seek support with	-.01	1.87(.65)	1-3.67
8. Total negative events – aggregate	.42**	7.35(5.15)	0-21
9. Total negative events – social	.44**	2.12(1.69)	0-7
10. Total negative events – classes	.27*	2.05(1.40)	0-6
11. Total negative events – job	.11	.44(1.02)	0-5
12. Total negative events - health	.46*	1.81(1.65)	0-7
13. Total negative events - activities	-.05	3.47(2.17)	0-10

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

Table 3.

Zero-Order Correlations and Descriptive Statistics Regarding Positive and Negative Events and Capitalization and Support Attempts Reported in the Questionnaire Data

	1.	2.	3.	4.	5.	6.	7.	8.
1. Total positive events	--							
2. Total negative events	.16	--						
3. Total capitalization	.67**	.23	--					
4. Total support	.17	.75**	.41**	--				
5. Proportion capitalization	-.13	.06	.58**	.27*	--			
6. Proportion support	-.03	.18	.36**	.64**	.48**	--		
7. Significance positive events	.07	-.22	.01	-.14	.02	-.03	--	
8. Significance negative events	.04	.09	-.04	.12	-.01	.09	.36**	--
Mean (SD)	13.58 (6.46)	7.35 (5.15)	7.00 (4.55)	3.22 (3.31)	.52 (.22)	.40 (.30)	3.00 (.46)	2.97 (.53)
Range	3 - 33	0 - 21	1 - 19	0 - 15	.03 - 1	0 - 1	1.85 -3.85	1.67 - 4

Note. Total capitalization = total number of capitalization attempts reported; Total support = total number of social support attempts; Proportion capitalization = number of capitalization attempts relative to the total number of positive events; Proportion support = number of support attempts relative to the total number of

negative events; Significance positive events = mean level of significance for all positive events; Significance negative events = mean level of significance for all negative events. * $p < .05$, ** $p < .01$

Table 4.

Zero-Order Correlations and Descriptive Statistics Regarding Interpersonal Benefits Reported in the Questionnaire Data

	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.
1. AC comp	--												
2. AC	.62**	--											
3. AD	-.65**	-.22	--										
4. PC	-.71**	-.15	.20	--									
5. PD	-.78**	-.50**	.42**	.37**	--								
6. Respon Pos	.43**	.76**	-.24*	.04	-.40**	--							
7. Respon Neg	.19	.21	-.12	.02	-.26	.46**	--						
8. Close Pos	.34**	.64**	-.19	.04	-.30*	.82**	.33*	--					
9. Close Neg	.24	.22	-.18	-.06	-.19	.43**	.83**	.47**	--				
10. Support Pos	.37**	.72**	-.14	.05	-.37**	.90**	.39**	.90**	.41**	--			
11. Support Neg	.21	.20	-.18	-.02	-.21	.43**	.89**	.42**	.80**	.40**	--		
12. Prosocial Pos	.15	.33**	-.19	.11	-.09	.45**	.25	.54**	.26	.48**	.33*	--	
13. Prosocial Neg	.07	.14	-.12	.12	-.10	.33*	.50**	.48**	.60**	.35**	.59**	.72**	--
Mean (SD)	.46 (2.08)	2.98 (.67)	.79 (.76)	1.28 (1.01)	.45 (.60)	4.86 (.76)	4.77 (1.03)	4.82 (.87)	4.66 (1.11)	4.90 (.85)	4.70 (1.11)	4.60 (.74)	4.49 (.93)
Range	-7 - 4	1 - 4	0 - 3.5	0 - 4	0 - 3	3 - 6	1.5 - 6	2.75 -	1 - 6	3 - 6	1 - 6	3.14 -	2 - 6

Note. AC comp = active-constructive composite; AC = active-constructive; AD = active-destructive; PC = passive-constructive; PD = passive-destructive; Respon Pos = perceived partner responsiveness for positive events; Respon Neg = perceived partner responsiveness for negative events; Close Pos = closeness for positive events; Close Neg = closeness for negative events; Support Pos = supported for positive events; Support Neg = supported for negative events; Prosocial Pos = prosocial orientation for positive events; Prosocial Neg = prosocial orientation for negative events. * $p < .05$, ** $p < .01$

Table 5.

Zero-Order Correlations for Depressive Symptoms and Interpersonal Benefits from Capitalization and Support Attempts Reported in the Questionnaire Data

	Depressive Symptoms
Active- Constructive Composite	-.27*
Active- Constructive	-.13
Active- Destructive	.18
Passive- Constructive	.18
Passive- Destructive	.28*
Responsiveness (Capitalization)	-.14
Closeness (Capitalization)	-.18
Supported (Capitalization)	-.12
Prosocial (Capitalization)	-.05
Responsiveness (Support)	-.01
Closeness (Support)	-.10
Supported (Support)	-.02

Prosocial -.01
(Support)

Note. Responsiveness (Capitalization) = perceived partner responsiveness from capitalization interactions; Prosocial (Capitalization) = prosocial orientation from capitalization interactions; Responsiveness (Support) = perceived partner responsiveness from social support attempts; Prosocial (Support) = prosocial orientation from social support attempts, * $p < .05$

Table 6.

