

**BE CAREFUL WHAT YOU ASK FOR:  
HOW HIGHLY INCLUSIVE LEADERS DIMINISH  
UPWARD COMMUNICATION QUALITY**

John J. Sumanth

A dissertation submitted to the faculty of the University of North Carolina at Chapel Hill in fulfillment of the requirements for the degree of Doctor of Philosophy in the Kenan-Flagler Business School (Dept. of Organizational Behavior).

Chapel Hill  
2011

Approved by:

Daniel M. Cable

Alison R. Fragale

Adam M. Grant (Co-Chair)

David A. Hofmann (Chair)

Joshua D. Margolis

©2011  
John J. Sumanth  
ALL RIGHTS RESERVED

## **ABSTRACT**

JOHN J. SUMANTH: Be Careful What You Ask For: How Highly Inclusive Leaders Diminish Upward Communication Quality  
(Under the direction of David A. Hofmann and Adam M. Grant)

As organizations have come to realize the value of having employees offer ideas, suggestions, and observations that can improve organizational effectiveness, scholars have sought to better understand how leaders can cultivate higher levels of upward communication within their organizations. To date, research has shown that leaders who signal inclusiveness and openness to their followers' ideas and concerns are able to create a psychologically safe environment that encourages individuals to take the risk of communicating upwards. However, an implicit and untested assumption across this literature is that inclusive leadership also has a similar positive effect on the quality of communication subordinates provide. In this dissertation, I challenge conventional wisdom that "more is better" by suggesting that highly inclusive leaders may elicit a higher quantity of upward communication from their followers, but potentially a lower quality. Drawing from established literatures on motivation, social exchange and self-censorship, I propose and find evidence for an inverted U-shaped relationship between inclusive leadership and individuals' upward communication quality, such that both highly exclusive and highly inclusive leaders negatively influence the quality of comments individuals provide. In doing so, I advance established theory by providing conceptual and empirical guidance on how managers should be mindful of the benefits of inclusive leadership while recognizing its potential costs.

To Jaya and Miah, whose love and laughter reminds me of what is most important.

## **ACKNOWLEDGEMENTS**

To the casual observer, a doctoral dissertation may appear to be a solitary endeavor. However, to complete a project of this magnitude requires a broad network of support, and I am indebted to many people for helping, inspiring and encouraging me along the way. First, I am profoundly grateful to my dissertation chair, Dave Hofmann, co-chair, Adam Grant, and the members of my dissertation committee – Alison Fragale, Dan Cable and Joshua Margolis – for the countless hours of time and energy they invested in my growth and development as both a researcher and teacher these past several years. Their continual guidance, encouragement and challenging feedback have sharpened and expanded my thinking in numerous ways, and without their help, I would not have reached this significant milestone. I am also thankful to the entire Organizational Behavior (OB) faculty and staff here at the Kenan-Flagler Business School for their support and commitment to me these past five years, and to my fellow OB doctoral students who have helped to make this shared experience both rewarding and memorable. And, last but not least, I am especially grateful to my family – my parents, David and Chaya, whose encouragement and prayers have sustained me, my wife Jaya, whose love and innumerable sacrifices have enabled me to pursue this lifelong dream, and my beautiful daughter Miah, whose life is a gift from God that I am in awe of each and every day.

## TABLE OF CONTENTS

LIST OF TABLES.....	ix
LIST OF FIGURES.....	xi
LIST OF ABBREVIATIONS AND SYMBOLS.....	xii
Chapter	
I. INTRODUCTION.....	1
II. THEORIES OF LEADERSHIP AND INCLUSIVENESS .....	11
Transformational Leadership.....	13
Participative Leadership.....	16
Empowering Leadership.....	17
Shared Leadership.....	19
III. THEORIES OF UPWARD COMMUNICATION.....	22
Employee Voice.....	22
Issue-selling and Issue-crafting.....	26
Upward Influence.....	29
Upward Feedback .....	30
IV. UPWARD COMMUNICATION: MOVING FROM QUANTITY TO QUALITY ...	32
V. THE INFLUENCE OF INCLUSIVE LEADERSHIP ON THE QUANTITY AND QUALITY OF UPWARD COMMUNICATION .....	38
<i>Hypothesis 1</i> .....	39
<i>Hypothesis 2</i> .....	47

<i>Hypothesis 3</i> .....	49
<i>Hypothesis 4</i> .....	51
<i>Hypothesis 5</i> .....	53
<i>Hypothesis 6</i> .....	53
<i>Hypothesis 7</i> .....	56
<i>Hypothesis 8</i> .....	56
<i>Hypothesis 9</i> .....	57
<i>Hypothesis 10</i> .....	60
<i>Hypothesis 11</i> .....	61
<i>Hypothesis 12</i> .....	61
<i>Hypothesis 13</i> .....	64
<i>Hypothesis 14</i> .....	64
VI. STUDY 1.....	66
<i>Sample</i> .....	66
<i>Measures</i> .....	68
<i>Results</i> .....	70
<i>Discussion</i> .....	74
VII. STUDY 2.....	76
<i>Sample</i> .....	76
<i>Measures</i> .....	78
<i>Tested Mediators</i> .....	79
<i>Results</i> .....	81
<i>Trend Analysis</i> .....	83

<i>Analytic Approach to Testing Mediation</i> .....	85
<i>Tests of Mediation – Results</i> .....	86
<i>Discussion</i> .....	89
VIII. STUDY 3 .....	95
<i>Sample</i> .....	95
<i>Study Design</i> .....	96
<i>Measures</i> .....	97
<i>Tested Mediators</i> .....	98
<i>Results</i> .....	100
<i>Tests of Mediation – Results</i> .....	102
<i>Discussion</i> .....	109
<i>Supplemental Analysis</i> .....	112
IX. GENERAL DISCUSSION .....	123
X. FUTURE RESEARCH .....	129
REFERENCES .....	134



## LIST OF TABLES

### Table

1. Study 1 - Means, Standard Deviations and Correlations Among All Tested Variables.....	70
2. Study 1 - Results of Hierarchical Regression Analysis with Student Satisfaction as a Predictor of Upward Communication (UC) Quantity and Upward Communication (UC) Quality.....	73
3. Study 1 - Results of Hierarchical Regression Analysis without Student Satisfaction as a Predictor of Upward Communication (UC) Quantity and Upward Communication (UC) Quality.....	73
4. Study 2 – Mean Differences in Upward Communication Quantity and Quality across Low, Moderate and High Inclusive Leadership Conditions.....	82
5. Study 2 – Tests of Mediation (Hypotheses 3a-6b).....	92
6. Study 2 – Tests of Mediation (Hypotheses 7-10).....	93
7. Study 2 – Tests of Mediation (Hypotheses 11a-14).....	94
8. Study 3 - Means, Standard Deviations and Correlations Among All Tested Variables.....	101
9. Study 3 - Results of Hierarchical Regression Analysis Predicting Upward Communication (UC) Quantity and Upward Communication (UC) Quality.....	102
10. Study 3 - Tests of Mediation (Hypotheses 3a -8).....	107
11. Study 3 – Tests of Mediation (Hypotheses 9a-14).....	108
12. Study 3 – Supplemental Analysis: Means, Standard Deviations and Correlations Among all Tested Variables.....	115

13. Study 3 - Supplemental Analysis: Results of Hierarchical Regression Analysis – LMX Predicting Upward Communication (UC) Quantity and Upward Communication (UC) Quality.....	118
14. Study 3 – Supplemental Analysis: Tests of Mediation (Hypotheses 3a -8).....	119
15. Study 3 – Supplemental Analysis: Tests of Mediation (Hypotheses 9a -14).....	120

## LIST OF FIGURES

Figure

1. The Influence of Inclusive Leadership on Upward Communication Quantity and Quality.....65
2. Study 1 - MBA Students' Upward Communication Quality as a Function of Faculty Members' Perceived Inclusiveness.....74
3. Study 3 – Supplemental Analysis: Upward Communication Quality as a Function of Leader-Member Exchange (LMX).....117

## LIST OF ABBREVIATIONS AND SYMBOLS

LMX	Leader-Member Exchange
OB	Organizational Behavior
UC	Upward Communication
$\alpha$	Cronbach's Alpha
$b$	Unstandardized regression coefficient
$\beta$	Standardized regression coefficient
<i>n.s.</i>	Not significant

## I. INTRODUCTION

*“Too much of a good thing can be taxing.” ~ Mae West*

As the global economy continues to become increasingly competitive and knowledge-based, organizations have sought to leverage their human capital more effectively by encouraging frontline employees to “speak up” with new ideas that may help enhance organizational effectiveness (Van Dyne & LePine, 1998; George, 2007; Pfeffer, 1998; Powell & Snellman, 2004). Unfortunately for firms, getting employees to share their insights with management is not always an easy task. Research suggests that the fear of negative repercussions (Kish-Gephart, Detert, Treviño & Edmondson, 2009; Morrison & Milliken, 2000; Ryan & Oestrich, 1998; Dutton & Ashford, 1993) prevents many employees from communicating openly and honestly with management, causing them to remain silent across a wide variety of important organizational issues (e.g., Cortina & Magley, 2003; Detert & Treviño, 2010; Miceli, Near, & Dworkin, 2008).

Given this widespread and pervasive problem of organizational silence (Morrison & Milliken, 2000), scholars have sought to better understand how organizational leaders can minimize followers’ fears and encourage them to communicate their ideas, observations and concerns. Research suggests that one of the best ways leaders can encourage upward communication – defined as “openly stating one’s views or opinions about workplace matters, including the actions or ideas of others, suggested or needed changes, or alternative approaches or different lines of reasoning for addressing job-related issues” (Premeaux &

Bedeian, 2003, p.1538) – is by developing a psychologically safe environment.

Psychologically safe environments are characterized by high levels of mutual respect among members and help individuals take the interpersonal risk of expressing differences openly and honestly (Edmondson, 1996, 1999, 2003; Detert & Burris, 2007). Perhaps unsurprisingly, empirical evidence has shown that these safe, inclusive environments provide numerous organizational and individual benefits, including greater learning among colleagues (Carmeli & Gittell, 2009; Carmeli, Brueller, & Dutton, 2009; Edmondson, 1999), higher employee engagement and job satisfaction (Vogelgesang, 2008; Edmondson, 1996; Nembhard & Edmondson, 2006) improved decision-making (De Dreu & West, 2001; Roberto, 2002), enhanced innovation and creativity (West, 1990; Mumford & Gustafson, 1988; Edmondson, 2004), reduced accidents and safer workplaces (Christian, Bradley, Wallace, & Burke, 2009; Hofmann & Stetzer, 1996) and stronger financial performance (Baer & Frese, 2003; Lockwood, 2007). In this way, employees who communicate their ideas and concerns to powerful decision-makers can be an important and valuable source of change within their organizations (Frohman, 1997; Zhou & George, 2001; Dutton, Ashford, O'Neill, & Lawrence, 2001).

For these reasons, understanding how leaders can create work environments that encourage upward communication is a question of growing importance for both scholars and practitioners alike. Recent perspectives suggest that one way leaders can do this effectively is by being inclusive and open to employees' ideas and concerns (Edmondson, 1999; Nembhard & Edmondson, 2006; Detert & Burris, 2007; Carmeli, Reiter-Palmon, & Ziv, 2010). For example, in studying a team-based neonatal medical unit, Nembhard and Edmondson (2006, p. 947) discovered that perceptions of a leader's inclusiveness, which

they defined as “words and deeds by a leader or leaders that indicate an invitation and appreciation for others’ contributions,” predicted higher levels of employee engagement in process improvement work through the mechanism of psychological safety. In addition, in a large-scale field study of restaurant employees and managers, Detert and Burris (2007) showed that managers’ openness to employees’ ideas and suggestions was positively associated with employees’ frequency of speaking up. Building on these works, Carmeli, Reiter-Palmon, and Ziv (2010) recently demonstrated that inclusive leadership predicted individuals’ engagement in creative work. Specifically, they found that “...when leaders are open, accessible, and available to discuss new ideas with employees, they cultivate a social context in which people feel that they are psychologically safe to voice, speak up, and come up with novel and useful solutions” (p.256). Together, this emerging body of empirical evidence suggests that a leader’s willingness to be receptive, inclusive and open to others’ ideas can help create psychological safety for followers, which in turn, helps them take the risk of communicating upwards in ways that may challenge the organizational status quo.

Yet, despite the positive impact highly inclusive leaders seemingly have on increasing the *amount* of ideas and suggestions subordinates provide, questions remain as to whether or not such leaders also receive *better* ideas from their followers. To date, scholars have focused primarily on understanding how leaders affect the quantity of subordinates’ upward communication, without paying sufficient attention to the quality of this communication. This oversight is both surprising and unfortunate particularly in light of organizations’ perpetual need for high quality ideas (Tushman & O’Reilly, 2002) and the extensive amount of time, energy and resources they spend designing systems and processes with quality considerations in mind (Yong & Wilkinson, 2001; Powell, 1995). Ever since the late 1970s

and early 1980s ushered in the era of total quality management (TQM), Six Sigma, Kaizen and a host of other quality control measurement systems (Goldman, 2005; Hackman & Wageman, 1995), an emphasis on increasing quality across products, processes, and resources has been at the center of leaders' stated goals. This focus on increased quality has more recently found its way down to an idea level of analysis as a necessary precursor for innovation. For instance, Terwiesch and Ulrich (2009) argued that leaders must not simply rely on identifying raw opportunities or ideas for organizational improvement. Rather, leaders must invest in a more systematic evaluation and refining of those ideas to achieve innovative, quality solutions.

Yet, perhaps due to the fuzzy nature of "quality" as an easily definable and observable construct, this quality-first mindset has yet to pervade scholarly thinking on a wide variety of organizational issues, including upward communication. As Grant and Ashford (2008) observed in their review of the proactivity literature, scholars have spent a disproportionate amount of time and effort on predicting the frequency and volume of employees' proactive behaviors, while little to no attention has been paid to understanding whether or not these behaviors are ultimately useful or effective. One glaring example of this myopia is the implicit and untested assumption throughout the upward communications' literature that the more open and inclusive the leader is to subordinates' input, the better.

However, both anecdotal and research evidence seem to suggest that a leader's inclusiveness may actually have a 'dark side,' offering positive returns only up to a certain inflection point before these benefits start to diminish. For instance, on one end of the inclusiveness spectrum, leaders who are not particularly open or receptive to their followers' input are likely to find their subordinates distrustful of management and desirous of



opportunities to make their opinions known (Korsgaard & Roberson, 1995; Cook, Kramer, Thom, Stepanikova, Mollborn, & Cooper, 2004). This kind of exclusive leader can fuel individuals' fear and anxiety about communicating upward, leading them to generate poorer-quality ideas (e.g., Staw, Sandelands, & Dutton, 1981). When individuals are fearful about speaking up, they may experience greater pressure to perform and may not be able to concisely articulate their point of view to management. As a result, the overall quality of communication they share with their supervisor may be poorer. Less inclusive leaders may also lower individuals' quality of upward communication by increasing their apprehension about being evaluated, even if employees have good ideas worth sharing (e.g., Leary, 1983; Paulus & Yang, 2000). By making it uncomfortable for employees to speak up, leaders may find their followers unwilling to challenge management and/or prevailing organizational assumptions. As a result, leaders may only end up hearing what they want to hear, rather than what they need to hear (Van Dyne, Ang, & Botero, 2003). In this way, leaders who are unwilling to consider and/or act upon their followers' input are likely to find that the quality of upward communication they receive is generally lower because of individuals' unwillingness to express creative, unconventional ideas that challenge prevailing organizational norms.

At the other end of the inclusiveness spectrum, however, leaders face a far different challenge. Highly inclusive leaders who invite and appreciate others' input (Nembhard & Edmondson, 2006) may unintentionally create a work climate where psychological safety is so rampant that individuals relax their standards and tendencies towards self-censorship to the point that they frequently express irrelevant, ill-formed comments and suggestions that do not further the organization's goals and objectives. Because psychological safety lowers the

perceived risk of speaking up and reinforces individuals' belief that there are no negative consequences for doing so, individuals may be less motivated to put forth the cognitive effort necessary to provide high quality input. Given that individuals are often prone to take the path of least cognitive resistance (e.g., Taylor & Fiske, 1978; Latané, Williams, & Harkins, 1979) highly inclusive leaders may find that encouraging and inviting upward communication may not actually produce very many novel or useful ideas that truly enhance organizational effectiveness. Instead, leaders may get a large muddy pool of thoughts and suggestions that have no clear relevance or strategic benefit for the organization.

To illustrate, consider the case of BP, which encouraged the public to submit their ideas and suggestions on how to stop the massive oil well leak in the Gulf of Mexico last summer. Although part of the motive behind opening up this idea forum may have been driven by public relations concerns on the part of BP's leadership (particularly in light of their CEO's numerous and untimely verbal gaffes), the results of BP's online suggestion box produced over 35,000 ideas, of which 99 percent never received serious consideration for implementation (Crandell, 2010). Instead of securing a few well-conceived ideas that may have held greater promise, taking a highly inclusive approach produced a large number of bad ideas that cost the company significant time and money by diverting important resources away from the core problem.

This example illustrates the very real and practical conundrum leaders' face in trying to determine just how inclusive they should be. Although, highly inclusive leaders can help to alleviate individuals' fears about speaking up, in doing so they may simultaneously reduce individuals' motivation to engage in effortful cognitive processing and self-filtering of ideas for quality. In this way, an overabundance of psychological safety created by the leader's

inclusive style may actually be harmful to the organization's goal of obtaining high quality comments that effectively address workplace issues.

In light of this evidence pointing to how both low and high levels of inclusive leadership can produce a lower overall quality of upward communication, a logical question emerges – does an optimal “sweetspot” of inclusive leadership exist? While existing research on the topic is still sparse, both classical and emerging perspectives on human behavior and an observance of curvilinear relationships across various psychological constructs provide general support for such a possibility. For example, years ago Coombs and Avrunin (1977, p. 224) used a series of mathematical functions to make the simple, but profound argument that “good things satiate, bad things escalate.” They argued that whereas positive influences for human survival, such as food, water, and even sexual activity, reach a tipping point at which they no longer satisfy individuals' hedonistic desires, bad things, such as a dripping faucet or monotonous music can increase irritation and frustration to no end. This perspective suggests that although inherently good things momentarily placate and satisfy individuals' needs and desires, they do not continue ad infinitum. Echoing these concerns, Grant and Schwartz (2011) more recently highlighted the danger of scholars' overreliance on predicting linear relationships in psychological research, arguing instead for further exploration and investigation into more complex, inverted U-shape functions. As evidence for why monotonic relationships may under represent organizational phenomenon, Grant and Schwartz (2011) suggested that well-established psychological virtues, such as wisdom and knowledge, humanity and love, courage and justice, all exhibit serious costs that limit their supposed infinite benefits.

Drawing upon this logic for the study of inclusive leadership and upward communication suggests that leaders who are open and accessible may find only limited benefits of their inclusive approach beyond an optimal midpoint. This view has been generally supported in field research by Ames and Flynn (2007), who demonstrated an inverted U-shaped relationship between assertiveness and perceptions of leadership effectiveness. Across multiple field studies, they found that moderate levels of assertiveness facilitated the achievement of organizational outcomes, but high levels of assertiveness fostered negativity in interpersonal relationships, which reduced perceived leadership effectiveness. This evidence suggests that inherently effective leadership approaches, such as assertiveness or inclusiveness, may be detrimental at the far ends of the continuum. In addition, Fleishman and Harris (1962) showed that increased leader consideration or decreased structure did not predict lower turnover rates among a sample of production foreman. Rather, grievances and turnover were found to increase most markedly at the extreme ends of the leader consideration (low end) and structure (high end) scales, further suggesting that the relationship between leadership, grievances and turnover was curvilinear, rather than linear.

In short, this body of work suggests that neither a very low, nor a very high level of inclusive leadership will yield optimal results if a leader's goal is to get the highest quality of ideas from his/her workforce. Rather, a more moderate level of inclusiveness may be the optimal strategy for leaders to adopt if they are to obtain high quality input that truly helps their organizations innovate and gain a competitive advantage. For these reasons, the strong positive association between leader inclusiveness and upward communication found in prior empirical work may actually be more complex and nuanced than originally thought.

Therefore, a more thorough investigation into the form of the relationship between inclusive leadership and upward communication is needed to provide greater conceptual clarity around how inclusive leadership influences individuals' motivation to speak up well.

In this dissertation, I challenge conventional wisdom that “more is better” by arguing that highly inclusive leaders may elicit a higher quantity of ideas from their followers, but potentially a lower quality of ideas as well. Drawing from well-established theories on motivation, social exchange, and self-censorship, I propose and test an inverted U-shaped relationship between inclusive leadership and upward communication quality across three separate studies (archival, lab and field), in an effort to provide triangulated evidence (Campbell & Fiske, 1959) for this phenomenon. In doing so, I contribute to the growing upward communication and leadership literatures in three important ways: (a) first, by shifting researchers' sole focus away from the quantity of upward communication leaders receive towards a more holistic view of both quantity and quality, (b) second, by demonstrating how important contextual forces, such as inclusive leadership, that are conducive to increasing the quantity of individuals' upward communication, may have more mixed implications for the quality of this communication, and (c) third, by highlighting the hidden costs and pitfalls associated with inclusive leadership.

I begin this discussion by first reviewing the expansive literatures on leadership and upward communication. Specifically, I highlight several specific leadership constructs that are related to the broader conceptual idea that leaders can be open and receptive to input from others, as well as several upward communication-related constructs that closely mirror the broader idea of leader-directed input. Next, I highlight the different ways in which the relationship between inclusive leadership and upward communication has been studied in

prior research, and how this evidence and related social psychological work might inform my predictions about inclusive leadership and upward communication quality. Third, I empirically test my conceptual model and hypotheses across three different studies (archival, lab and field) in an effort to provide triangulated evidence for how high levels of inclusive leadership can lower followers' quality of upward communication at both low and high levels. Finally, I discuss the strengths and limitations of this research, discuss the implications of this work for both theory and practice and suggest avenues for future research.

## II. THEORIES OF LEADERSHIP AND INCLUSIVENESS

The idea that leaders can be inclusive, open and receptive to employee input is not a new one, given the numerous theoretical perspectives that have emerged on the topic over the past several decades (e.g., Avolio, Walumbwa, & Weber, 2009; Yukl, 1994; Vroom & Yetton, 1973). However, recent conceptualizations of leader inclusiveness and how they relate specifically to individuals' propensity to express upward communication to management have arisen primarily from two empirical studies by Nembhard and Edmondson (2006) and Detert and Burris (2007). Despite the theoretical advances made through this work, the concept of leader inclusiveness remains elusive, as research has only begun to scratch the surface of what it actually means to be inclusive as a leader and the specific behaviors followers perceive as inclusive or not.

According to Nembhard and Edmondson (2006), leader inclusiveness can be defined as "*words and deeds by a leader or leaders that indicate an invitation and appreciation for others' contributions*" (p.947). In providing justification for how this construct differs from existing perspectives, Nembhard and Edmondson (2006) offer the following explanation:

"Leader inclusiveness captures attempts by leaders to include others in discussions and decisions in which their voices and perspectives might otherwise be absent. It is related to team leader coaching behavior, which describes team leader behaviors that facilitate group process and provide clarification and feedback (Baron, 1990; Edmondson, 1999), and to participative leadership, which describes leaders that consult with workers, participate in shared decision-making and delegate decision-making authority to subordinates (Bass, 1990; McGregor, 1960; Yukl, 1994). Leader inclusiveness differs from these constructs in that it directly pertains to situations characterized by status or power differences and pertains more narrowly to behaviors that invite and acknowledge others' views" (p. 947).

In other words, for leaders to be inclusive there must be some perceived difference in formal status and authority that makes their acts of inclusiveness stand out when juxtaposed against their hierarchical position. Yet, despite the intuitive nature of this definition that suggests applicability to a variety of contexts, Nembhard and Edmondson (2006) defined the construct of leader inclusiveness specifically for a medical environment, using items adapted from Shortell and colleagues' (1991) physician leadership scale. Thus, this raises questions as to whether or not Nembhard and Edmondson's (2006) conceptualization of leader inclusiveness is generalizable across a broader set of industries, jobs and work settings. In an effort to build upon this work, Detert and Burris (2007) offered a related construct they called leader openness, defined as "*subordinates' perceptions that their boss listens to them, is interested in their ideas, gives fair consideration to the ideas presented, and at least sometimes takes action to address the matter raised*" (p.871). Although similar to Nembhard and Edmondson's (2006) leader inclusiveness construct, this definition of leader openness provides subtle, but important distinctions. For instance, while leader inclusiveness focuses more on the participative and emotional aspects of leaders' behaviors (i.e., does the leader involve others in decisions by seeking and appreciating their input), leader openness goes beyond this by emphasizing leaders' fairness in evaluating ideas, and highlighting the degree to which they act upon employees' suggestions. In this way, leader openness mirrors prior work on management openness (Ashford, Rothbard, Piderit, & Dutton, 1998; House & Rizzo, 1972) that looks at specific behaviors top management teams take to create a favorable context for raising issues and expressing ideas. However, an important limitation of Detert and Burris' (2007) definition is that leader openness is constrained to subordinates' perceptions of their direct supervisor, which limits the ability of the construct to tap into



other work-relationships (e.g., project teams, informal committees, etc.) and organizational structures (e.g., matrix organizations) where leadership is more emergent and not solely defined by the dyadic leader-member interaction (Morgeson, DeRue, & Karam, 2010; Bell & Kozlowski, 2002).

Given these small, but important conceptual distinctions between these constructs, I seek to bridge these gaps by offering an integrated definition of leader inclusiveness and leader openness that potentially offers greater generalizability and utility for researchers going forward. Specifically, I define *inclusive leadership* as: “*Individuals’ perceptions that a leader is receptive to feedback and input, as demonstrated by behaviors and acts of communication (both written and verbal) that show a willingness to listen to individuals’ ideas, to consider them fairly, and to potentially act upon them.*”

One benefit of viewing leader inclusiveness from this slightly broader perspective is that individuals’ perceptions of leaders’ inclusiveness are not limited solely to the views of subordinates, as they are in the definition of leader openness, but can be expanded to consider multiple sources in future research, such as subordinates, peers, customers or supervisors. In this way, multiple measures of leader inclusiveness can be aggregated together to form a more robust assessment of whether or not a leader is truly inclusive. Having provided my operational definition of inclusive leadership, I now highlight other closely related leadership constructs that help fill the nomological net of inclusive leadership.

### Transformational Leadership

Ever since Burns (1978) and Bass (1985) signaled the need to shift the focus of leadership research from more transactional models of leadership to more charismatic, visionary and inspiring leadership forms, the concept of transformational leadership has

grown into one of the most frequently researched theories over the past 20 years (Avolio, 2005; Lowe & Gardner, 2000; Bono & Judge, 2004). Although this theory is multi-dimensional and suggests that transformational leaders provide their followers with intellectual stimulation, inspirational motivation and idealized influence (e.g., Avolio, 1999; Bass, 1985; Conger & Kanungo, 1998; Howell & Hall-Merenda, 1999), perhaps most relevant for our understanding of how transformational leadership relates specifically to inclusive leadership is its fourth dimension of individualized consideration.

When transformational leaders provide individualized consideration, they tend to their followers' individual and collective needs, act as a mentor/coach and listen to their followers' concerns and suggestions. In the language of inclusive leadership, transformational leaders "invite and appreciate" input from others. By providing empathy and support for their followers and by keeping the lines of communication open, transformational leaders help individuals feel cared for and respected. By doing so, leaders can encourage their followers to be more loyal, committed and devoted to them (Johns & Saks, 2005). Although transformational leadership has provided equivocal results as a positive predictor of individuals' performance in the past (e.g., Dvir, Eden, Avolio, & Shamir, 2002; Barling, Weber, & Kelloway, 1996; McNatt & Judge, 2004; Bono & Judge, 2003; Kirkpatrick & Locke, 1996), it has been shown to be positively associated with several organizationally-important outcomes, including individuals' citizenship behaviors (Podsakoff, MacKenzie, Moorman, & Fetter, 1990), and leaders' effectiveness and productivity (Judge & Piccolo, 2004).

Recently, scholars have begun to investigate the effects of transformational leadership on individuals' upward communication at work. For instance, Liu, Zhu, and Yang (2010)

found empirical support for the positive association of transformational leadership with speaking out (voice toward peers) and speaking up (voice toward the supervisor) across a sample of 191 Chinese employees in different organizations. Similarly, Detert and Burris (2007) tested the association of transformational leadership on individuals' improvement-oriented communication across a national restaurant chain, arguing that the individualized consideration transformational leaders provide fosters two-way communication, while their inspirational motivation helps to increase followers' engagement in resolving workplace issues. Despite the intuitive nature of these hypotheses, the authors did not find support for a significant predictor of managers' perceived transformational leadership on employees' upward communication behavior. This lack of a direct association between transformational leadership and upward communication raises interesting questions and the possibility that the positive impact of transformational leaders may be limited and bounded by numerous conditions that researchers have yet to uncover.

Other work has also begun to explore the underlying mechanisms driving the positive relationship between transformational leadership and employee behavior. Researchers have demonstrated that transformational leaders are effective at influencing subordinates' behavior because they are able to increase followers' commitment, satisfaction, identification, and perceptions of fairness (e.g., Liao & Chuang, 2007; Walumbwa, Avolio, & Zhu, 2008). They do this by enhancing perceptions of leader trustworthiness (e.g., Wang, Law, Hackett, Wang, & Chen, 2005) and perceptions of individual- and group-efficacy, potency and cohesiveness (e.g., Bass, Avolio, Jung, & Berson, 2003; Bono & Judge, 2003; Schaubroeck, Lam, & Cha, 2007).

In short, this body of work suggests that transformational leaders who are open and receptive to their subordinates' ideas can motivate and encourage their followers to do things they may have never envisioned before, such as taking the risk of communicating up to the boss with challenging dissent or constructive criticism (Bass & Steidlmeier, 1999; Shamir, House, & Arthur, 1993). Going forward, teasing apart the individualized consideration dimension of transformational leadership as a proxy for inclusive leadership may produce valuable dividends for scholars seeking to better understand how inclusive leaders can enhance both the quantity and quality of upward communication within their organizations.

### Participative Leadership

Although transformational leadership is perhaps the most well-known modern leadership construct in management circles, its broad focus on visionary goal-setting makes it slightly more tangential to the core premise of inclusive leadership. One leadership perspective that more closely shares the basic idea of openness and receptivity to subordinate input is participative leadership. The theory of participative leadership suggests that leaders can encourage greater employee involvement and engagement in their organizations by adopting a participative leadership style. According to Yukl (1994), participative leadership is “the use of various decision procedures that allow other people some influence over the leader’s decision” (p.157). Often described as consultation, joint decision-making, power sharing, decentralization or democratic management, participative leadership is typically used as a way to involve others in the decision-making process (Johns & Saks, 2005; Yukl, 1994). As defined here, participation is not a fixed or absolute property, but rather a relative concept. In fact, the manner in which leaders can go about trying to gain subordinate participation can vary along a continuum, ranging from no influence by other people (i.e.,

autocratic decision-making) to high influence (i.e., delegating full authority) (Heller & Yukl, 1969; Strauss, 1977; Tannenbaum & Schmidt, 1958; Vroom & Yetton, 1973).

Research suggests that participative leadership offers tangible benefits to the organization, including (a) improving the quality of a decision when participants have information and knowledge that the leader lacks and (b) enhancing individuals' commitment to the decision (Yukl, 1994; Yukl, Gordon, & Taber, 2002). Furthermore, when individuals have an opportunity to communicate their concerns about organizational issues, they often feel a greater sense of procedural justice (Korsgaard & Roberson, 1995). In addition, participation is likely to yield favorable results when employees are open to engaging in the process and the task is complex enough to make participation useful (Miller & Monge, 1986; Wagner & Gooding, 1987a; Wagner & Gooding, 1987b). In this way, participative leadership is a strategy leaders can use to signal inclusiveness by encouraging followers to communicate upwards with ideas, observations and concerns and enabling them to participate in organizational decision-making.

### Empowering Leadership

Although similar to participative leadership in its emphasis on encouraging individual participation and engagement within organizations, empowering leadership differs from participative leadership in its exclusive focus on leader actions that share power or give more autonomy and responsibility to employees (Kirkman & Rosen, 1997; 1999; Strauss, 1963). In their empirical paper testing the effects of empowering leadership on team performance, Srivastava, Bartol and Locke (2006) defined empowering leadership as “*behaviors whereby power is shared with subordinates and that raise their level of intrinsic motivation*” (p.1240).

Some of the behaviors that empowering leaders engage in when adopting such a leadership style include leading by example, participative decision-making, coaching, informing, and showing concern (Arnold, Arad, Rhoades, & Drasgow, 2000). By actively soliciting employees' input on organizational matters and explicitly communicating to them that such input is welcome and of value to both the leader and the organization, empowering leaders can help increase followers' motivation to actively participate in solving organizational problems. At a time when employees are highly cynical and distrustful of organizations, government, and leaders in general (Kohut, 2010; Garlick, 2010), empowering leadership can be a powerful antidote to the widespread lack of employee engagement seen within organizations today (cf., Robison, 2010), despite its inherent limitations (Fineman, 2006).

In fact, in a recent large-scale field investigation of professional Chinese workers, Zhang and Bartol (2010) found that empowering leadership predicted individuals' psychological empowerment, which in turn predicted both their intrinsic motivation and involvement in creative work. Across a much different, but still relevant organizational context (i.e., public high schools) Vecchio, Justin, and Pearce (2010) showed that empowering leadership was associated with higher levels of employee satisfaction and performance, as well as reduced dysfunctional resistance. More specific to the focus of the current investigation, Srivastava and colleagues (2006) demonstrated that empowering leaders helped to improve team performance by increasing team members' efficacy and knowledge-sharing – the latter being a key measure of whether or not individuals actually spoke up and expressed their concerns to management.