Zero-Order Correlations and Descriptive Statistics Regarding Mood, Cognition, and Behavior Reported in the Interaction Data

	1.	2.	3.	4.	5.	6.	7.
1. Significance of Discussed Event	--						
2. Change Positive Mood	.09	--					
3. Change Negative Mood	-.13	-.52**	--				
4. Change Event Significance	-.10	.20	-.15	--			
5. Perceived Accuracy	.35**	.27*	-.29*	.02	--		
6. Expressions of Positivity	.38**	.09	-.05	-.09	.37**	--	
7. "Pulling Teeth"	-.40**	-.13	.14	.11	-.46**	-.64**	--
Mean (SD)	2.04 (.67)	.51 (.55)	-.23 (.47)	.90 (1.06)	7.5 (1.34)	2.31 (.74)	1.15 (1.21)
Range	.5 - 3	-1 - 2.33	-1.67 - 1	-1.38 - 3.38	4 - 9	1 - 4	0 - 4

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

Table 7.

Zero-Order Correlations and Descriptive Statistics Regarding Interpersonal Benefits Reported in the Interaction Data

	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.
1. AC composite	--											
2. AC	.29*	--										
3. PC	-.82**	.21	--									
4. PD	-.38**	-.26*	.07	--								
5. AD	-.58**	.05	.35**	.26*	--							
6. Support	.32**	.47**	.00	-.60**	-.13	--						
7. Enjoyment	.24*	.19	-.04	-.55**	-.19	.83**	--					
8. Liking	.05	.27*	.17	-.46**	-.00	.68**	.79**	--				
9. Closeness	.15	.16	-.02	-.24*	-.11	.51**	.59**	.51**	--			
10. Responsiveness	-.00	.31**	.23*	-.37**	-.01	.58**	.66**	.67**	.58**	--		
11. Self-disclosure	.10	.23	.11	-.35**	-.15	.39**	.53**	.54**	.43**	.50**	--	
12. Prosocial orientation	-.04	.27*	.23	-.36**	.07	.48**	.48**	.56**	.37**	.54**	.47**	--
Mean (SD)	-.01 (1.97)	6.02 (.85)	3.64 (1.59)	1.09 (.27)	1.28 (.55)	7.76 (1.47)	7.97 (1.47)	7.94 (1.20)	4.15 (1.41)	6.10 (1.32)	6.94 (1.88)	5.70 (1.48)
Range	-4.33 - 4	3.33 - 7	1 - 7	1 - 2.33	1 - 3	3 - 9	2 - 9	2.5 - 9	1 - 7	2.5 - 8.78	1.5 - 9	2.33 - 9

Note. AC composite = active-constructive composite; AC = active-constructive; PC = passive-constructive; PD = passive-destructive; AD = active-destructive; Responsiveness = perceived partner responsiveness. * $p < .05$, ** $p < .01$.

Table 8.

Zero-Order Correlations and Descriptive Statistics for Depressive Symptoms and the Three Mood Assessments Reported in the Interaction Data

	1.	2.	3.	4.	5.	6.	7.
1. Depressive Symptoms	--						
2. Positive Mood 1	-.35**	--					
3. Negative Mood 1	.59**	-.51**	--				
4. Positive Mood 2 (Before the Interaction)	-.34**	.75**	-.39**	--			
5. Negative Mood 2 (Before the Interaction)	.56**	-.40**	.81**	-.50**	--		
6. Positive Mood 3 (After the Interaction)	-.11	.60**	-.01	.71**	-.21	--	
7. Negative Mood 3 (After the Interaction)	.35**	-.36**	.64**	-.36**	.73**	-.34**	--
Mean (SD)	20.30 (12.25)	2.24 (.64)	1.73 (.74)	2.47 (.72)	1.52 (.68)	2.98 (.70)	1.29 (.50)
Range	0 - 51	1 - 4	1 - 3.67	1 - 4	1 - 3.33	1.33 - 4	1 - 2.67

Note. ** $p < .01$

Table 9.

Zero-Order Correlations for Depressive Symptoms and Mood, Cognition, Behavior, and Interpersonal Benefits Reported in the Interaction Data

	Depressive Symptoms
1. Significance of Discussed Event	-.18
2. Change in Positive Mood	.31**
3. Change in Negative Mood	-.44**
4. Change in Event Significance	.13
5. Perceived Accuracy	.09
6. Expressions of Positivity	-.19
7. "Pulling Teeth"	.16
8. AC Composite	.01
9. AC	.19
10. PC	.09
11. PD	.17
12. AD	-.07
13. Support	.01
14. Enjoyment	.01
15. Liking	-.02
16. Closeness	.01
17. Responsiveness	.07
18. Self-Disclosure	.07
19. Prosocial Orientation	-.03

Note. AC Composite = active-constructive composite; AC = active-constructive; PC = passive-constructive; PD = passive-destructive; AD = active-destructive; Responsiveness = perceived partner responsiveness. ** $p < .01$.