In short, by providing their subordinates with the autonomy and flexibility to be able to share their ideas and concerns with management, empowering leaders convey an openness and receptivity to upward communication – a key marker of inclusive leadership behavior.

### Shared Leadership

A final leadership perspective that shares conceptual overlap with the idea of inclusive leadership is shared leadership. Often described as “collective” or “distributed” leadership, shared leadership has been conceptualized as a team emergent state that develops over the lifespan of a team, whereby team members collectively lead each other, rather than relying on a single individual to lead the team (Day, Gronn, & Salas, 2004). This model of reciprocal influence helps to reinforce and develop positive relationships among team members (Carson, Tesluk, & Marrone, 2007). According to Pearce and Conger (2003, p.1), shared leadership is “*a dynamic, interactive, influence process among individuals in groups for which the objective is to lead one another to the achievement of group or organizational goals or both.*” Klein, Ziegert, Knight and Xiao (2006) describe this process of shared leadership within teams as dynamic delegation, in which senior leaders are able to delegate active leadership roles to more experienced members, while providing junior members with opportunities to develop skills and learn over time.

In this way, shared leadership differs greatly from earlier leadership models focused on hierarchical authority (Pearce & Sims, 2002). Because shared leadership implicitly discounts status differences within the team in an effort to make it more egalitarian, employees are freer to communicate their ideas, observations and concerns both laterally, as well as upwards. Particularly in team situations where relative status differences between the leader and members are high, adopting a shared leadership approach may be beneficial in

creating a psychologically safe environment that encourages interpersonal risk taking (Nembhard & Edmondson, 2006).

Although empirical work on shared leadership is scarce, initial studies tend to support the view that shared leadership predicts higher levels of team effectiveness (e.g., Avolio & Bass, 1995; Pearce & Sims, 2002). However, too much shared leadership may not necessarily work well under all conditions. For example, Edwards and Jabs (2009) recently conducted a study within a multinational corporation's R&D facility in the western United States to understand the impact of bureaucratic control and shared governance on workplace safety culture. They found that safety protocols, rules, and rhetoric, combined with efforts to give workers more shared responsibility for safety in the workplace, actually predicted tendencies toward worker alienation, shame with regard to injuries, complacency, and a fear of bureaucratic processes. Although these findings need to be replicated in future work, they do suggest that leaders' efforts to create a strong culture of shared leadership may backfire if not implemented correctly. Thus, additional research is needed to understand the impact shared leadership can have on employee outcomes, both intended and unintended. Given that no work to date has tested the relationship between shared leadership and upward communication, this offers an interesting and important avenue for future research particularly in light of the growing organizational trend towards team-based work structures (cf. O'Toole & Lawler, 2006).

In summary, each of these unique, but related leadership perspectives – leader inclusiveness, leader openness, transformational leadership, participative leadership, empowering leadership and shared leadership – provide general support for the idea that leaders who are considerate of their followers, solicit their input about organizational issues,



and at least sometimes, act upon their input, are often seen by others as “inclusive” leaders. Although future research is needed to empirically validate this proposed nomological network, this discussion provides an initial theoretical framework from which to begin such efforts.

I now turn my attention to briefly reviewing the upward communication literature, focusing specifically on a variety of constructs (e.g., voice, issue-selling, issue-crafting, upward influence, upward feedback) that much like the leadership literature, share conceptual overlap with one another. In discussing these various forms of upward communication, I specifically focus only on the interpersonal and contextual *antecedents* of upward communication, rather than taking a more procedural justice view that explores the opportunity individuals have for upward communication as well as the various outcomes that can result from it (e.g., McFarlin & Sweeney, 1996; Brockner & Wiesenfeld, 1996).

### III. THEORIES OF UPWARD COMMUNICATION

Just as the leadership literature includes a host of constructs that share conceptual overlap around the idea that leaders can be inclusive and open to their followers' ideas and concerns, so too do numerous theories of upward communication provide a broad foundation from which to argue that individuals "speak up" to management in a variety of ways. Although theoretically distinct in the conceptual space they occupy, each of these forms of upward communication – employee voice, issue-selling, issue-crafting, upward influence and upward feedback – are perhaps more accurately identified as unique forms of a broader construct of *upward communication*. In the following section, I briefly review these literatures, highlighting their shared commonalities around the broader schema of management-directed, upward input.

#### Employee Voice

Since Hirschman (1970) first conceptualized the idea that employees speak up when they recognize some source of dissatisfaction or opportunity to improve their own and/or their organization's well-being, scholars have taken a greater interest in understanding this phenomenon, as evidenced by a growing body of work examining the many antecedents, moderators, mediators and consequences of voice in the workplace. As originally conceptualized, employee voice is a proactive, discretionary behavior (Van Dyne, Cummings & McLean Parks, 1995; Van Dyne & LePine, 1998) that individuals express upward in the form of challenging opinions, concerns, or ideas about work-related issues (Van Dyne, Ang,

& Botero, 2003). In this way, voice shares conceptual overlap with a family of other challenge-oriented constructs, including issue-selling (Dutton & Ashford, 1993; Dutton, Ashford, O'Neill & Lawrence, 2001), speaking up (Premeaux & Bedeian, 2003), issue crafting (Sonenshein, 2006), prosocial rule breaking (Morrison, 2006), tempered radicalism (Meyerson & Scully, 1995), whistleblowing (Miceli, Near & Dworkin, 2008), and taking charge (Morrison & Phelps, 1999). A common theme running through each of these behaviors is that individuals are motivated to speak up out of a desire to help and improve the organization, even if it means sometimes having to upset established norms and organizational practices.

Given that voice can sometimes be perceived as a challenge to management's authority, expressing voice carries inherent challenges and risks for organizational actors, since it may or may not be well received by the powerful individual toward whom it is directed. In fact, several studies demonstrate the inherent difficulties in getting employees to speak up honestly (e.g., Detert, 2003; Milliken, Morrison & Hewlin, 2003; Ryan & Oestrich, 1998), since many individuals conclude that it is better to "bite your tongue and be a good soldier," rather than risk upsetting the boss and facing negative repercussions. To maximize the likelihood that their expressions of voice are welcomed, rather than frowned upon, individuals are thought to engage in a cost-benefit mental calculus when deciding whether or not to speak up (Chiaburu, Van Dyne & Marinova, 2008; Dutton et al., 2001; Ashford et al., 1998; Morrison & Milliken, 2000). This cognitive process involves weighing the personal, professional and social repercussions individuals may experience as a consequence of speaking up (Cortina & Magley, 2003; Detert, 2003; Edmondson, 1996).

In light of the potential challenges associated with upward voice, scholars have attempted to better understand who voices, why they choose to voice, and what organizational conditions facilitate voice (cf., Van Dyne & LePine, 1998; Burris, Detert & Chiaburu, 2008; Tangirala & Ramanujam, 2008a, 2008b; Detert & Burris, 2007). In developing theories around each of these questions, three broad lines of research on voice have emerged. First, scholars have spent considerable time systematically examining demographic and personality differences as correlates of voice (Crant, 2003; LePine & Van Dyne, 2001). For instance, studies have shown that voice is more common among employees high in conscientiousness and extraversion (LePine & Van Dyne, 2001), low in agreeableness and neuroticism (LePine & Van Dyne, 2001), and high in proactive personality (Seibert, Kraimer, & Crant, 2001; for meta-analytic reviews, see Fuller & Marler, 2009, and Thomas, Whitman, & Viswesvaran, 2010). Recent work has also begun to examine the personality correlates of voice in cross-cultural samples. For instance, across a sample of Greek workers, Nikolaou, Vakola, and Bourantas (2008) found that compared to other personality traits such as extraversion, openness, and agreeableness, individuals who were high in conscientiousness and emotional stability were more likely to express voice to their supervisor.

A second body of work, based primarily on Hirschman's (1970) exit, voice and loyalty model, suggests that individuals' attitudes towards their work environment (e.g., job satisfaction, supervisors, organization, etc.) drives their decision to speak up or remain silent (Rusbult, Farrell, Rodgers, & Mainous, 1988; Withey & Cooper, 1989). This perspective takes the view that individuals' attitudes and beliefs about their job and supervisor shape their motivations to voice (Farrell & Rusbult, 1992). That is, when employees are

dissatisfied with their current work conditions, they seek to restore equity in the relationship by expressing their dissatisfaction vocally and making their views known to management (Withey & Cooper, 1989; Zhou & George, 2001). Scholars in other research domains have also sought to understand how employee attitudes might impact voice behavior. For instance, marketing scholars have shown that individuals' attitudes to the responsiveness of their organization across a variety of service-oriented contexts (e.g., automotive repair, medical care, banking services) have a significant influence on whether or not they chose to voice their complaints or not (Singh & Wilkes, 1996).

The third primary stream of research within the voice literature centers on understanding how various organizational contextual factors, such as psychological safety, voice climate, and leadership, influence individuals' decision to voice (Morrison, Wheeler-Smith, & Kamdar, 2011; Detert & Treviño, 2010; Edmondson, 2006; Detert & Burris, 2007; Nembhard & Edmondson, 2006; Hofmann & Stetzer, 1996). This literature makes the implicit assumption that over and above personal characteristics and specific work-related attitudes, individuals are likely to gauge the "temperature in the room" before determining whether or not to make their thoughts and ideas publicly known (Dutton, Ashford, O'Neill, Hayes, & Wierba, 1997; Ashford, Rothbard, Piderit & Dutton, 1998; Milliken, Morrison, & Hewlin, 2003; Ryan & Oestrich, 1998; Withey & Cooper, 1989). That is, individuals make general attributions about the perceived risks of speaking up in a particular social context, and take their behavioral cues from organizational leaders who explicitly or implicitly convey to their followers that expressions of voice are welcome or not. In this way, a leader's perceived trustworthiness and openness to followers' ideas can have a strong

influence on whether or not individuals feel comfortable speaking up about challenging or controversial issues (Ashford, 1998).

In summary, the employee voice literature has been instrumental in helping to bring to the forefront an important and relevant issue for both scholars and practitioners alike – specifically, how leaders can encourage individuals to speak up to management for the betterment of their organizations. Yet, despite the significant contributions scholars have made to this body of work, much of this research has focused exclusively on trying to get leaders to obtain *more* voice, not necessarily *better* voice from their followers. Thus, going forward, understanding how managers can reap both a high quantity and high quality of voice from their subordinates is a promising avenue for future research.

#### Issue-selling and Issue-crafting

Another popular and well-established form of upward communication that scholars have explored in-depth is issue-selling. In their seminal paper introducing the concept, Dutton and Ashford (1993) defined issue-selling as “individuals’ behaviors that are directed towards affecting others’ attention to and understanding of issues” (p.398). At its core, issue-selling is concerned with understanding how middle managers can effectively direct senior leaders’ attention towards issues or concerns they deem worthy of attention. In this way, issue-selling is a process through which middle managers attempt to influence the identification phase of organizational decision making (Dutton & Ashford, 1993). According to Mintzberg, Raisinghani and Théorét (1976), this identification stage involves issue recognition, where “opportunities, problems, and crises are recognized and evoke decision activity” as well as diagnosis, in which “management seeks to comprehend the evoking stimuli and determine cause-effect relationships for the decision situation” (p.253). This

ability to identify important issues among the many that vie for managers' attention can be a valuable resource for leaders seeking to adapt their strategies to enhance organizational effectiveness (Dutton et al., 2001; Dutton & Ashford, 1993; Grant, Parker, & Collins, 2009).

However, despite the importance of identifying critical issues within organizations, comparatively little work has examined the contextual influences that shape issue-sellers' behavior over time, and how issue-selling can be a mechanism of organizational change (Dutton & Ashford 1993; Dutton, Ashford, Lawrence, & Miner-Rubio, 2002). In an effort to address this shortcoming, scholars have taken greater interest in examining *how* individuals go about selling issues to management to achieve maximum impact. For example, in their study of hospital workers and top management teams, Dutton, Ashford, O'Neill and Lawrence (2001) found that successful issue-sellers used a variety of strategic moves, such as packaging, involvement, and timing to amplify their chances that senior leaders will be receptive to their concerns. Research has shown that these tactics are generally effective because they help issue-sellers thoughtfully demonstrate how their idea or concern fits in with the leader's broader goals and constraints (Ashford, et al., 1998; Dutton & Ashford, 1993; Sonenshein, 2006). By framing issues as 'win-win' solutions, individuals can make a more compelling case to management for why their ideas and concerns should be acted upon (Bansal, 2003; Savitz, 2006). As a case in point, Howard-Grenville (2007) used ethnographic, archival and interview data over a six-year period to better understand how a high-tech manufacturer came to implement environmental considerations into their core manufacturing processes. Through this longitudinal effort, she found that striking the right balance between the novelty of the issue and an appeal to dominant schemas within the organization produced the conditions necessary to effect organizational change. This

research illustrates how the linguistic strategies issue-sellers employ can potentially mean the difference between success and failure.

In an effort to expand the portfolio of linguistic tactics described in the issue-selling, sensegiving, and influence tactics literatures, as well as work on discourse theory (Grant, Hardy, Osrick, & Putnam, 2004), Sonenshein (2006) introduced the concept of issue-crafting, which he defined as “the intentional use of public language to portray an issue in a way that differs from an individual’s private understanding of that issue” (p.1158). Although issue-crafting differs from issue-selling in that it lacks a clearly defined communicator (e.g., middle managers are the ones considered issue-sellers), as well as a clearly defined target of communication (e.g., senior leaders are the target of issue-sellers), in many ways the two constructs share much in common. For instance, just as issue-sellers seek to gain support for their views by framing their issues as vital to the organization’s success, issue-crafters use the domain of public opinion to position their concerns as legitimate (Hardy, Palmer, & Phillips, 2000). Furthermore, in the same way that issue-sellers seek to frame their arguments in a way that management finds most palatable and persuasive (Howard-Grenville, 2007), issue-crafters construct public justifications that have broader legitimacy with important others, and portray issues as being congruent with the target’s values and mental schema (Creed, Scully, & Austin, 2002). In this way, issue-crafters can also gain the ear of powerful leaders who have the ability to enact change, particularly when the issues are difficult to talk about openly (e.g., social issues).

Taken together, this collective stream of research provides important insight into how individuals can draw senior leaders’ attention to important organizational issues and improve the perceived quality of their upward communication. More importantly, through the use of



these subtle, but powerful framing and communication techniques, employees can increase their chances of getting their specific issue(s) heard and acted upon by powerful decision-makers, thus setting the stage for improved organizational effectiveness. By adopting specific linguistic strategies that help to frame their contribution as germane and legitimate, issue-sellers and issue-crafters can provide their leaders with ideas and suggestions that they perceive as high quality upward communication (e.g., Savitz, 2006).

### Upward Influence

Upward influence is a third form of upward communication that is closely related to the aforementioned constructs of employee voice, issue-selling and issue-crafting. This line of research is primarily concerned with how power affects the techniques individuals use to influence others (Kipnis, Schmidt, & Wilkinson, 1980; Yukl & Falbe, 1990; Yukl, Falbe, & Youn, 1993; Yukl & Tracey, 1992). Specifically, Kipnis and colleagues offer six different strategies individuals can use to influence those situated higher in the organizational hierarchy – namely, ingratiation, assertiveness, administrative sanction, exchange, rationality, and appealing to higher levels of authority. Although this line of research, much like the work on issue-selling and issue-crafting, is most concerned with the tactics individuals use to gain the attention of powerful individuals, it also speaks more generally to the phenomenon that individuals look for ways to make their voices heard and known within organizational settings. Although individuals' motives for speaking up in the first place may sometimes be suspect (Bolino, 1999), the fact that individuals take the time to consider how best to influence their superiors – be it through ingratiation, rational appeal or other verbal techniques – suggests that sharing views and opinions with management is something individuals value and deem consequential. In this way, the act of engaging in upward

communication, whether through proactive, discretionary expressions of voice or more calculated issue-selling, issue-crafting or upward influence tactics, can serve as a powerful testament to the desire individuals have to express their thoughts, ideas and suggestions up through the organizational ranks.

### Upward Feedback

A fourth and final theoretical perspective that can be subsumed under the broader conceptual umbrella of upward communication is upward feedback. As described by Atwater and colleagues (2000) “upward feedback is a process that involves the rating of supervisors by their respective subordinates on various behavioral dimensions, combined with formal feedback of the results to the supervisors” (p.275). This form of upward communication enables subordinates and peers to offer their leader constructive guidance and insight into how he/she is performing. In this way, upward feedback can be a tool organizational actors use to communicate their ideas and suggestions to management, while also providing leaders with helpful input on how to improve their perceived performance. As suggested by research, this upward feedback can have a tangible positive impact on how leaders’ behave, and subsequent perceptions of their effectiveness (Atwater, Rousch, & Fischthal, 1995). For this reason, providing upward input to managers about their performance can help improve overall organizational functioning.

In summary, this review is intended to highlight how the dominant forms of upward communication discussed in the organizational literature, such as employee voice, issue-selling, issue-crafting, upward influence and upward feedback all conceptually revolve around the broader idea that individuals are motivated to make their thoughts and opinions known to management. Although not the focus of the current investigation, future research

should explore in greater depth how these purportedly unique forms of inclusive leadership and upward communication are theoretically and empirically related to one another, given the conceptual similarities these different constructs share.

Having reviewed the extensive literatures on both inclusive leadership and upward communication, I now turn attention to highlighting the need for scholars to consider quality implications in their assessments of individuals' upward feedback to management. Such a focus is sorely needed, given that much of the literature to date has focused exclusively on quantity-based arguments for why inclusive leadership is consequential. Thus, in an effort to help move both the leadership and upward communication literatures forward and to invite new thinking on the topic, in the following section I introduce the concept of *upward communication quality* for scholars to consider.

#### **IV. UPWARD COMMUNICATION: MOVING FROM QUANTITY TO QUALITY**

As the pace of business has dramatically increased over the last quarter century (Gates, 1999), organizations have begun to place a greater premium on designing high quality products and services that can compete effectively in the global marketplace. Despite the significant amounts of time, money and effort required to design systems, products and processes with quality considerations in mind (Yong & Wilkinson, 2001; Powell, 1995), many organizations have come to realize that this investment in quality is often well-spent, given its positive association with higher financial performance (McInerney & White, 1995; Germano, 1992; Kearns & Nadler, 1992; Koska, 1990).

At a more micro-level, however, researchers have also considered the notion of quality, but primarily from an idea generation and information flow standpoint. For instance, creativity scholars have spent a considerable amount of time and effort investigating the processes through which individuals generate and evaluate novel and creative solutions for their organizations (e.g., Amabile, 1983, 1996; Elsbach & Kramer, 2003). This research has attracted a great deal of interest, since highly creative ideas can be a significant source of competitive advantage for both individuals and organizations (Amabile, 1988, 1996; Oldham & Cummings, 1996; Shalley, 1991; Zhou, 2003). For instance, companies like Ideo and Google have developed reputations as some of the most innovative places to work (Fast Company, 2010), in part, because of their commitment to helping employees share challenging, creative ideas with management. Rather than stifling upward communication, these organizations actively encourage it and even solicit frequent employee feedback. In

many cases, these employee-driven ideas often become the fuel for new products and innovations for these leading organizations (Elgin, 2005; Kelley & Littman, 2001). An added benefit of this innovation culture, and the positive press that results from it, is that highly talented job seekers line up to be recruited by such firms. In this way, reputable firms like Google and Ideo are better positioned to hire the best and the brightest employees (e.g., Turban & Cable, 2003), which further strengthens their competitive advantage (Hitt, Bierman, Bierman, Shimizu, & Kochhar, 2001; Kang, Morris, & Snell, 2007).

Yet, despite the numerous benefits associated with higher levels of organizational quality at both a micro- and macro-level, management researchers have yet to broadly adopt this “quality-first” mindset in their research, perhaps in part due to the ambiguous nature of quality as a theoretical construct. In their extensive review of the proactivity literature, Grant and Ashford (2008) lamented that researchers have spent the bulk of their time and effort predicting the amount and frequency of individuals’ proactive behaviors, such as voice, while failing to consider whether or not such behaviors are ultimately beneficial or effective. Unfortunately, the majority of studies that have been done in recent years exploring the impact of contextual forces, such as leadership and psychological safety, have only measured either increases in the amount of upward feedback individuals offer (e.g., Nembhard & Edmondson, 2006) or increases in the frequency of this behavior (e.g., Detert & Burris, 2007). Although such a focus on the quantity of upward communication behaviors is understandable, given scholars’ interest in helping organizations break the spirals of silence that keep many employees from speaking up in the first place (Bowen & Blackmon, 2003; Kish-Gephart, et al., 2009; Morrison & Milliken, 2000), this lack of focus on the effectiveness of upward communication leaves an important gap in the literature to be

addressed. Without a more holistic understanding of how important contextual influences, such as inclusive leadership, are related to individuals' quantity *and* quality of upward communication, our knowledge of upward communication and leadership remains incomplete and lacking theoretical precision. Thus, in an effort to take a first step towards addressing this shortcoming, I introduce the term *upward communication quality* to describe how managers and researchers alike can more effectively consider and evaluate the content of individuals' spoken and/or written forms of upward feedback. Drawing from the employee voice literature, I define upward communication quality as "*leader-directed feedback that attempts to clarify, improve and/or challenge the organizational status quo.*"

Although this definition captures essential elements of previous descriptions of voice, such as an improvement-orientation and organizational-level focus (e.g., Van Dyne & LePine, 1998), this proposed definition of upward communication quality is noticeably broader – in large part, based on prior guidance from the creativity literature. Although a host of literatures speak directly to how individuals assess the effectiveness of individuals' upward communication to management (e.g., issue selling, issue crafting, persuasion and upward influence), creativity scholars have been engaged in a vigorous debate and at the forefront of trying to understand how individuals make judgments about what constitutes a high quality, "creative" idea.

Despite the fact creativity scholars agree that creativity can be defined as the extent to which an idea is both novel and useful (Amabile, 1996; George, 2007; Zhou & Shalley, 2008), they have been much more divided in their beliefs about how creativity should be evaluated. Although some scholars have argued that creativity judgments can be measured and interpreted consistently across different organizational contexts (Amabile, 1996; George

& Zhou, 2001; Hennessey & Amabile, 2010), others have said that creativity is much too subjective a construct for it to easily generalize across organizational settings (Berry & Tugman, 2010; Cropley, 2000; Ford & Gioia, 2000; Kampylis & Valtanen, 2010; Litchfield, 2008; Plucker, 2004; Shapiro, 1968). To support this latter assertion, scholars have shown empirically that the evaluation of creativity is often highly context-dependent and unique to individual settings (Berry & Tugman, 2010; Ford & Gioia, 2000; Kilgour & Koslow, 2009; Paletz & Peng, 2008). That is, an idea that may be considered novel and/or useful (i.e., creative) in a particular setting (e.g., academic institutions) may not be viewed similarly in a far different organizational environment (e.g., for-profit businesses). This emerging body of work seems to suggest that despite our inherent desire as researchers for broad, generalizable measures that adapt well across various contexts, creativity may be one construct that does not fit the traditional mold.

In the same way that creativity judgments may not easily generalize across organizations or individuals, perceptions of upward communication quality may also be context-specific. For instance, depending upon the organizational norms and culture of the organization, the quality of individuals' comments and ideas may be judged and evaluated quite differently. In some cases, such as in highly competitive organizational cultures, expressing one's thoughts in a loud, challenging, and somewhat acerbic manner may actually be viewed favorably by those individuals tasked with evaluating the quality of this feedback (Dutton & Ashford, 1993; Dunbar, 1995). As a case in point, Dunbar (1995) found that major advances and scientific breakthroughs within microbiology labs often came from scientists aggressively (and sometimes acerbically) challenging each other's interpretations. However, in more egalitarian, team-based organizational environments where harmony,

agreeableness and the quality of relationships are highly valued, or where individuals are still learning about one another, such a poignant and direct communicative act may be frowned upon and even disregarded, irrespective of the merits of the argument (e.g., Fragale, 2006; Loyd, Phillips, Whitson, & Thomas-Hunt, 2010).

In addition to the role organizational norms may play in determining how upward communication quality is judged, the task itself may also dictate how leaders evaluate the quality of ideas they receive. For example, brainstorming sessions are typically designed to allow for the free flow of thoughts and ideas that are not yet fully formed or well-conceived (Osborn, 1953). In such environments, individuals are actively encouraged to engage in low levels of self-censorship in the belief that the more ideas generated the better, since more divergent ideas and points of view can jumpstart the creative energy of others (e.g., Amabile, 1996; Guilford, 1950; Campbell, 1960; Osborn, 1953). However, in other more defined task environments, such an approach may not be ideal. For example, at those critical moments when leaders need clear, actionable intelligence to make the best decision possible, employees who share ideas that are “out of the box” or “half-baked” may be evaluated harshly because their input does little to address or solve the issue at hand. In this way, the task environment in which manager-directed feedback occurs may moderate how upward communication quality is evaluated and judged by powerful decision-makers.

Taken together, this line of evidence suggests that upward communication quality, much like creativity, is often highly context specific and lacks global standards against which individuals can make objective measurements (cf. Csikszentmihalyi & Wolfe, 2000). Given the potential for individual-level differences to introduce systemic bias in upward communication quality evaluations, one solution advocated by creativity scholars is the use



of raters who are familiar with the domain in which the product was made. This consensual assessment technique (Amabile, 1982, 1983), which allows informed raters to provide subjective assessments and judgments of creative products, may be a useful tool for researchers seeking to find agreement as to what constitutes upward communication quality. Furthermore, given the natural similarities and shortcomings both creativity and upward communication quality share as context-specific constructs, drawing from this established procedure for idea evaluation helps to integrate a closely related literature into the broader upward communications domain.

In short, because assessments of quality, much like creativity, are often “in the eye of the beholder,” and can vary widely depending upon the context in which they are judged, I conceptualize upward communication quality as a domain-specific phenomenon that is dependent upon a variety of individual-, task-, process-, and contextual-forces. Although future research should aim to explore whether upward communication quality is multi-dimensional and generalizable across multiple contexts, for purposes of this discussion, I position upward communication quality as an individual-level assessment that differs across contexts, and therefore, must be judged by domain experts accordingly (cf. Amabile, 1982).

## V. THE INFLUENCE OF INCLUSIVE LEADERSHIP ON THE QUANTITY AND QUALITY OF UPWARD COMMUNICATION

I now turn attention to developing my theoretical arguments for *why* high levels of leader inclusiveness might have varied implications for both the quantity and quality of upward communication. In doing so, I articulate reasons why inclusive leadership should enhance the quantity of comments and ideas individuals raise, while having more mixed effects on the quality of these ideas.

Although it seems fairly intuitive that leaders who are more inclusive should get more upward communication from their followers, while those who are less inclusive should receive less, surprisingly few studies have been done to explore this relationship in greater depth. Of those studies that have been conducted to date, both qualitative (e.g., Sprague & Rudd, 1988; Ryan & Oestrich, 1998) and quantitative work (e.g., Carmeli, et al., 2010; Detert & Burris, 2007; Liu, Zhu, & Yang, 2010; Nembhard & Edmondson, 2006; Walumbwa & Schaubroeck, 2009) support the view that higher levels of inclusive leadership are positively associated with followers' willingness to speak up to management in greater numbers and more frequently. Because inclusive leaders create a "voice climate" where individuals can freely take risks and discuss issues that may not necessarily support the status quo (Morrison, Wheeler-Smith, & Kamdar, 2011), individuals are likely to feel empowered to shed their inhibitions and express their feedback with management openly and without concern for their social standing. Thus, it stands to reason that highly inclusive leaders should find their

followers more willing to communicate upwards about relevant organizational issues and concerns.

***Hypothesis 1:** Inclusive leadership is positively associated with the quantity of upward communication individuals express.*

Yet, despite the positive influence highly inclusive leadership has been shown to have on individuals' willingness to speak up (e.g., Detert & Burris, 2007; Nembhard & Edmondson, 2006; Carmeli et al., 2010), this form of leadership may also have a dark side that encourages followers to engage in a lower quality of upward communication. Unfortunately, to the detriment of the field, scholars have demonstrated little motivation to explore the potentially deleterious effects (if any) of inclusive leadership on individuals' upward communication behavior.

However, accepting the benefits of inclusive leadership as limitless and without boundary conditions seems to be misguided from both a conceptual and practical standpoint. Despite the numerous individual and organizational benefits associated with positive organizational scholarship (e.g., Bakker & Schaufeli, 2008), both classic (e.g., Coombs & Avrunin, 1977) and recent (e.g., Grant & Schwartz, 2011) theoretical perspectives seem to suggest that "all good things must come to an end" and that in fact, there can be "too much of a good thing." As noted earlier by Coombs and Avrunin (1977), there is a general tendency for inherently good things to reach a tipping point before yielding to diminishing returns. This implies that the assumption of monotonic functions across a wide body of psychological research may be overly simplistic and failing to take into account the potential for nonmonotonic phenomena.

More recently, Grant and Schwartz (2011) used this same logic to develop theory around choice overload and how the presence of too few or too many choices can lead

individuals to experience less than optimal outcomes (e.g., Patall, Cooper & Robinson, 2008; Shah & Wolford, 2007). Specifically, these scholars argue that when individuals have an abundance of options to choose from, this can lead to feelings of regret, missed opportunities, and rising expectations, which together heighten the risk of disappointment (Grant & Schwartz, 2011).

In the same way that having too many choices can lead individuals to experience a host of negative emotions and cognitions, having too much psychological safety given to them by a highly inclusive leader may also encourage negative outcomes, such as a lower quality of upward input. Although inclusive leadership has often been perceived as a good thing because it helps to reduce individuals' fears (e.g., Kish-Gephart, et al., 2009) and lowers their perceived risks of speaking up to management (Nembhard & Edmondson, 2006; Detert & Burris, 2007), too much inclusive leadership may actually produce negative effects because it reduces individuals' self-monitoring and self-censorship tendencies (see Snyder, 1974; Snyder & Gangestad, 1986). That is, beyond the initial positive impact inclusive leadership has on followers' willingness to communicate upwards, it may not produce monotonic infinite returns. Rather, past a certain inflection point, a negative effect of inclusiveness may become apparent as individuals misuse the psychological safety they have been afforded and express ill-formed thoughts and ideas that are not borne from high levels of cognitive effort.

To illustrate this point, consider a common work setting – the meeting – which many employees characterize as notorious incubators of low quality upward communication. Despite being the de facto venue within organizations for employees to express their ideas and opinions (Tobia & Becker, 1990; Streibel, 2003), meetings are often infamous for being

ineffective platforms for solving organizational problems, and often have the unintended effect of demotivating employees. In many cases, research suggests that highly inclusive leaders are to blame for these unwanted outcomes. A recent global workplace study of more than 6,100 finance, accounting, HR and executive-level managers from 20 countries showed that between 25 and 40 percent of individuals surveyed described meetings as a “waste of time,” primarily because participants lose focus and discuss anything they want, rather than the issue the meeting was called for (Robert Half International, 2009). Even worse, meetings can actually harm employees’ job attitudes and well-being on a variety of levels, particularly if the meetings are unscheduled or perceived as ineffective (Rogelberg, Leach, Warr, & Burnfield, 2006).

The fact that so many meetings and other frequently used forums for upward communication (e.g., employee feedback surveys) devolve into useless, unfocused, and/or unhelpful comments and suggestions implies that many modern leaders have swung the pendulum of leadership too far in favor of inclusiveness, without carefully considering the downsides of such an approach. By inviting followers to share opinions and ideas without holding them accountable to communicate in a focused, constructive manner, highly inclusive leaders may find that their subordinates take advantage of the psychological safety they have been afforded and offer tangential, irrelevant and/or ill-conceived ideas (Premeaux & Bedeian, 2003). Ironically, by attempting to be overly inclusive and accommodating of their subordinates’ views, leaders may actually work against themselves in their quest to obtain the highest quality ideas from their workforce. In this way, high levels of inclusive leadership can negatively affect the quality of upward communication individuals’ provide.

However, high levels of inclusive leadership and its harmful impact on followers' communication quality is only one half of the psychological phenomenon. At the low end of the inclusive leadership continuum, poor quality feedback can still emerge from individuals, but for much different reasons. One rationale for why individuals may provide low quality ideas to their supervisor is their apprehension about being evaluated publicly by the leader. As described in the brainstorming literature, leaders can sometimes make their followers feel uncomfortable sharing novel ideas because they evaluate them harshly in front of the larger group (Diehl & Stroebe, 1987; Paulus & Yang, 2000). Such leader behavior can often have the unintended effect of shutting down individuals' motivation to engage in the creative process, even if individuals have good ideas worth sharing (cf. Paulus & Yang, 2000; Staw et al., 1981). Because individuals have an inherent need for belonging (e.g., Baumeister & Leary, 1995), this fear of being made to look foolish in front of one's peers and supervisor can lead individuals to experience a great deal of apprehension and anxiety, and reduce their willingness to challenge prevailing norms (Detert & Edmondson, 2008; Dutton et al., 1997; Kish-Gephart, et al., 2009). In fact, Leary (1983) observed that when individuals fear being evaluated negatively by others, they often behave in predictable ways, such as conforming to majority held-views, engaging in greater self-censorship, and feeling higher levels of social anxiety. One important consequence of this evaluation apprehension is that individuals may retreat from potentially beneficial task conflict in favor of conformity. Rather than openly challenging the organizational status quo, individuals may take the path of least resistance and choose to express only acquiescent forms of voice (e.g., Van Dyne, Ang & Botero, 2003) that simply mirror what leaders already know. As a result, leaders may not get enough new

ideas to be able to make accurate judgments of quality or they may get ideas that do not offer truly creative solutions.