Table 10.

Multiple Regression Predicting Mood While Controlling for Significance of the Discussed Event in the Interaction Data

	<i>Change in Positive Mood</i>				<i>Change in Negative Mood</i>			
	<i>b</i>	<i>B</i>	<i>t</i>	<i>p</i>	<i>b</i>	<i>B</i>	<i>t</i>	<i>p</i>
Event Significance	.11	.14	1.25	.22	-.14	-.21	-1.95	.06
Depressive Symptoms	.01	.33	2.85	.006	-.02	-.48	-4.40	.00
Overall	<i>R</i> ²	<i>F</i>	<i>p</i>		<i>R</i> ²	<i>F</i>	<i>p</i>	
	.12	4.35	.02		.24	10.44	.00	

Table 11.

Zero-Order Correlations and Descriptive Statistics for Depressive Symptoms and Interpersonal Benefits from Positive, Shared Activities

	Depressive Symptoms	Mean (SD)	Range
Closeness	-.12	5.41(.71)	3-6
Support	-.19	5.38(.72)	3.5-6
Responsiveness	-.15	5.32(.73)	3.25-6
Prosocial orientation	-.17	5.08(.82)	3-6

Note. Responsiveness = perceived partner responsiveness.

References

- Alloy, L. B., Abramson, L. Y., Whitehouse, W. G., Hogan, M. E., Tashman, N. A., L. Steinberg, D., et al. (1999). Depressogenic cognitive styles: Predictive validity, information processing and personality characteristics, and developmental origins. [doi: 10.1016/S0005-7967(98)00157-0]. *Behaviour Research and Therapy*, 37, 503-531.
- American Psychiatric Association. (1994). *Diagnostic and statistical manual of mental disorders*. (4th ed.). Washington, DC: American Psychiatric Association.
- Aron, A., Aron, E. N., & Smollan, D. (1992). Inclusion of other in the self scale and the structure of interpersonal closeness. *Journal of Personality and Social Psychology*, 63, 596-612.
- Ayduk, O., Gyurak, A., Akinola, M., & Mendes, W. B. (2011). *Self-verification processes revealed in implicit and behavioral responses to feedback*. UC Berkeley.
- Beck, A. T. (1987). Cognitive models of depression. *Journal of Cognitive Psychotherapy*, 1, 5-37.
- Beck, A. T., Rush, A., Shaw, B. F., & Emery, G. (1979). *Cognitive theory of depression*. New York: Guilford Press.
- Bermis, J. M. (2008). Emotional responsiveness, intimacy, and capitalization attempts in intimate relationships: A dyadic assessment. Unpublished Doctoral Dissertation. University of Minnesota.
- Bolger, N., & Schilling, E. A. (1991). Personality and the problems of everyday life: The role of neuroticism in exposure and reactivity to daily stressors. *Journal of Personality and Social Psychology*, 59, 355-386.
- Bowlby, J. (1988a). *A secure base: Clinical applications of attachment theory*. London: Routledge.

Bowlby, J. (1988b). A secure base: Parent-child attachment and healthy human development.

New York: Basic Books Inc.

Bradley, B. P., Mogg, K., & Lee, S. C. (1997). Attentional biases for negative information in induced and naturally occurring dysphoria. *Behaviour Research and Therapy*, *35*, 911-927.

Bryant, F. B. (2003). Savoring beliefs inventory (SBI): A scale for measuring beliefs about savouring. *Journal of Mental Health*, *12*, 175-196.

Burchill, S. A. L., & Stiles, W. B. (1988). Interactions of depressed college students with their roommates: Not necessarily negative. *Journal of Personality and Social Psychology*, *55*, 410-419.

Bylsma, L. M., Morris, B. H., & Rottenberg, J. (2008). A meta-analysis of emotional reactivity in major depressive disorder. *Clinical Psychology Review*, *28*, 676-691.

Bylsma, L. M., Taylor-Clift, A., & Rottenberg, J. (2011). Emotional reactivity to daily events in major and minor depression. *Journal of Abnormal Psychology*, *60*, 150-167. doi: 10.1037/a0021662

Cane, D. B., & Gotlib, I. H. (1985). Depression and the effects of positive and negative feedback on expectations, evaluations, and performance. *Cognitive Therapy and Research*, *9*, 145-160. doi: 10.1007/bf01204846

Cuijpers, P., van Straten, A., & Warmerdam, L. (2007). Behavioral activation treatments of depression: A meta-analysis. *Clinical Psychology Review*, *27*, 318-326.

Dobson, K. S., Hollon, S. D., Dimidjian, S., Schmaling, K. B., Kohlenberg, R. J., Gallop, R. J., et al. (2008). Randomized trial of behavioral activation, cognitive therapy, and

- antidepressant medication in the prevention of relapse and recurrence in major depression. *Journal of Consulting and Clinical Psychology*, *76*, 468-477. doi: 10.1037/0022-006x.76.3.468
- Ellis, A. J., Beevers, C. G., & Wells, T. T. (2009). Emotional dysregulation in dysphoria: Support for emotion context insensitivity in response to performance-based feedback. *Journal of Behavior Therapy and Experimental Psychiatry*, *40*, 443-454. doi: 10.1016/j.jbtep.2009.05.002.
- Feldman, G. C., Joormann, J., & Johnson, S. L. (2008). Responses to positive affect: A self-report measure of rumination and dampening. *Cognitive Therapy and Research*, *32*, 507-525. doi: 10.1007/s10608-006-9083-0
- 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*, 904-917.
- Gable, S. L., & Reis, H. T. (2010). Good news! Capitalizing on positive events in an interpersonal context. In M. P. Zanna (Ed.), *Advances in experimental social psychology*.
- Gable, S. L., Reis, H. T., Impett, E. A., & Asher, E. R. (2004). What do you do when things go right? The intrapersonal and interpersonal benefits of sharing positive events. *Journal of Personality and Social Psychology*, *87*, 228-245.
- Giesler, R. B., Josephs, R. A., & Swann, W. B. (1996). Self-verification in clinical depression: The desire for negative evaluation. *Journal of Abnormal Psychology*, *105*, 358-368.
- Gonzaga, G. C., Keltner, D., Londahl, E., & Smith, M. D. (2001). Love and the commitment problem in romantic relations and friendship. *Journal of Personality and Social Psychology*, *81*, 247-262. doi: 10.1037//0022-3514.81.2.247

- Gotlib, I. H., & Cane, D. B. (1987). Construct accessibility and clinical depression: A longitudinal approach. *Journal of Abnormal Psychology, 96*, 199-204.
- Gotlib, I. H., Krasnoperova, E., Neubauer, D. L., & Joormann, J. (2004). Attentional biases for negative interpersonal stimuli in clinical depression. *Journal of Abnormal Psychology, 113*, 127-135.
- Gotlib, I. H., & McCann, C. D. (1984). Construct accessibility and depression: An examination of cognitive and affective factors. *Journal of Personality and Social Psychology, 47*, 427-439.
- Gotlib, I. H., Yue, D., & Joormann, J. (2005). Selective attention in dysphoric individuals: The role of affective interference and inhibition. *Cognitive Therapy and Research, 29*, 417-432.
- Gray, J. A. (1994). Framework for a taxonomy of psychiatric disorder. In S. H. M. van Goozen, N. E. van de Poll, & J. A. Sargeant (Eds.), *Emotions: Essays on emotion theory*.
- Hamilton, M. (1960). A rating scale for depression. *Journal of Neurology, Neurosurgery, and Psychiatry, 23*, 56-62.
- Hamilton, M. (1967). Development of a rating scale for primary depressive illness. *British Journal of Social Clinical Psychology, 6*, 278-296.
- Hicks, A. M., & Diamond, L. M. (2008). How was your day? Couples' affect when telling and hearing daily events. *Personal Relationships, 15*, 205-228.
- Hopko, D. R., Armento, M. E., Cantu, M., Chambers, L. L., & Lejuez, C. W. (2003). The use of daily diaries to assess the relations among mood state, overt behavior, and reward value of activities. *Behaviour Research and Therapy, 41*, 1137-1148.

- Ingram, R. E., Bernet, C. Z., & McLaughlin, S. C. (1994). Attentional allocation processes in individuals at risk for depression. *Cognitive Therapy and Research, 18*, 317-332.
- Jacobson, E., & Anderson, E. (1982). Interpersonal skill deficits and depression in college students: A sequential analyses of the timing of self-disclosure. *Behavior Therapy, 13*, 271- 282.
- Jacobson, N. S., Dobson, K. S., Truax, P. A., Addis, M. E. K., K., Gollan, J. K., & al. (1996). A component analysis of cognitive-behavioral treatment for depression. *Journal of Consulting and Clinical Psychology, 64*, 295-304.
- Joiner, T., & Coyne, J. C. (1999). *The interactional nature of depression: Advances in interpersonal approaches*. Washington, DC: American Psychological Association.
- Joormann, J., & D'Avanzato, C. (2010). Cognition & Emotion Lecture at the 2009 ISRE Meeting. *Cognition and Emotion, 24*, 913-939.
- Joormann, J., Siemer, M., & Gotlib, I. (2007). Mood regulation in depression: Differential effects of distraction and recall of happy memories on sad mood. *Journal of Abnormal Psychology, 116*, 484-490. doi: 10.1037/0021-843X.116.3.484
- Joormann, J., & Gotlib, I. H. (2007). Selective attention to emotional faces following recovery from depression. *Journal of Abnormal Psychology, 116*, 80-85.
- Joormann, J., Nee, D., Berman, M., Jonides, J., & Gotlib, I. H. (2010). Interference resolution in major depression. *Cognitive, Affective, & Behavioral Neuroscience, 10*, 21-33. doi: 10.3758/cabn.10.1.21
- Kuiper, N. A., & McCabe, S. B. (1985). The appropriateness of social topics: Effects of depression and cognitive vulnerability on self and other judgments. *Cognitive Therapy and Research, 9*, 371-379.