Although this literature provides one logical rationale for why individuals may provide their leaders with a lower quality of ideas, other research suggests that individuals may express a lower quality of communication because they become more rigid in response to the perceived threat posed by the highly exclusive leader. As Staw, Sandelands, and Dutton (1981, p. 502) noted in their threat rigidity hypothesis, “a threat to the vital interests of an entity... will lead to forms of rigidity.” This theoretical lens suggests that individuals may respond to direct threats through inaction and an inability to carry out their task(s) effectively. If individuals perceive their leaders as a significant threat to their self-esteem and well-being, they may “seize up” and prove unable to communicate their thoughts and ideas clearly when given the opportunity to provide the leader with input. In these situations, highly exclusive leaders may reduce individuals’ confidence and ability to express well-conceived ideas because of the perceived threat they pose to individuals’ self-concept.

Although this tendency towards expressing low quality upward communication is likely to be heightened in face-to-face settings where individuals may be evaluated publicly by the leader, it may even occur in situations where individuals have the benefit of being able to provide input anonymously. Although scholars have often used anonymity in survey designs as a way to ensure confidentiality and increase individuals’ confidence that they can provide honest opinions (Simsek & Veiga, 2001; Singer, Von Thurn, & Miller, 1995) highly exclusive leaders may find that these anonymous forums devolve into largely unproductive complaint sessions. Rather than using anonymity to express out of the box, creative solutions to management, individuals may misuse it by using engaging in excessive complaining,

venting and voicing of grievances with management. For instance, using a series of confidential online surveys, Kassing (2000) found that employees were more likely to use less articulate forms of dissent when they had low quality relationships with their supervisors, compared to when they had high quality working relationships. Although individuals' frustrations may very well be justified, expressing negative feelings and opinions in this manner may not be the best approach if the objective is to change the leader's behavior. As research on issue-selling has shown, leaders are generally more likely to respond favorably to employees' concerns when they are framed constructively and with the organization's best interests in mind (Ashford, 1998; Dutton et al., 2001; Bansal, 2003; Savitz, 2006). This suggests that employees who communicate upwards in a manner that can be interpreted as griping, whining or worse, may not find a receptive audience for their concerns. In this way, anonymity may potentially contribute to a lower quality of upward communication as well.

Taken together, the preceding arguments suggest that the quality of upward communication individuals express in highly rigid and threatening work environments is likely to be quite low, even across anonymous environments that provide individuals with a means of protection against leader-driven retaliation. If one supports this premise that neither high nor low levels of inclusiveness leads to high quality upward feedback, it begs the question as to whether a more moderate level of inclusiveness exists that can effectively resolve these dueling psychological forces. According to Coombs and Avrunin (1977) and Grant and Schwartz (2011), such a possibility is quite likely.

One rationale for why a moderate level of inclusive leadership may predict the highest quality of upward feedback is the uncertain receptivity to ideas these leaders pose for



individuals. When individuals have a clear sense for a leader's level of inclusiveness – either high or low – it provides them with greater clarity and direction on how to act. This is consistent with the goal-setting and role definitions' literatures, which suggest that a lack of ambiguity around what individuals are expected to accomplish and how they are to behave can steer their behavior in the desired direction (Locke & Latham, 2002; House, 1971; Lyons, 1971). For example, when a leader is highly approachable and open to subordinate feedback, individuals are more likely to feel more positive emotions and comfort about sharing their honest opinions with the leader (Chiaburu, Marinova & Van Dyne, 2008). In contrast, when a leader is highly unapproachable and disinterested in followers' ideas, individuals are likely to know that they should be on their guard and be more careful with their words (Detert & Edmondson, 2008; Nembhard & Edmondson, 2006). In either case, the leader's clear inclusiveness (or lack thereof) can provide individuals with cognitive clarity as to how they should behave around the leader.

However, when leaders are perceived as only 'moderately inclusive,' this implies a degree of uncertainty around how the leader will respond to acts of upward communication. By definition, a moderate level of inclusiveness suggests that sometimes the leader is open to input, and sometimes the leader is not. Because moderately inclusive leaders are variable in how they respond to subordinates' upward communication, individuals may not be able to accurately predict how the leader will respond to their comments and suggestions.

Although uncertainty reduction theory suggests that individuals are often motivated to reduce uncertainty about self and others in their communicative interactions (Berger & Calabrese, 1975), in some cases, a moderate level of uncertainty can actually help to improve individuals' performance. For instance, experimental research by Brown and Wade (1987)

found that task performance within groups was highest under moderate levels of uncertainty and ambiguity because it allowed the groups to be more imaginative and creative in their approach to the task. In the same way, moderate levels of uncertainty around how the leader will evaluate individuals' upward communication can improve the quality of communication individuals raise because they approach the task more creatively and expend more cognitive resources. This can occur because individuals often use uncertainty as a tool or resource in communication interactions (Bradac, 2001). Rather than attempting to eliminate all uncertainty from the equation, individuals may actually find great benefit in some moderate amount of ambiguity because it helps them focus on communication cues and signals more closely (Bradac, 2001). For instance, research suggests that when individuals are uncertain about the norms of their task environment, they often engage in more systematic processing to ensure their behavior is in line with established protocols (e.g., Chiaburu et al., 2008). This increase in ambiguity can even help individuals focus their cognitive resources in a more productive fashion. Supporting this position, Whitchurch, Wilson, and Gilbert (2011) recently used an experimental task to show how higher levels of uncertainty about romantic interests actually led individuals to expend greater cognitive effort and focus.

In the same way, individuals who are uncertain about how leaders will respond to their upward communication may be motivated to engage in more effortful, systematic processing (e.g., Todorov, Chaiken, & Henderson, 2002) that can help improve the overall quality of ideas and suggestions they raise to management. In essence, by creating uncertainty around how they will react to their followers' concerns, moderately inclusive leaders increase individuals' motivation to invest the time and cognitive resources needed to speak up at a high quality level. Since individuals are often motivated to reduce negative

evaluations and harsh criticism (Baumeister & Leary, 1995; Leary, 1983), knowing that only “good ideas” will be viewed favorably by the leader can help to increase the quality of communication individuals’ ultimately share. In this way, moderately inclusive leaders can reap the benefits of inclusiveness by breaking down barriers of fear, while still creating the uncertainty needed to encourage individuals to engage in a higher level of cognitive complexity (e.g., Tetlock, 1983). In other words, moderately inclusive leaders cleverly activate their followers’ approach and avoidance tendencies simultaneously in ways that can ultimately help to improve the quality of ideas organizations receive.

In summary, while prior research has suggested that highly inclusive leaders may get a higher *quantity* of upward communication from their followers, the logic presented here suggests that highly inclusive leaders may also get a lower overall *quality* of upward communication. Specifically, the influence of inclusive leadership on individuals’ upward communication is likely to be positive at low to moderate levels, but negative at moderate to high levels, consistent with a more general overall negative trend of inclusiveness on quality. However, at moderate levels of inclusiveness, leaders’ perceived unpredictability in evaluating the quality of upward feedback can encourage individuals to engage in more systematic processing, which helps to produce the highest quality of upward communication. These dueling mechanisms that converge at a moderate level of inclusiveness imply an inverted U-shaped relationship (e.g., McGuire, 1997; Grant & Schwartz, 2011). Therefore, I hypothesize the following:

***Hypothesis 2:*** *The form of the relationship between inclusive leadership and the quality of upward communication followers express is an inverted U-shape. That is, individuals’ upward communication quality is highest at moderate levels of inclusive leadership but lower at either very low or very high levels of inclusive leadership.*

By proposing divergent predictions for how inclusive leadership might influence individuals' quantity and quality of upward communication, this raises logical questions as to *why* these very different phenomena exist. In an effort to articulate reasons why high levels of inclusive leadership might have differential effects on upward communication quantity and quality, in the following section, I offer several theoretically-grounded explanations, drawing from a wide expanse of literature on psychological safety, motivation, social exchange, social anxiety and self-censorship.

### The Psychological Mechanisms of Upward Communication Quantity and Quality

To date, perhaps the most well-established psychological explanation for why inclusive leadership enhances upward communication is psychological safety. Defined as the belief that a workplace is safe for interpersonal risk-taking (Edmondson, 1999), psychological safety has been theorized and shown to be an important contextual antecedent of individuals' speaking up behavior because of its ability to reduce individuals' perceptions of risk (e.g., Chiaburu, Marinova, & Van Dyne, 2008; Morrison & Milliken, 2000; Edmondson, 2003; Detert & Burris, 2007; Walumbwa & Schaubroeck, 2009). When individuals perceive that they can communicate to management without incurring any form of punishment, they may communicate upward more often and in greater numbers (Detert & Burris, 2007; Morrison, Wheeler-Smith, & Kamdar, 2011). For example, Morrison and colleagues (2011) recently demonstrated across a sample of engineers in a large chemical company that shared group-level beliefs about upward communication (i.e., group voice climate) were positively associated with individuals' upward communication behavior.

The basic logic for why psychological safety increases upward communication is that when individuals feel safe to share their thoughts and opinions without fear of negative

repercussions from management, they are more willing to share opinions and concerns that would otherwise remain unspoken. Because psychologically safe environments promote risk-taking, freedom of expression (Edmondson, 1996; 1999), and higher levels of engagement (Nembhard & Edmondson, 2006), these settings can have a positive impact on individuals' willingness to share their concerns with powerful decision-makers (e.g., Nembhard & Edmondson, 2006). For these reasons, high levels of psychological safety should help highly inclusive leaders increase the amount of upward communication they receive.

***Hypothesis 3: Psychological safety will mediate the relationship between inclusive leadership and the quantity of upward communication individuals express. Specifically, inclusive leadership will be positively related to psychological safety (H3a) and psychological safety will be positively related to the quantity of upward communication individuals raise (H3b).***

However, at the same time high levels of psychological safety are working to increase individuals' willingness to communicate upward, they may also be creating an environment where a lower quality of communication is more frequently observed. Because psychologically safe environments lower the risks individuals associate with communicating upward (Edmondson, 1999; Detert & Burris, 2007), individuals may say whatever is on their mind, with little concern or regard for the overall quality of ideas they express. That is, environments high in psychological safety may have the unintended effect of lowering individuals' self-monitoring and self-censorship behaviors, since individuals may come to believe there are no sanctions associated with speaking up (Premeaux & Bedeian, 2003). When individuals do not feel pressure to vet their comments or self-monitor their communication, their personality tendencies may overpower any behavioral constraints placed upon them by situational norms. As a result, individuals may use this consequence-

free work environment to share perspectives with management that are not relevant, timely, or well-conceived, yielding a low overall quality of communication.

Another possible consequence of high levels of psychological safety is that it may encourage individuals to engage in less effortful cognitive processing. As the social loafing literature has repeatedly shown, individuals do not need much motivation to lower their effort levels dramatically (Karau & Williams, 1993). Given that individuals often take the path of least resistance (Leary, 1983; Premeaux & Bedeian, 2003), psychologically safe work environments may further reduce individuals' motivation to expend the cognitive resources needed to be able to communicate to management effectively. In this way, psychologically safe environments may encourage cognitive laziness that manifests itself in the form of half-baked, low quality ideas and suggestions.

At the other end of the spectrum, however, low levels of psychological safety may also encourage lower upward communication quality but for a far different reason. Specifically, when individuals are fearful about how their ideas will be received by important others, individuals are not likely to offer their honest opinions and thoughts to management (Kish-Gephart, et al., 2009; Van Dyne, Ang, & Botero, 2003; Morrison & Milliken, 2000). Rather than offering challenging, improvement-oriented ideas that can enhance the organizational status quo (Van Dyne & LePine, 1998), individuals are likely to fall victim to conformity pressures and engage in more acquiescent communication behavior (Van Dyne, Ang, & Botero, 2003). Unfortunately for organizations, if leaders have their followers simply parrot back to them whatever they want to hear, this does little to improve organizational-decision-making and makes them more prone to a host of natural cognitive biases (see Bazerman, 1993). For these reasons, low levels of psychological safety are likely

to be counterproductive to leaders' goals of obtaining high quality ideas and suggestions from their workforce, since they may not even get a significant number of ideas on which to render quality judgments. Of the ideas they do receive, they may not be novel or challenging of current practices, given the exclusive leader's appetite for maintaining the status quo.

These countervailing and opposing mechanisms at different points along the psychological safety continuum suggests that the established positive association of psychological safety on individuals' upward communication (e.g., Detert & Burris, 2007; Nembhard & Edmondson, 2006) may only occur at low to moderate levels of psychological safety. Beyond this point, higher levels of psychological safety may begin to bend the positive linear function and start to produce diminishing returns. Therefore, I hypothesize that the association of psychological safety on individuals' upward communication is likely to take on the shape of an inverted U-shaped function, where an initial positive linear trend of psychological safety on upward communication quality begins to give way to a more negative relationship.

***Hypothesis 4:** Psychological safety will mediate the relationship between inclusive leadership and the quality of upward communication individuals express. Specifically, psychological safety will be related to the quality of upward communication in the form of an inverted U-shape, where an initial positive association between psychological safety and upward communication quality gives way to a negative association.*

Although scholars have explored psychological safety as the primary driver of individuals' upward communication, several other well-established psychological theories have the potential to offer fresh insight into how inclusive leadership affects individuals' propensity to communicate at work. One such perspective that may explain why individuals choose to provide upward feedback is Vroom's (1964) expectancy theory of motivation, one of the most well-established theories in all of organizational behavior research. Simply

stated, expectancy theory posits that individuals are motivated to act when they believe that (a) they have the knowledge, skills and abilities needed to do what is asked of them (i.e., expectancy beliefs), (b) if they perform, there will be consequences (i.e., instrumentality beliefs), and (c) the consequences are highly valued (i.e., valence). All three facets are necessary for individuals to be fully motivated, with motivation decreasing if any component of this equation is absent or less than optimal (for a review, see Van Eerde & Thierry, 1996).

Applying this theoretical lens of expectancy theory to individuals' decision to engage in upward communication suggests that individuals may not speak up if they have reservations or concerns about their ability to communicate persuasively or to say something of value (e.g., Van Dyne, Ang, & Botero, 2003). Although individuals' reticence may be due to their own lack of self-efficacy or natural personality characteristics (e.g., high introversion), highly inclusive leaders should be able to help their followers overcome these hesitations about sharing concerns with management, irrespective of personality orientation, by reassuring them that they can communicate competently and offer a meaningful contribution. Similarly, highly inclusive leaders can strengthen individuals' instrumentality beliefs about providing upward feedback by removing individuals' doubts about management's commitment and willingness to implement their ideas (Avery & Quiñones, 2002). If employees perceive their leaders as merely paying lip-service to their suggestions and concerns, their motivation to communicate with management in the future is likely to decrease, since leaders' inaction implicitly communicates to subordinates that their performance (i.e., communicating upward) will not be rewarded.

However, when inclusive leaders demonstrate their commitment to their followers by considering and implementing good ideas whenever possible, individuals will be more likely



to communicate with management more frequently and in greater numbers (Detert & Burris, 2007). For these reasons, highly inclusive leaders should increase individuals' expectancy and instrumentality beliefs about communicating upward, which in turn, should enhance the amount of comments, ideas and/or suggestions individuals provide.

***Hypothesis 5:** Individuals' expectancy beliefs about communicating upward will mediate the relationship between inclusive leadership and the quantity of upward communication individuals express. Specifically, inclusive leadership will be positively related to expectancy beliefs (5a) and expectancy beliefs will be positively related to the quantity of upward communication individuals raise (5b).*

***Hypothesis 6:** Individuals' instrumentality beliefs about communicating upward will mediate the relationship between inclusive leadership and the quantity of upward communication individuals express. Specifically, inclusive leadership will be positively related to instrumentality beliefs (6a) and instrumentality beliefs will be positively related to the quantity of upward communication individuals raise (6b).*

However, just as high levels of psychological safety can potentially backfire and lead individuals to engage in a lower quality of upward communication, so too can heightened expectancy and instrumentality beliefs. The primary logic for this assertion comes from the goal-setting literature which finds that when individuals have simple goals that do not challenge their capabilities, they exert less effort and perform worse than when they are given more challenging, difficult goals (Locke & Latham, 2002; Locke, Shaw, Saari, & Latham, 1980). Because simple goals enable individuals to accomplish their objectives while exerting minimal effort, individuals' focus and attention to the task can easily wane (e.g., Knight, Durham, & Locke, 2001). In this way, by creating the perception that is easy for anyone to communicate to management well (i.e., increasing expectancy beliefs), irrespective of whether they possess the relevant knowledge, skills and abilities to do so, highly inclusive leaders may unintentionally reduce individuals' motivation to put forth the cognitive effort needed to engage in high quality upward communication. Essentially, highly inclusive

leaders may encourage individuals to feel overconfident in their capacity to communicate well, even if their ideas and comments are poorly conceived (e.g., Vancouver & Kendall, 2006; Bandura & Locke, 2003; Dunning, Heath & Suls, 2004). As a result, individuals may view speaking up to management as something that doesn't demand their full attention or care, resulting in lower quality ideas.