- Langston, C. A. (1994). Capitalizing on and coping with daily-life events: Expressive responses to positive events. *Journal of Personality and Social Psychology, 67*, 1112-1125.
- Laurenceau, J. P., 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*, 314-323.
- Laurenceau, J. P., Feldman-Barrett, L., & 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.
- Lyubomirsky, S., Caldwell, N. D., & Nolen-Hoeksema, S. (1998). Effects of ruminative and distracting responses to depressed mood on retrieval of autobiographical memories. *Journal of Personality and Social Psychology, 75*, 166-177.
- Lyubomirsky, S., & Nolen-Hoeksema, S. (1993). Self-perpetuating properties of dysphoric rumination. *Journal of Personality and Social Psychology, 65*, 339-349.
- Lyubomirsky, S., & Nolen-Hoeksema, S. (1995). Effects of self-focused rumination on negative thinking and interpersonal problem solving. *Journal of Personality and Social Psychology, 69*, 176-190.
- Lyubomirsky, S., Tucker, K. L., Caldwell, N. D., & Berg, K. (1999). Why ruminators are poor problem solvers: Clues from the phenomenology of dysphoric rumination. *Journal of Personality and Social Psychology, 77*, 1041-1060.
- Mayer, J. D., & Gaschke, Y. N. (1988). The experience and metaexperience of mood. *Journal of Personality and Social Psychology, 55*, 102-111.

- Mezulis, A. H., Abramson, L. Y., Hyde, J. S., & Hankin, B. L. (2004). Is there a universal positivity bias in attributions? A meta-analytic review of individual, developmental, and cultural differences in the self-serving attributional bias. *Psychological Bulletin, 130*, 711-747. doi: 10.1037/0033-2909.130.5.711
- Mogg, K., Bradley, B. P., & Williams, R. (1995). Attentional bias in anxiety and depression: The role of awareness. *British Journal of Clinical Psychology, 34*, 17-36.
- Nezlek, J. B., & Gable, S. L. (2001). Depression as a moderator of relationships between positive daily events and day-to-day psychological adjustment. *Personality and Social Psychology Bulletin, 27*, 1692-1704.
- Nolen-Hoeksema, S., & Morrow, J. (1993). Effects of rumination and distraction on naturally occurring depressed mood. *Cognition and Emotion, 7*, 561-570.
- Nolen-Hoeksema, S., Wisco, B. E., & Lyubomirsky, S. (2008). Rethinking rumination. *Perspectives on Psychological Science, 3*, 400-424.
- Peeters, F., Nicolson, N. A., Berkhof, J., Delespaul, P., & deVries, M. (2003). Effects of daily events on mood states in major depressive disorder. *Journal of Abnormal Psychology, 112*, 203-211. doi: 10.1037/0021-843X.112.2.203
- Pinel, E. C., & Swann, W. B. (1996). *The cognitive affective crossfire revisited: Affective reactions to self-discrepant evaluations*. Unpublished manuscript.
- Reis, H. T. (2007). Steps toward the ripening of relationship science. *Personal Relationships, 14*, 1-23.
- 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. J. Mashek & A. Aron (Eds.), *Handbook of closeness and intimacy*. Mahwah, NJ: Erlbaum

- Reis, H. T., Smith, S. M., Carmichael, C. L., Caprariello, P. A., & Tsai, F. (2010). Are you happy for me? How sharing positive events with others provides personal and interpersonal benefits. *Journal of Personality and Social Psychology, 99*, 311-329. doi: 10.1037/a0018344
- Rose, A. J. (2002). Co-rumination in the friendships of girls and boys. *Child Development, 73*, 1830-1843.
- Rottenberg, J., Gross, J. J., & Gotlib, I. H. (2005). Emotion context insensitivity in major depressive disorder. *Journal of Abnormal Psychology, 114*, 627-639.
- Rottenberg, J., Kasch, K. L., Gross, J. J., & Gotlib, I. H. (2002). Sadness and amusement reactivity differentially predict concurrent and prospective functioning in major depressive disorder. *Emotion, 2*, 135-146.
- Rush, A., Gullion, C. M., Basco, M. R., Jarrett, R. B., & Trivedi, M. H. (1996). The inventory of depressive symptomatology (IDS): Psychometric properties. *Psychological Medicine, 26*, 477-486.
- Rush, A., Trivedi, M. H., Ibrahim, H. M., Carmody, T. J., Arnow, B., Klein, D. N., Markowitz, J.C., Ninan, P.T., Kornstein, S., Manber, R., Thase, M.E., Kocsis, J.H., & Keller, M.B. (2003). The 16-item Quick Inventory of Depressive Symptomatology (QIDS), Clinician Rating (QIDS-C), and Self-Report (QIDS-SR): A Psychometric Evaluation. *Biological Psychiatry, 54*, 573-583. doi: 10.1016/S0006-3223(03)01866-8
- Segrin, C. (2000). Social skills deficits associated with depression. *Clinical Psychology Review, 20*, 379-403.
- Segrin, C., & Flora, J. (1998). Depression and verbal behavior in conversation with friends and strangers. *Journal of Language and Social Psychology, 17*, 492-503.