In the same way that individuals' expectancy beliefs about upward communication can rise to the point where they do not take it seriously enough, individuals' heightened instrumentality beliefs may also lead to lower quality upward communication because there are no perceived consequences of speaking up poorly. When individuals do not have any evaluation apprehension or concern about how their comments will be perceived by the leader, they may take the path of least resistance and offer ideas or suggestions that are not particularly relevant or well-conceived (Leary, 1983; Premeaux & Bedeian, 2003). For example, an analyst who is unconcerned about the consequences of communicating to management poorly may come to a meeting unprepared to discuss work-related issues in depth, choosing instead to offer surface-level suggestions or comments that give the appearance of conscientiousness. In this way, individuals may abuse the privilege their leader has given them to speak up freely, and instead, engage in social loafing. As scholars have previously demonstrated (e.g., Harkins, 1987; Karau & Williams, 1993; Latané, Williams, & Harkins, 1979), when individuals know that their performance will be evaluated and observed by others, they are less likely to shirk their responsibilities and instead, put forth the effort needed to perform at a high level. Thus, the reward of being able to communicate upward freely and not being sanctioned or punished by the highly inclusive leader, may actually work against individuals' motivation to provide high quality

communication to management. Ironically, by telling followers that they have the capacity to provide input to senior leaders, and that doing so will not lead to any punitive actions, highly inclusive leaders may unintentionally lower followers' motivation to provide high quality ideas and suggestions.

While these heightened expectancy and instrumentality beliefs may work in tandem to reduce the overall quality of communication individuals provide to their leaders, a similar problem can occur when leaders are highly exclusive and unwilling to consider or act upon their followers' suggestions or concerns. This assertion is grounded in the basic tenets of motivation theory, which posits that individuals are unlikely to put forth sufficient effort if they are not convinced that they can achieve the task they are asked to complete, or if they believe that performing the task will not result in important, valued consequences (Vroom, 1964; Ramlall, 2004). Because highly exclusive leaders can easily make their followers feel incapable and undervalued (Padilla, Hogan, & Kaiser, 2007), individuals may lack the confidence or required expertise needed to communicate their ideas upward. Even if individuals do believe they have the knowledge, skills and ability to provide management with valuable feedback, they may still determine that it is not worth the time or effort to do so, given the exclusive leader's demonstrated unwillingness to act upon their input (Avery & Quiñones, 2002). These broken motivational links of expectancy and instrumentality can often lead to higher levels of employee disengagement and cynicism (e.g., Reichers, Wanous, & Austin, 1997; Cartwright & Holmes, 2006; Wanous, Reichers, & Austin, 2000), which can manifest in the form of discourteous, unhelpful and/or lackadaisical upward communication. Furthermore, because followers often view their interactions with leaders through the lenses of equity (Adams, 1963, 1965) and social exchange (Gouldner, 1960; Graen & Uhl-Bien,

1995), individuals may decide that the appropriate amount and quality of ideas they offer to their leaders should be consistent with the lack of respect and concern they have been shown. As a result, they may choose not to speak at all, or if they do, only offer surface-level suggestions that maintain the balance in their inequitable relationship. For these reasons, lowered expectancy and instrumentality beliefs about communicating upward can discourage individuals from expressing a higher quality of upward communication.

In short, these arguments suggest that despite the positive motivational influence heightened expectancy and instrumentality beliefs can have on individuals' willingness to engage in more upward communication, these forces do not provide unlimited benefits. Rather, the quality of individuals' spoken and/or written contributions to management, can actually suffer at both high and low levels of expectancy and instrumentality beliefs, since at high levels of each, individuals say too much and at low levels, they say too little. Given these opposing mechanisms influencing the quality of individuals' communication with management, this suggests an inverted curvilinear relationship between expectancy and instrumentality beliefs and upward communication quality.

***Hypothesis 7:*** *Individuals' expectancy beliefs about communicating upward will mediate the relationship between inclusive leadership and the quality of upward communication individuals express. Specifically, expectancy beliefs will be related to the quality of upward communication in the form of an inverted U-shape.*

***Hypothesis 8:*** *Individuals' instrumentality beliefs about upward communication will mediate the relationship between inclusive leadership and the quality of upward communication individuals express. Specifically, instrumentality beliefs will be related to the quality of upward communication in the form of an inverted U-shape.*

A third potential explanation for why highly inclusive leadership may have mixed implications for individuals' upward communication behavior comes from a long-standing body of research on social exchange and norms of reciprocity. For years, theories of social

exchange (Blau, 1964) and norms of reciprocity (Gouldner, 1960) have been used to explain the relationship of perceived organizational support and leader-member exchange with employee attitudes and behavior (e.g., March & Simon, 1958; Levinson, 1965; Etzioni, 1961). Researchers have found that depending on the nature of the relationship between leader and member, individuals engage in different reciprocation efforts (e.g., McNeely & Meglino, 1994).

In work environments where individuals perceive a high degree of closeness and trust with their supervisor (i.e., a strong leader-member exchange (LMX) relationship), they are more likely to engage in both in-role and citizenship behaviors (Settoon, Bennett, & Liden, 1996), such as upward communication, because of strong feelings of obligation and duty to the leader. This desire to reciprocate arises from individuals' belief that a leader who signals a willingness to listen to their ideas and input, should be rewarded by receiving something back. Because the leader has taken the initiative to offer something of value in the social exchange – namely, an opportunity to provide input – individuals may feel obligated to respond in kind. For this reason, remaining silent in this moment may be viewed by individuals as “not holding up their end of the bargain.” As a result of these social exchange expectations, highly inclusive leaders may find themselves receiving more upward communication from their subordinates because the latter feel compelled to reciprocate in some tangible manner.

***Hypothesis 9:*** *Individuals' social exchange beliefs about communicating upward will mediate the relationship between inclusive leadership and the quantity of upward communication individuals express. Specifically, inclusive leadership will be positively related to social exchange beliefs (9a) and social exchange beliefs will be positively related to the quantity of upward communication individuals raise (9b).*

At the same time, however, the very need to reciprocate that encourages individuals to engage in more upward communication may also lead them to express a lower quality of upward communication, particularly when leaders have high social exchange expectations of the individual. As Harris and Kacmar (2006) demonstrated, high levels of leader-member exchange (LMX) and reciprocity expectations can actually be detrimental, causing greater stress among followers because of their perceived need to fulfill role obligations. These heightened stress levels can easily arise when individuals feel obliged to communicate something, such as in a project update meeting, where individuals' opinions and thoughts are being actively solicited by the leader. In such cases, individuals may determine that saying anything, regardless of whether or not it is useful or germane to the discussion, is preferable to remaining silent and being seen as not having anything to contribute.

From an employee's perspective, offering more, rather than less input may be rational behavior, in light of research showing that individuals who speak up more frequently and forcefully are often viewed by observers as higher status (Tiedens & Fragale, 2003; Erickson, Lind, Johnson, & O'Barr, 1978). As Van Dyne, Ang, and Botero (2003) suggested, even the simple act of expressing agreement with another's opinion can be viewed as a form of "speaking up," albeit a less than ideal one. In situations where individuals perceive strong norms of social exchange with the leader, they may determine that the costs of silence outweigh the costs of communicating poorly, and thus, choose to share their ideas or suggestions, even if they are ill-formed, untimely, or generally unhelpful. In this way, high levels of social exchange that place excessive demands on individuals to keep up their end of the psychological contract make it more likely that a lower quality of upward communication will emerge.

At the other end of the social exchange spectrum, leaders who have not made a real effort to develop trusting, productive relationships with their subordinates are likely to find their followers unwilling to provide them with highly valuable input. Because highly exclusive leaders, through their inattention to followers' ideas and concerns, reduce the likelihood that productive, mutually beneficial relationships can develop between themselves and their subordinates (Cropanzano, Prehar, & Chen, 2002), they are likely to "reap what they sow" in the form of low quality communication.

According to the justice literature, this can easily happen when leaders keep their followers from having an active role in shaping the organization's responses to important issues. For instance, when leaders fail to develop strong social exchange norms and discourage their followers' active participation in solving organizational problems, subordinates are likely to be unwilling to share their best ideas with management because they feel little or no sense of obligation or commitment to the leader (Turnley & Feldman, 1999; Tangirala & Ramanujam, 2008a). Instead, these subordinates experience lower morale and higher levels of affective and cognitive disengagement that diminishes their ability to be effective (Saks, 2006). In this way, highly exclusive leaders who fail to foster productive working relationships with their members are likely to produce followers who are unwilling to expend the cognitive energy and resources needed to provide management with high quality ideas and suggestions.

In summary, neither very low nor very high levels of perceived social exchange between leader and follower are likely to increase individuals' quality of upward communication. However, as leaders and followers collectively move from a very low (or non-existent) perception of social exchange to a more moderate level, they may find that

followers begin to trust leaders more and provide them with quality ideas and suggestions that serve as a reward for this dramatic increase in trust and mutual respect. However, once this level of social exchange has been established, it no longer serves its initial purpose of freeing up individuals to express their concerns without fear. Therefore, this suggests that beyond a point of moderation, high levels of social exchange do not provide any added benefit, and thus, produce diminishing returns.

***Hypothesis 10:** Individuals' social exchange beliefs about communicating upward will mediate the relationship between inclusive leadership and the quality of upward communication individuals express. Specifically, social exchange beliefs will be related to the quality of upward communication in the form of an inverted U-shape where an initial positive association between social exchange and upward communication quality gives way to a negative association and diminishing returns.*

A final reason why highly inclusive leaders may get more upward communication, but also a lower quality of upward communication, is the mixed influence highly inclusive leaders have on subordinates' social anxiety and motivation to self-censor. As Morrison and Milliken (2000) theorized, in many organizations, employees are hesitant to share their true thoughts and opinions because they worry that their leader will not look favorably upon their ideas and/or make negative attributions about them. Because individuals may be anxious about being evaluated and receiving negative feedback from the leader (Leary, 1983), individuals may instead engage in self-censorship – defined as “the withholding of one’s true opinion from an audience perceived to disagree with that opinion” (Hayes, Glynn, and Shanahan, 2005, p.298). In fact, research has shown that individuals will often choose silence over voice unless they know beforehand that their opinions are shared and supported by numerous others (Hayes, Uldall, & Glynn, 2010; Hayes, Scheufele, & Huges, 2006; Hayes, Shanahan, & Glynn, 2001). As Van Dyne and colleagues (2003) describe it, this passive,



acquiescent form of communication enables individuals to endear themselves to the majority in the group, while simultaneously limiting the possibility that they will be singled out.

However, when individuals work for highly inclusive leaders, they gain the freedom to openly share their honest, unfiltered perspective with important actors. That is, highly inclusive leaders implicitly signal to their followers that there is no need for them to engage in self-censorship, since there are no negative sanctions associated with communicating upward (Detert & Burris, 2007). By providing their followers with the psychological safety they need to communicate upward effectively (Nembhard & Edmondson, 2006), individuals are likely to feel empowered to share their insights with little concern for how their leader might perceive them (Carmeli, Reiter-Palmon, & Ziv, 2010). For these reasons, highly inclusive leaders should receive an abundance of ideas – good, bad, and in-between – because individuals are not anxious about communicating upward, nor feel the need to self-censor their views in order to make them palatable to management (e.g., Premeaux & Bedeian, 2003).

***Hypothesis 11:*** *Individuals' social anxiety about communicating upward will mediate the relationship between inclusive leadership and the quantity of upward communication individuals express. Specifically, inclusive leadership will be negatively related to social anxiety (11a) and social anxiety will be negatively related to the quantity of upward communication individuals raise (11b).*

***Hypothesis 12:*** *Individuals' willingness to self-censor will mediate the relationship between inclusive leadership and the quantity of upward communication individuals express. Specifically, inclusive leadership will be negatively related to self-censorship (12a) and self-censorship will be negatively related to the quantity of upward communication individuals raise (12b).*

However, similar to the previously hypothesized mechanisms, these beneficial influences of lower social anxiety and self-censorship on individuals' quantity of upward communication may also have negative implications for the quality of this communication

beyond a certain inflection point. For instance, on the right side of the curve, a high level of anxiety about speaking up to management can lead individuals to experience greater rigidity, which hinders their ability to perform (Staw et al., 1981). Just as high levels of social exchange increase individuals' perceived role obligations to the point where it induces debilitating stress (Harris & Kacmar, 2006), so too can high levels of social anxiety increase individuals' experiences of threat rigidity. Unlike the beneficial impact positive emotions can have on individuals' ability to broaden and build their cognitive resources (Fredrickson, 2001), higher levels of anxiety caused by the leader's unwillingness to consider others' input can leave individuals with fewer mental faculties available to be harnessed (see Kashdan, 2007 for a meta-analysis and review) for the purpose of expressing high quality ideas. In this way, high levels of social anxiety may reduce the number of good ideas individuals generate and share with senior leaders, thereby lowering the probability that high quality ideas can emerge. The same outcome can arise when individuals engage in high levels of self-censorship, particularly when they do so in response to a highly exclusive leader. When individuals self-impose too restrictive a cognitive filter when sharing their ideas and concerns upward, managers have a limited base of ideas from which to render quality judgments. Thus, by creating a climate of fear and apprehension around speaking up, leaders increase individuals' self-censorship tendencies to the point where they implicitly choose silence over voice, thus hurting leaders' ability to get both a high quantity and quality of ideas from their workforce.

However, at the low ends of social anxiety and self-censorship, poor quality upward communication can also result, but for the opposite reason. When individuals experience too little social anxiety about communicating upward and have little motivation to engage in self-

self-censorship, they may engage in too little cognitive filtering of ideas for quality and say whatever is on their mind. In this way, low levels of social anxiety and self-censorship can lead individuals to produce an abundance of upward communication that varies widely in its perceived quality. Without giving individuals an appropriate amount of structure (e.g., Judge, Piccolo, & Ilies, 2004) or strong incentives to exert high levels of cognitive effort, highly inclusive leaders who lower individuals' social anxiety and self-censorship behaviors may find that their openness and approachability actually works against them. In this way, a lack of social anxiety and self-censorship can actually contribute to a lower overall quality of upward communication.

Given that theory suggests that neither high nor low levels of social anxiety or self-censorship are particularly conducive to producing a high quality of upward communication, this implies that perhaps a more moderate approach to both mechanisms may be needed to yield quality outcomes. In fact, such a view is supported by the psychology-based Yerkes-Dodson law (1908), which suggests that a moderate amount of arousal (e.g., stress) is needed to produce high levels of individual performance, but that at the extremes of arousal, performance suffers. In this way, having a moderate amount of social anxiety about how the leader will perceive and evaluate one's contribution may actually help to channel individuals' cognitive resources towards producing a higher quality of communication. Similarly, moderate levels of self-censorship may help leaders get a sufficient number of ideas (i.e., enough to be able to make sound quality judgments), but only those ideas that have been vetted by the individual and that have gone through some elaborate cognitive filtering and selection process. Thus, it stands to reason that individuals' overall quality of upward communication may be highest when there is some moderate level of performance pressure

that motivates individuals to put forth a significant amount of time and effort into generating and articulating their ideas to management. Therefore, for my final two hypotheses, I propose the following:

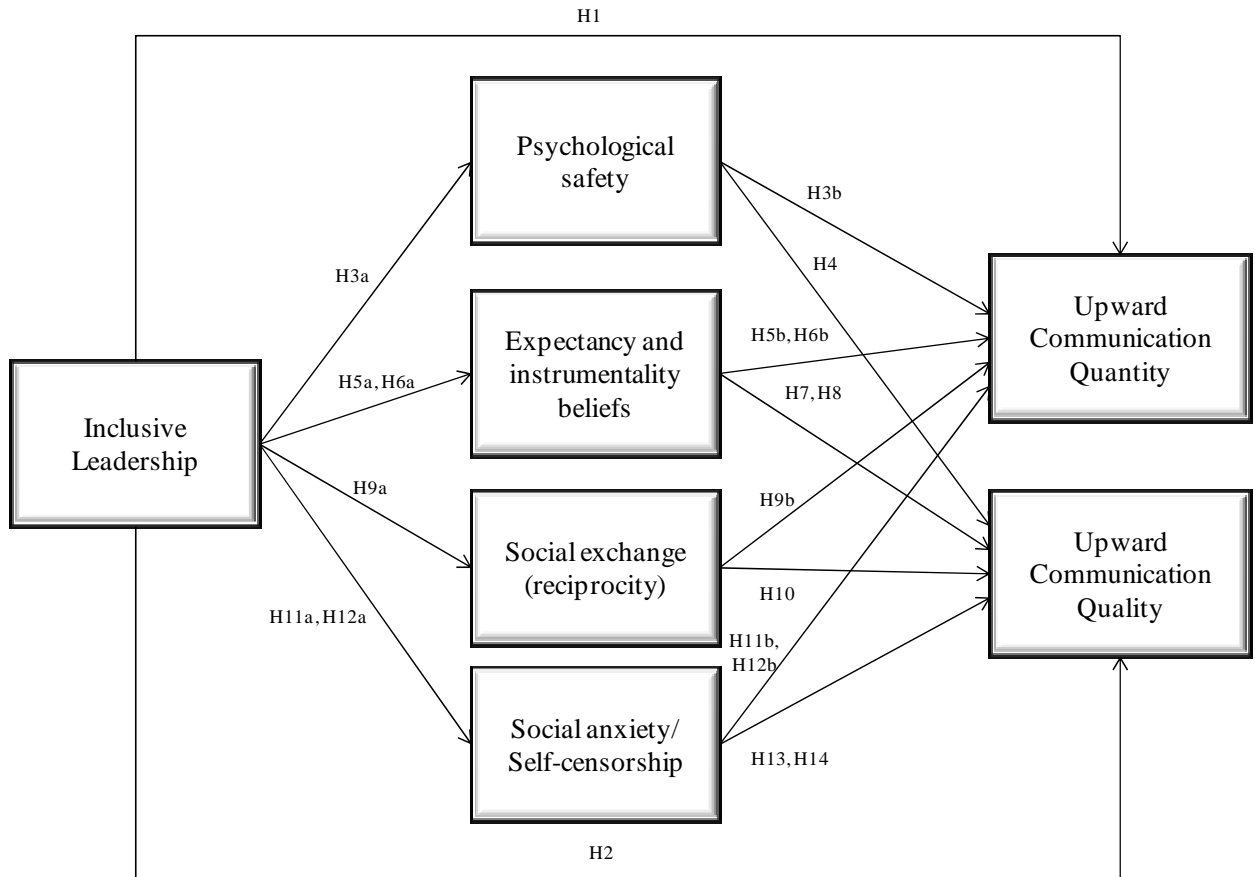
***Hypothesis 13:*** *Individuals' social anxiety about communicating upward will mediate the relationship between inclusive leadership and the quality of upward communication individuals express. Specifically, social anxiety will be related to the quality of upward communication in the form of an inverted U-shape where an initial positive association between social anxiety and upward communication quality gives way to a negative association.*