- Siegle, G. J., Ingram, R. E., & Matt, G. E. (2002). Affective interference: An explanation for negative attention biases in dysphoria? *Cognitive Therapy and Research*, *26*, 73-87.
- Steger, M. F., & Kashdan, T. B. (2009). Depression and everyday social activity, belonging, and well-being. *Journal of Counseling Psychology*, *56*, 289-300. doi: 10.1037/a0015416.
- Strauman, T. J. (2002). Self-regulation and depression. *Self and Identity*, *1*, 151-157.
- Sturme, P. (2009). Behavioral activation is an evidence-based treatment for depression. *Behavior Modification*, *33*, 818-829. doi: 10.1177/0145445509350094
- Swann, W. B. (1992). Depression and the search for negative evaluations: More evidence of the role for self-verification strivings. *Journal of Abnormal Psychology*, *101*, 314-317.
- Swann, W. B. (1997). The trouble with change: Self-verification and allegiance to the self. *Psychological Science*, *8*, 177-180.
- Swann, W. B. (2012). Self-verification theory. In P. Van Lang, A. Kruglanski & E. T. Higgins (Eds.), *Handbook of Theories of Social Psychology* (pp. 23-42). London: Sage.
- Swann, W. B., Wenzlaff, R. M., Krull, D. S., & Pelham, B. W. (1992). Allure of negative feedback: Self-verification strivings among depressed persons. *Journal of Abnormal Psychology*, *101*, 293-306.
- Watson, D., Clark, L., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: The PANAS scales. *Journal of Personality and Social Psychology*, *54*, 1063-1070.
- Williams, J. M., & Nulty, D. D. (1986). Construct accessibility, depression, and the emotional Stroop task: Transient mood or stable structure? *Personality and Individual Differences*, *7*, 485-491.
- Wisco, B. E. (2009). Depressive cognition: Self-reference and depth of processing. *Clinical Psychology Review*, *29*, 382-392. doi: 10.1016/j.cpr.2009.03.003.

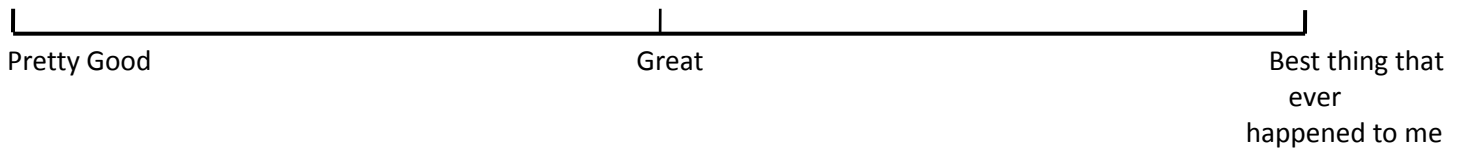
Wood, A. M., Maltby, J., Gillett, R., Linley, P. A., & Joseph, S. (2008). The role of gratitude in the development of social support, stress, and depression: Two longitudinal studies. *Journal of Research in Personality, 42*, 854-871.

Appendix A

Please take a moment to think about the things that have made you happiest within approximately the last two years. These can include concrete events such as going on vacation, getting a date with someone you like, and so on. They can also include states of mind such as connecting with God or some higher power, and so on. Please list below three of these positive events or states of mind that stand out to you.

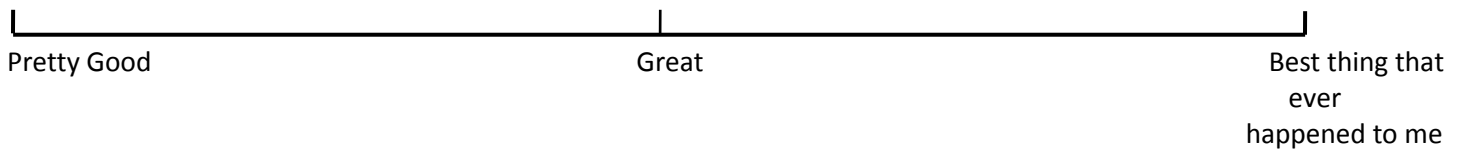
1. Event: _____

Please make an "x" along the line to rate your current feelings about this event.



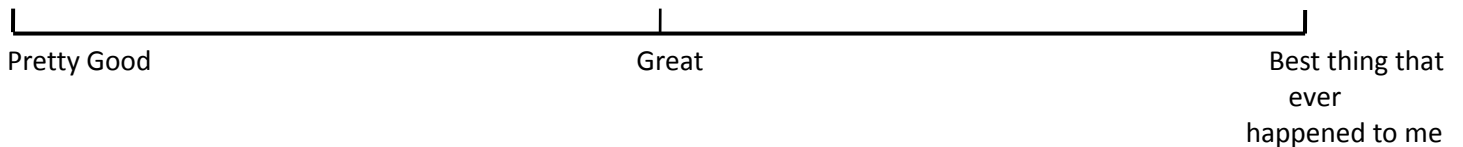
2. Event: _____

Please make an "x" along the line to rate your current feelings about this event.



3. Event: _____

Please make an "x" along the line to rate your current feelings about this event.



Appendix B

Positive and Negative Events Life Questionnaire

Think about all of your **social relationships** – this can include your family, friends, romantic partner, roommates, or any other people in your life. Please list the positive events or issues that have happened or affected you during these two weeks. These can include things like spending enjoyable time with someone (in-person, on phone, or on email), standing up for yourself, being forgiven or forgiving someone, getting attention from someone you like, receiving recognition or praise, receiving or giving support, reassurance, comfort, or help, going on a date, flirting, being physically affectionate or sexually intimate, thinking about how much you care about someone, or being told or telling someone that you care about them. These are all just examples – please list any positive events or issues in your relationships that have affected you these past 2 weeks. It’s ok if you already included some of these events in an earlier section of this survey.

Now, think about your **classes and schoolwork**. Please list the positive events or issues that have happened or affected you during these two weeks. These can include things like studying hard for or doing well on an exam or assignment, getting work done or completing an important activity or project, class being cancelled or getting out early, figuring out something confusing, learning something exciting, enjoying class, receiving recognition or praise, finishing applications, going on an interview, deciding to study abroad, or getting accepted into a program. These are all just examples – please list any positive events or issues with your classes and schoolwork that have affected you these past 2 weeks.

Now, if you happen to have a **job**, please list the positive events or issues that happened or affected you during these two weeks. These can include things like getting paid, working hard, getting a raise, work being cancelled, learning something new, receiving recognition or praise, or getting a promotion. These are all just examples – please list any positive events or issues with your job that have affected you these past 2 weeks.

Now, think about your **health and body**. Please list the positive events or issues that have happened or affected you during these two weeks. These can include things like exercising, playing sports, getting over an illness, gaining, losing, or maintaining weight, catching up on sleep, or getting to relax. These are all just examples – please list any positive events or issues with your health and body that have affected you these past 2 weeks.

Now, think about the **other activities** you’ve participated in. Please list the positive events or issues that have happened or affected you during these past two weeks like going out to eat, cooking, watching something special on TV, going to a movie, show, or concert, participating in a school club, reading a good book, buying something special, going to place of religious worship, traveling, or partying. These are all just examples – please list any positive events or issues from your activities that have affected you these past 2 weeks.

For each event listed, participants were asked:

- How significant was this event to you? (0 = *not all significant*, 1 = *a little significant*, 2 = *moderately significant*, and 3 = *incredibly significant*).
- How positive was this event? (0 = *not at all positive*, 1 = *a little positive*, 2 = *moderately positive*, and 3 = *incredibly positive*).
- Did you tell anyone about this event (other than the person you may have experienced the event with)? (y/n).

If yes:

- Who have you told about this event? Please select all that apply:
(friend/roommate/sibling/parent/romantic interest or romantic partner/other).
- Who was the first person you remember telling about this event?
friend/roommate/sibling/parent/romantic interest or romantic partner/other
- Was the first person you told a part of the event? (no/yes)

Please think about the first person you told about this event.

The first person I shared this positive event with ... (1 = not at all true, 5 = very true)

- Reacted enthusiastically to my good event
- Pointed out the potential problems or down sides of the good event
- Said little, but I knew he/she was happy for me
- Seemed disinterested

Keep thinking about the first person you told. When you told this first person about the positive event... (0 = *not at all*, 1 = *very little*, and 5 = *a great deal*)

- How understood did you feel by that person?
- How validated did you feel by that person?
- How accepted did you feel by that person?
- How cared for did you feel by that person?
- How much closeness did you experience with that person?
- How supported did you feel by that person?
- To what extent did you consider (or would you have considered) giving up something important to yourself to help that person do something important for him/her?
- That day, if she/he had done something rude or unpleasant (intentionally or unintentionally), to what extent would you have been willing to put aside your hurt feelings and respond nicely?
- That day, to what extent did you go out of your way to do something nice for him/her?

Please think about the last two weeks. We are going to be asking you questions about problems or stressful events or issues that have occurred or affected you during these last **two** weeks.

Now, think about all of your **social relationships** – this can include your family, friends, romantic partners, roommates, or any other people in your life. Please list the problems or stressful events or issues that have occurred or affected you during these last two weeks. These can include things like not hearing from someone, hurting someone’s feelings or having your feelings hurt, not speaking to someone, thinking about ending a relationship or having a relationship end, having a disagreement or conflict, trying to give someone support, reassurance, or comfort, someone close becoming ill or dying, feeling ignored or left out, jealous, or embarrassed, getting insulted, getting unsolicited or unhelpful advice, feeling like you disappointed someone or they disappointed you, having an awkward or uncomfortable interaction, feeling pressure to do something for or with someone, rejecting or getting rejected for advances for physical affection or sex, or having a bad sexual encounter. These are all just examples– please list any negative or stressful events or issues in your relationships that have affected you these past 2 weeks.