***Hypothesis 14:*** *Individuals' willingness to self-censor will mediate the relationship between inclusive leadership and the quality of upward communication individuals express. Specifically, self-censorship will be related to the quality of upward communication in the form of an inverted U-shape where an initial positive association between self-censorship and upward communication quality gives way to a negative association.*

In summary, this preceding discussion highlights several different reasons why highly inclusive leadership can increase the quantity of individuals' upward communication, while simultaneously lowering the quality of this communication. While these arguments admittedly stand in direct opposition to conventional wisdom and recent trends in management, a few scholars have noted that high levels of inclusive leadership may actually be counterproductive (e.g., Judge, Piccolo, & Ilies, 2004; Fleishman & Harris, 1962; Peterson, 1999) to organizations' stated goals of getting the best, most innovative ideas from their workforce. Although highly inclusive leaders may increase the amount of upward communication they receive by creating a climate of psychological safety, increasing expectancy and instrumentality beliefs, fostering higher levels of social exchange, and reducing individuals' social anxiety and need to self-censor, these same forces may also produce a lower quality of upward communication because they do not provide any adequate form of monitoring, accountability or structure that individuals often need to perform at a

high level. Because individuals' incentives to engage in self-censorship and self-filtering of ideas for quality are minimal in highly inclusive settings, individuals may take advantage of the comfortable and open relationship they have with their leader by expressing thoughts, ideas or concerns that are not at all clear, constructive, thoughtful, or actionable. Therefore, the established positive association between highly inclusive leadership and individuals' upward communication observed in previous studies (e.g., Detert & Burris, 2007; Nembhard & Edmondson, 2006) may turn negative when evaluated from a quality perspective.

**Figure 1: The Influence of Inclusive Leadership on Upward Communication Quantity and Quality**



## VI. STUDY 1

To test my primary hypotheses, three separate studies using multiple methods (i.e., archival, lab, and field) were conducted in an effort to find triangulated support for my primary thesis that high levels of inclusive leadership may have mixed implications for the quantity and quality of upward communication individuals' offer. In the next three chapters, I detail the results of these analyses.

To better understand how leaders' inclusiveness might impact both the quantity and quality of upward communication individuals raise within their organizations, I used an archival dataset of MBA student-faculty evaluations to test Hypotheses 1 and 2 to determine if any initial empirical support for the phenomena existed.

### *Sample*

I sent an e-mail invitation to full-time and part-time faculty members<sup>1</sup> (151 members in total) at a large, accredited business school in the Southeast requesting their permission to use their 2008-2009 MBA student-faculty teaching evaluations as an archival dataset. Forty-three faculty members, representing 28 percent of total faculty, and roughly 60 percent of MBA teaching faculty, agreed to release their teaching evaluations for this research effort. These 43 faculty members represented each of the seven academic units within the school –

---

<sup>1</sup> Although faculty members may not be viewed as leaders in the traditional sense, their role in creating a climate of psychological safety for students to express ideas, communicating performance feedback, and setting clear goals and expectations for performance (see Yukl, 1994), provided sufficient theoretical justification to investigate their behavioral impact on their followers' (i.e., students) communication patterns.

Accounting (4), Finance (10), Marketing (4), Organizational Behavior (7), Operations, Technology, and Information Management (6), Communications (4), and Strategy and Entrepreneurship (8), with tenure-track Assistant Professors representing the largest group among respondents (32.6%). Across the entire sample, tenure-track faculty (67.5%) at the Assistant, Associate, Full, and Chair Professor levels had greater representation than Clinical and Adjunct faculty (32.6%). On average, each faculty member taught 1.5 MBA courses during this time period, with a total of 58 courses and 143 sections represented across all departments. Each faculty member received an average of 65.7 student evaluations ( $SD=49.2$ ). Although students were typically asked by both the faculty member and the school to complete these evaluations, student participation was completely voluntary and had no bearing on their course grades.

Students had the opportunity to complete and submit their course evaluations via an online school-wide system. This online evaluation form included a quantitative section in which students were asked a series of questions about both the instructor and the course, followed by an open-ended qualitative free response section where students could provide typed comments about their academic experience. In total, faculty received 2,360 open-ended comments related specifically to the course, its characteristics, and how it might be improved. Although the large number of comments provided sufficient power to test the proposed hypotheses, because this study was designed to test the association of inclusive leadership with individuals' quantity and quality of upward communication, the level of analysis chosen for all statistical analyses was the faculty member (i.e., the leader). Therefore, all student comments nested within sections and within courses were aggregated to the specific faculty member, resulting in a final sample size ( $N$ ) of 43.

## *Measures*

Inclusive Leadership: Inclusive leadership was measured using a three-item composite taken from the course evaluation form ( $\alpha=.89$ ), where each item was measured on a 1 to 5 point Likert scale (1=*Strongly Disagree*, 5=*Strongly Agree*). The three items were, “*The instructor was open to student questions (during or outside of class)*”, “*The instructor was available for help outside of class (e.g., by keeping office hours or making appointments)*”, and “*The instructor provided appropriate feedback on my performance during this course.*” While the first two items were clearly face valid with respect to inclusiveness, the third item was included based on research suggesting that the feedback process constitutes an open and honest exchange of information that communicates supportiveness on the part of the leader (see Wayne, Shore, & Liden, 1997; Detert & Burris, 2007).

Upward Communication Quality: Given the large number of comments (i.e., over 2,300) that needed to be evaluated for quality, two independent coders were selected. The first coder was employed by the school and had extensive prior experience as a teaching assistant in MBA classes, thereby allowing her to serve as a reliable domain expert, while the second coder was a prospective doctoral candidate. I asked both coders to rate a single-item for upward communication quality, “*I would describe this statement/comment as high quality*” on a 1 to 7 point Likert scale (1=*Strongly Disagree*, 7=*Strongly Agree*).

After reviewing a small sample of coded comments from both raters, discussing discrepancies and calibrating ratings, a good level of internal consistency ( $ICC(2) = .80$ ,  $p<.001$ ) and agreement ( $r_{wg}=.80$ ) between both coders’ ratings of upward communication



quality was observed. Thus, overall upward communication quality was measured using an average of each coder's quality ratings.

Controls: I included several control variables in the regression analysis to minimize the possibility of alternative explanations. For Hypothesis 1, which tested the association between inclusive leadership and upward communication quantity, I included controls for the number of faculty evaluations completed and students' satisfaction ratings. Students' overall satisfaction was assessed with the following two-items, "*Overall, considering its content, design and structure, this course was excellent*", and "*Overall, considering both the possibilities and limitations of the subject matter, this instructor was excellent*" ( $\alpha=.98$ ). It was important to control for students' satisfaction ratings in order to account for the possibility that students were simply unhappy with grades, the class, or the professor, and thus, wrote comments that were unhelpful, poorly expressed, or generally low in quality. Additional controls, such as faculty member gender, rank, and department affiliation were also tested, but excluded from the reported results for the sake of parsimony, given their lack of predictive power.

For Hypothesis 2, which tested the proposed inverted U-shaped relationship between inclusive leadership and upward communication quality, the same controls as above were used, while also including the total number of words each faculty member received in their evaluations. By including the number of evaluations and number of words as proxy measures of upward communication quantity, the incremental effects of inclusive leadership on upward communication quality could be better assessed.

## Results

Means, standard deviations, and correlations for the tested variables are displayed in Table 1. OLS hierarchical regression was used to test Hypothesis 1 and Hypothesis 2, the results of which are displayed in Table 2. Following the recommendations of Aiken and West (1991), all measures were mean-centered prior to inclusion in the regression equation to facilitate interpretation of the form of the interaction.

**Table 1**

**Study 1 - Means, Standard Deviations and Correlations Among All Tested Variables**

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5	6
1. Inclusive leadership	4.35	.33	(.89)					
2. Inclusive leadership <sup>2</sup>	19.06	2.79	-.58**	---				
3. Number of words	2399.44	2344.56	-.34*	.60**	---			
4. Number of evaluations	65.72	49.22	-.14	.31*	.88**	---		
5. UC Quality	3.86	.56	-.31*	.20	.23	-.10	---	
6. Student satisfaction	4.25	.51	.90**	.57**	-.35*	-.11	-.44**	(.98)

Notes. \*\*  $p < .01$ ; \*  $p < .05$ ;  $N = 43$

Coefficient alphas for scales are in parentheses along the diagonal.

UC = Upward Communication

Hypothesis 1 predicted that a high level of inclusive leadership was positively associated with a higher quantity of upward communication, measured in terms of the number of words students typed in their evaluations. In Step 1, control variables were included in the regression model (i.e., the number of faculty evaluations and students' satisfaction). As expected, a main effect for the number of evaluations on individuals' upward communication quantity ( $\beta = .85, p < .001$ ) was observed. This result simply indicates that the more faculty evaluations students voluntarily completed, the greater the amount of written communication faculty members received. In Step 2, the inclusive leadership term

was added to the model, but no significant association with the amount of upward communication was found ( $\beta = -.001, n.s.$ ). Thus, Hypothesis 1 was not supported.

Hypothesis 2, which was the primary hypothesis of interest in this investigation, predicted that high levels of inclusive leadership would be associated with diminishing returns on upward communication quality (i.e., an inverted U-shape). In Step 1, main effects for the number of evaluations ( $\beta = -1.20, p < .001$ ) and number of words ( $\beta = 1.24, p < .001$ ) were observed. These results imply that the fewer evaluations faculty members received, but the more words students wrote, the higher the perceived quality of their contributions. In Step 2, the linear inclusive leadership was entered, but no significant association with upward communication quality was found ( $\beta = .44, n.s.$ ). In Step 3, as predicted, there was a significant curvilinear association of inclusive leadership ( $\beta = -.60, p \leq .001$ ) on upward communication quality. Thus, Hypothesis 2 was supported. Figure 2 graphically illustrates this finding, highlighting the inverted U-shaped relationship between faculty member's inclusiveness and the quality of feedback students provided in their online course evaluations.

Although this finding provides some initial support for the hypothesized negative influence of inclusive leadership, given the extremely high correlation between inclusive leadership and student satisfaction ( $r = .90, p < .001$ ), a confirmatory factor analysis (CFA) using AMOS Version 17.0 was conducted to assess whether students' ratings of inclusiveness were reflective of an underlying attitude toward the class/professor, or whether they were truly judging faculty members' inclusiveness independent of satisfaction. Results of the CFA showed slightly poorer model fit when the correlation between the two factors was fixed to 1.0 ( $\chi^2 = 62.7, df = 7, p < .001, CFI = .80$ ), compared to when they were allowed to

correlate freely ( $\chi^2=57.3$ ,  $df=6$ ,  $p<.001$ ,  $CFI=.82$ ), providing some evidence for discriminant validity. However, given the similarity of these results, to further assess whether including students' satisfaction scores as a unique predictor was justified, Hypotheses 1 and 2 were reanalyzed without student satisfaction included in the hierarchical regression model. Results of this supplemental analysis are shown in Table 3.

In testing Hypothesis 1, the total number of completed faculty evaluations was included as a predictor of individuals' upward communication quantity in Step 1, resulting in a significant main effect ( $\beta= .88$ ,  $p<.001$ ). However, unlike in the original analysis, adding the inclusive leadership term in Step 2 produced a significant negative association of inclusive leadership with individuals' amount of upward communication ( $\beta= -.23$ ,  $p<.01$ ). This implies that highly inclusive leaders received less, not more, written feedback from their students, contrary to my prediction. Thus, Hypothesis 1 was still not supported. Although the removal of students' satisfaction scores changed the interpretation of Hypothesis 1 in this supplemental analysis, retesting Hypothesis 2 without students' satisfaction scores as a predictor in the regression equation did not yield significantly different results. Just as before, a significant curvilinear term was observed for the association of faculty members' inclusiveness and individuals' upward communication quality ( $\beta= -.61$ ,  $p\leq.001$ ). Thus, Hypothesis 2 was still supported.

**Table 2**

**Study 1 - Results of Hierarchical Regression Analysis with Student Satisfaction as a Predictor of Upward Communication (UC) Quantity and Upward Communication (UC) Quality**

Variable	DV=UC Quantity (H1)			DV=UC Quality (H2)	
	Step 1	Step 2	Step 1	Step 2	Step 3
Number of evaluations	.85***	.85***	-1.20***	-1.18***	-1.64***
Number of words	---	---	1.24***	1.24***	1.94***
Student satisfaction	-.25***	-.25	-.15	-.54	-.53*
Faculty inclusiveness	---	<b>-.00</b>	---	.44	.26
Faculty inclusiveness <sup>2</sup>	---	---	---	---	<b>-.60***</b>
R <sup>2</sup>	.83	.83	.47	.51	.64
Adjusted R <sup>2</sup>	.83	.82	.43	.45	.60
ΔF	100.79***	.00	11.47***	2.82	14.30***

Note. \**p* <.05; \*\**p*<.01; \*\*\**p*≤.001; *N* = 43. Statistics in bold represent tests of hypotheses.

**Table 3**

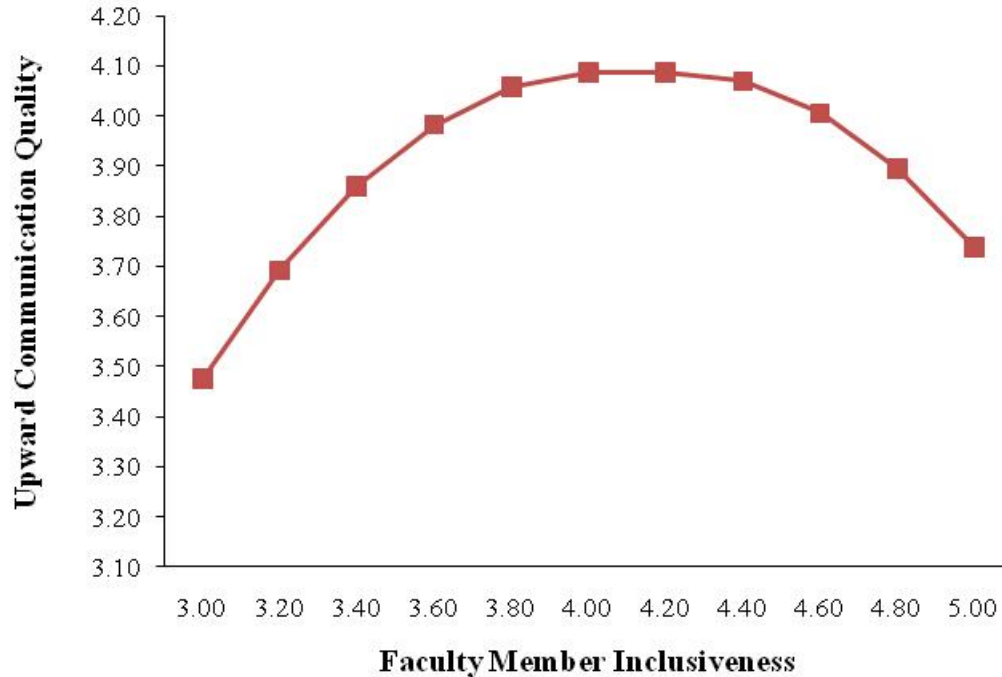
**Study 1 - Results of Hierarchical Regression Analysis without Student Satisfaction as a Predictor of Upward Communication (UC) Quantity and Upward Communication (UC) Quality**

Variable	DV=UC Quantity (H1)			DV=UC Quality (H2)	
	Step 1	Step 2	Step 1	Step 2	Step 3
Number of evaluations	.88***	.85***	-1.32***	-1.31***	-1.77***
Number of words	---	---	1.40***	1.38***	2.09***
Faculty inclusiveness	---	<b>-.23**</b>	---	-.02	-.19
Faculty inclusiveness <sup>2</sup>	---	---	---	---	<b>-.61***</b>
R <sup>2</sup>	.77	.82	.45	.45	.59
Adjusted R <sup>2</sup>	.77	.81	.43	.41	.55
ΔF	139.53***	92.80***	16.57***	.01	13.10***

Note. \**p* <.05; \*\**p*<.01; \*\*\**p*≤.001; *N* = 43. Statistics in bold represent tests of hypotheses.