Now, think about your **classes and schoolwork**. Please list the problems or stressful events or issues that have occurred or affected you during these last two weeks such as exams or assignments, not getting as much work done as you hoped, procrastinating or wasting time, studying, feeling stressed or overwhelmed with work, feeling bored in class, not understanding something, falling asleep in class, not getting the grade you hoped for, missing a meeting, not getting a desired course, being accused of misconduct (e.g., cheating, plagiarism), or not getting accepted for something you applied for. These are all just examples – please list any negative or stressful events or issues with your classes and schoolwork that have affected you these past 2 weeks.

Now, if you happen to have a **job**, please list the problems or stressful events or issues that have occurred or affected you during these two weeks. These can include things like having a difficult boss, not getting along with co-workers, not getting paid enough, feeling stressed about work, working overtime or more than expected, having difficult customers, getting negative feedback, feeling like work is interfering with your schoolwork or time to relax, not getting an expected raise or promotion, or getting fired. These are all just examples – please list any negative or stressful events or issues with your job that have affected you these past 2 weeks.

Now, think about your **health and body**. Please list the problems or stressful events or issues that have happened or affected you during these two weeks. These can include things like feeling sick, getting an injury, feeling hung over, waking up early or feeling tired, oversleeping, gaining, maintaining, or losing weight, overeating, not having a chance to exercise, doing badly in a sports game, having a bad workout, or not being able to relax. These are all just examples – please list any negative or stressful events or issues with your health and body that have affected you these past 2 weeks.

Now, think about the **other activities** you've participated in (or haven't had a chance to participate in). Please list the problems or stressful events or issues that have happened or affected you during these past two weeks such as spending too much money, running out of money, forgetting to do something, not getting to do something, losing or misplacing something, getting stuck in traffic, reading a bad book, getting stuck in bad weather, or watching a bad movie, TV show, show, or concert. These are all just examples – please list any negative or stressful events or issues from your activities that have affected you these past 2 weeks.

For each event listed, participants were asked:

- How significant was this event to you? (0 = *not all significant*, 1 = *a little significant*, 2 = *moderately significant*, and 3 = *incredibly significant*).
- How negative was this event? (0 = *not at all negative*, 1 = *a little negative*, 2 = *moderately negative*, and 3 = *incredibly negative*).
- Did you tell anyone about this event (other than the person you may have experienced the event with)? (y/n).

If yes:

- Who have you told about this event? Please select all that apply:
(friend/roommate/sibling/parent/romantic interest or romantic partner/other).
- Who was the first person you remember telling about this event?
(friend/roommate/sibling/parent/romantic interest or romantic partner/other)
- Was the first person you told a part of the event? (no/yes)

Keep thinking about the first person you told. When you told this person about the negative event (0 = not at all, 1 = very little, 5 = a great deal)...

- How understood did you feel by that person?
- How validated did you feel by that person?
- How accepted did you feel by that person?
- How cared for did you feel by that person?
- How much closeness did you experience with that person?
- How supported did you feel by that person?
- To what extent did you consider (or would you have considered) giving up something important to yourself to help that person do something important for him/her?
- That day, if she/he had done something rude or unpleasant (intentionally or unintentionally), to what extent would you have been willing to put aside your hurt feelings and respond nicely?
- That day, to what extent did you go out of your way to do something nice for him/her?

Appendix C

Ranking Preference for Event Discussion

Please rank these events based on your preference for discussing them with the interviewer.

_____ 1. Event: _____

_____ 2. Event: _____

_____ 3. Event: _____

_____ 4. Event: _____

_____ 5. Event: _____

_____ 6. Event: _____

Appendix D

Feelings Toward Positive Activity Partners.

Now, we want you to switch your attention from the interviewer to your experiences over the past two weeks. Can you think of a positive activity you engaged in these past 2 weeks with just one other person, like a family member, friend, romantic partner, or roommate? You may be thinking of a positive event such as going to dinner with this person, going on a walk together -- any activity when it was just you and one other person. Can you think of one activity?

For each event listed (up to three), participants were asked:

- Who did you participate in this activity with? (friend/roommate/sibling/parent/romantic interest or partner/other)
- How significant was this event to you? (0 = *not all significant*, 1 = *a little significant*, 2 = *moderately significant*, and 3 = *incredibly significant*)
- How positive was this event? (0 = *not at all positive*, 1 = *a little positive*, 2 = *moderately positive*, and 3 = *incredibly positive*).

- Please answer the following questions using the scale where 0 = *not at all*, 1 = *very little*, and 5 = *a great deal*. After you participated in this activity...
 - How understood did you feel by that person?
 - How validated did you feel by that person?
 - How accepted did you feel by that person?
 - How cared for did you feel by that person?
 - How much closeness did you experience with that person?
 - How supported did you feel by that person?
 - To what extent did you consider (or would you have considered) giving up something important to yourself to help that person do something important for him/her?
 - That day, if she/he had done something rude or unpleasant (intentionally or unintentionally), to what extent would you have been willing to put aside your hurt feelings and respond nicely?
 - That day, to what extent did you go out of your way to do something nice for him/her?