**Figure 2**

**Study 1 - MBA Students' Upward Communication Quality as a Function of Faculty Members' Perceived Inclusiveness**



*Discussion*

Although this study makes an important empirical contribution to both the upward communication and leadership literatures by providing initial support for the idea that high levels of inclusive leadership may encourage a lower quality of upward communication from subordinates, it is not without its limitations. For one, this sample included a relatively small number of faculty members from a single academic institution that operated under a culture that encourages faculty members to be open and receptive to students' ideas and concerns. As illustrated by the high mean for faculty members' inclusiveness ( $M=4.35, SD=.33$ ), the restricted range of observable values on this measure (i.e., between 3 and 5) could account for the symmetrical inverted-U shaped function observed in Figure 2, rather than a more

asymptotic-shaped function that might be more consistent with a diminishing returns argument. Second, although faculty members were viewed as the “leaders” in this particular study, they may not necessarily play the traditional roles leaders might be expected to occupy in typical business environments. A third limitation of this exploratory investigation is that highly inclusive faculty members could very well have captured students’ input and suggestions throughout the course, thus leaving students with very little of substance or value to say in their final evaluations. Fourth, the data in this initial study were nested in ways (e.g., multiple evaluations within students) that leave open the possibility that students’ personal characteristics influenced their ratings across multiple faculty members. Fifth, the dependent measure of upward communication quantity was measured as the number of words, rather than the number of specific sentences or comments. This was done, in large part, due to the limited availability of coders and resources, given the already sizable dataset they were evaluating for quality. However, future research should attempt to break down communication patterns in more specific and tangible ways, including the presence of affect (e.g., positive vs. negative tone). Finally, because this study design was purely correlational, it did not allow for the testing of psychological mechanisms or determining causality. As such, an experimental lab study using a sample of undergraduates was conducted in an effort to constructively replicate the curvilinear findings from Study 1, and to provide greater insight into the reasons why high levels of inclusive leadership might encourage lower upward communication quality.

## VII. STUDY 2

### *Sample*

One-hundred and thirty undergraduate business students from a large public university in the southeast participated in this experimental task. Students were recruited to participate in this study through visits to undergraduate classes, as well as through the undergraduate subject pool available to researchers. This resulted in 53 participants coming from multiple sections of an upper-level, undergraduate strategy course, and 77 participants from the undergraduate subject pool. I conducted an independent samples t-test and used Levene's equality of variances test to see if there were significant differences between the two groups on the key dependent measures of interest (i.e., upward communication quantity and upward communication quality). Through this analysis, no significant differences between the two groups on either the quantity ( $F=1.74, p=.190$ ) or quality of communication measures were found ( $F=.084, p=.773$ ). For this reason, I combined both groups into a single sample to ensure sufficient statistical power across my three experimental conditions (see Cohen, 1992). After excluding participants who did not complete the experimental task or survey completely, 121 students (93%) were left in the final sample. Respondents were primarily Caucasian (83.5%), male (62.8%) and on average, 20.9 years old ( $SD= 1.84$ ).

### *Study Design*

To test my primary thesis that compared to low or high levels, moderate levels of inclusive leadership should produce the highest quality of upward communication, I randomly assigned participants to one of three manipulated conditions in which inclusive



leadership varied across three separate levels (high, moderate, and low), resulting in a single-factor ANOVA (3x1) design. To validate the strength of the manipulation, I ran a pretest using a random sample of 150 undergraduates who were not a part of the main sample, or any other part of the investigation. Results of this pretest confirmed significant differences between the three groups on individuals' perceptions of inclusive leadership ( $F=8.85$ ,  $p<.001$ ), where inclusive leadership was measured using Ashford et al.'s (1998) six-item top management openness scale.

For the main experimental task, participants were presented with an official-looking memo from a fictitious new Associate Director of Undergraduate Business, in which he solicited their input on an important organizational issue. To help foster realism and students' role immersion in the task, the memo included the school's official logo and the Director's personal signature. More generally, this task was modeled after Kahai, Sosik, and Avolio's (2004) experimental manipulation in which they sought to determine the effects of leadership style (i.e., participative vs. directive) on work groups' performance, participation and satisfaction in interactive, electronic-communication environments.

In this "official memo," the new administrator described how he had been tasked by senior leadership to help the school become "ranked as one of the top three undergraduate business programs among public universities." Participants across the three conditions were asked to provide their input and ideas on how to go about achieving this goal, but to varying degrees. In the high inclusive leadership condition, the leader's manipulated request for input was inviting and enthusiastic, and suggested that the leader would consider any and all ideas:

*"I would like to extend a personal invitation to you to send me your ideas, observations, concerns, and suggestions on what we should be doing to become a Top*

*3 business school. Please be aware that I will read each and every single one of your comments carefully, and will think hard about how I can implement all of your ideas. Your input is extremely valuable and important to me. Thank you so much for taking the time to send me your helpful feedback - I really appreciate it, and eagerly look forward to hearing from you!"*

In the moderate inclusive leadership condition, the leader was more subdued in his request for feedback, suggesting that only a few ideas would be considered and implemented:

*"I ask that you send me your ideas, observations, concerns, and suggestions on what we should be doing to become a Top 3 business school. Please be aware that I will go through a few of your comments, and will give a bit of thought as to how I can implement a few of your ideas."*

Finally, in the low inclusive leadership condition, the leader made it explicitly clear that students' input was not considered valuable, nor was it likely to be acted upon:

*"I have a strong sense already for what our next steps should be to become a Top 3 business school, but if you really want to, you can write down some ideas, observations, concerns, and suggestions below. If past experience is any guide, I'm unlikely to implement them."*

Upon reading this memo from the hypothetical leader, participants were given ten minutes to write down or type their comments and suggestions on how the school could achieve its stated goal. After completing this experimental task, participants were then presented with a short survey in which they were asked to rate how they felt about the feedback process, what they were experiencing as they completed the task, and their perceptions of the leader, all of which formed the basis for testing the hypothesized mechanisms. At the end of the survey, participants were thanked for their time and debriefed.

### *Measures*

Unless otherwise noted, all measures were assessed on a 1 to 7-point Likert scale, where 1=*Strongly Disagree*, and 7=*Strongly Agree*.

### *Manipulation Check – Inclusive Leadership*

To determine whether or not the inclusive leadership manipulation worked as intended, at the end of the survey I captured adapted measures of perceived management openness ( $\alpha = .96$ ) (see Ashford, Rothbard, Piderit, & Dutton, 1998). A sample management openness item is, “*I would feel free to make recommendations to this leader to change existing practices.*” One-way analysis of variance and Tukey multiple comparison tests provided evidence of significant mean differences between the low vs. moderate ( $p < .05$ ) and moderate vs. high inclusive leadership conditions ( $p < .01$ ), suggesting the manipulation was effective.

### *Dependent Measures*

#### Upward Communication Quantity and Upward Communication Quality

As in Study 1, upward communication quantity was operationalized as the number of words individuals provided in their responses to the fictitious leader. To evaluate upward communication quality, I had two independent coders once again rate students’ comments for perceived quality on a single item measure – “*I would describe this statement/comment as high quality.*” One of the coders worked in the business school as a research assistant, while the other was employed full-time outside of the school, in the higher education arena, thus providing them both with relevant contextual knowledge for making judgments about quality. Measures of both consistency ( $ICC(2) = .76, p < .001$ ) and agreement ( $r_{wg} = .75$ ) of ratings between both coders were adequate.

### *Tested Mediators*

#### Psychological Safety

I assessed psychological safety using adapted items from Edmondson's (1999) established seven-item scale ( $\alpha=.82$ ), of which a sample item is, "*Students at (XYZ School) are able to bring up problems and tough issues.*"

#### Expectancy and Instrumentality Beliefs

I measured individuals' expectancy beliefs about communicating upward using a three-item scale ( $\alpha=.86$ ). The first item was adapted from Jones' (1986) self-efficacy scale – "*Speaking up to this leader was well within the scope of my abilities,*" while the other two items were created for the purposes of this study – "*I felt capable in my ability to effectively speak up to this leader,*" and "*I was confident in my ability to voice my concerns effectively to this leader.*"

To measure individuals' instrumentality beliefs, I created a three-item scale ( $\alpha=.93$ ), specific to upward communication motivation. These items were: "*I thought my ideas would be heard by this leader,*" "*I thought my suggestions would be well received by this leader,*" and "*I thought my ideas would be acted upon by this leader.*"

#### Social Exchange

Social exchange was measured using a three-item scale I developed for this study ( $\alpha=.89$ ). These items were, "*I felt obligated to offer ideas that will help (XYZ School) be successful because of the way this leader communicated with me,*" "*I felt it was my duty to offer my best thoughts and ideas to this leader,*" and "*I felt a sense of responsibility to this leader to provide him with high quality comments and ideas.*"

#### Social Anxiety and Self-censorship

I adapted Leary's (1983) twelve-item evaluation apprehension scale ( $\alpha=.89$ ) to assess individuals' social anxiety about communicating upward. A few sample items include, "*I*

*was worried about saying the wrong things around this leader,”* and *“When I voiced my opinions, I was afraid that this leader might find fault with me.”* Finally, I measured individuals’ perceived need to engage in self-censorship using an adapted version of Hayes et al’s (2005a) previously validated eight-item scale ( $\alpha=.84$ ). A sample item is, *“I thought it was safer to keep quiet than publicly speak an opinion that I thought this leader might not share.”*

### *Results*

I used one-way analysis of variance (ANOVA) with Tukey HSD multiple comparison tests to test for mean differences in upward communication quantity (Hypothesis 1) and quality (Hypothesis 2) across the three inclusive leadership conditions. The results of this analysis are presented in Table 4. For Hypothesis 1, I predicted that higher levels of inclusive leadership would yield a higher quantity of individuals’ upward communication. Although the omnibus *F*-test indicated significant differences across conditions ( $F(2, 118) = 3.62, p<.05$ ), the highest mean word count resided in the moderate inclusive leadership condition ( $M=126.22, SD=67.29$ ), rather than the high inclusive leadership condition ( $M=101.91, SD=68.55$ ), contrary to Hypothesis 1. Post hoc, planned comparison tests using Tukey’s HSD further indicated that the driver of the observed differences across conditions was the significantly higher word count ( $p<.05$ ) in the moderate inclusiveness condition ( $M=126.22, SD=67.29$ ), compared to the low inclusiveness condition ( $M=86.06, SD=60.36$ ). No statistically significant mean differences across the low vs. high or moderate vs. high conditions were observed. Thus, Hypothesis 1 was not supported.

For Hypothesis 2, I predicted an inverted U-shaped relationship between inclusive leadership and individuals’ quality of upward communication. This suggests that the highest

quality of upward communication would occur within the moderate inclusive leadership condition. Once again, I found a significant omnibus *F*-test, suggesting differences across the three conditions ( $F(2, 118) = 5.31, p < .01$ ). Furthermore, as predicted, the highest upward communication quality was observed in the moderate inclusive leadership condition ( $M=4.78, SD=1.43$ ), while feedback quality was roughly equal in both the high ( $M=3.79, SD=1.41$ ) and low ( $M=3.97, SD=1.62$ ) inclusiveness conditions. A post hoc planned comparison using Tukey's HSD test confirmed significant mean differences between the low vs. moderate conditions ( $p < .05$ ) and the moderate vs. high conditions ( $p < .01$ ), but no significant difference between the low vs. high conditions ( $p > .10$ ). Thus, this evidence provides support for Hypothesis 2 and the inverted curvilinear relationship between inclusive leadership and upward communication quality.

**Table 4**

**Study 2 – Mean Differences in Upward Communication Quantity and Quality across Low, Moderate and High Inclusive Leadership Conditions**

<b>DV = Upward Communication Quantity</b>					
<b>Condition</b>	<b><i>N</i></b>	<b><i>M</i></b>	<b><i>SD</i></b>	<b>95% Confidence Interval</b>	
				<b>Lower Bound</b>	<b>Upper Bound</b>
Low Inclusive Leadership	35	86.06	60.36	65.32	106.79
Moderate Inclusive Leadership	41	126.22	67.29	104.98	147.46
High Inclusive Leadership	45	101.91	68.55	81.32	122.50
Total	121	105.56	67.28	93.45	117.67

<b>DV = Upward Communication Quality</b>					
<b>Condition</b>	<b><i>N</i></b>	<b><i>M</i></b>	<b><i>SD</i></b>	<b>95% Confidence Interval</b>	
				<b>Lower Bound</b>	<b>Upper Bound</b>
Low Inclusive Leadership	35	3.97	1.62	3.42	4.53
Moderate Inclusive Leadership	41	4.78	1.43	4.33	5.23
High Inclusive Leadership	45	3.79	1.41	3.37	4.21
Total	121	4.18	1.53	3.90	4.45

### *Trend Analysis*

Having found initial support for the inverted curvilinear relationship between inclusive leadership and upward communication quality using a traditional ANOVA framework, I wanted to conduct a more robust test of the mean differences across conditions by comparing them using trend analysis. According to Keppel (1982, p.129), trend analysis is particularly useful as an analytic technique because of its ability to provide the simplest function that adequately describes the data and to “make specific statements concerning the shape of a function relating performance to different points on a stimulus dimension.” This is especially true when the function may be nonlinear in nature, as suggested by my results in both the archival and experimental study. However, one important requirement for using trend analysis is that it assumes equally spaced intervals across levels of the treatment variable (Keppel, 1982).

In order to test this equal interval assumption and whether the differences in the strength of the manipulation were roughly equivalent across the low, moderate and high inclusive leadership conditions, I compared the means of my manipulation check variable, management openness (i.e., Ashford et al., 1998), across the three conditions. This test yielded approximately equidistant intervals between the low ( $M=3.78$ ,  $SD=1.70$ ), moderate ( $M=4.53$ ,  $SD=1.62$ ) and high ( $M=5.21$ ,  $SD=1.17$ ) inclusive leadership conditions. Thus, having met this necessary requirement, I proceeded to create linear and quadratic orthogonal contrasts for the purpose of including them as independent predictors in the regression model.

The conceptual basis for using orthogonal contrasts in trend analysis is that it dissects the data into a number of orthogonal comparisons to allow for cleaner interpretation as to the

order of the function. According to Keppel (1982, p.134), “each comparison represents the pure form of a different order of polynomial, one for the linear order, one for the quadratic order, and so on.” These individual components can then be tested for significance to determine the true nature of the function (e.g., linear, quadratic, cubic, etc.) so that the most parsimonious explanation can be offered.

To perform this trend analysis, I began by first creating dummy variables for both the linear and quadratic comparisons, using a special set of contrast coefficients for each of the orthogonal trend components (i.e., linear vs. quadratic). These coefficients were taken from Keppel’s (1982) Table A-4 of Appendix A, in which he outlined special coefficients depending on the number of number of levels and the order of the polynomial. For the linear contrast, the coefficients were -1, 0, and 1, corresponding to the low, moderate and high inclusive leadership conditions in my experiment. For the quadratic contrast, the coefficients were 1, -2, and 1, once again corresponding to the low, moderate and high inclusive leadership conditions.

After I created these independent predictors in SPSS Version 17.0, I then used hierarchical regression analysis to test the impact of the linear and quadratic forms of inclusive leadership on the quality of students’ feedback (Hypothesis 2). In Step 1, individuals’ upward communication quality was regressed on the dummy-coded linear contrast variable, and no support for a significant linear function was found ( $\beta = -.07, n.s.$ ). In Step 2, I included the quadratic contrast variable along with the linear contrast variable. As hypothesized, I found a significant negative coefficient for the quadratic contrast ( $\beta = -.28, p < .01$ ), but no significant effect for the linear contrast ( $\beta = -.05, n.s.$ ). Most significant, the inclusion of the quadratic contrast in Step 2 of the hierarchical regression model explained



over eight percent of the total variance in individuals' upward communication quality ( $R^2 = .083$ ,  $\Delta F=10.01$ ,  $p<.01$ ).

In short, this trend analysis, combined with the previously reported one-way ANOVA results, provides further support for the assertion that individuals' quality of comments, ideas and input can often increase from low to moderate levels of inclusive leadership, but potentially decrease as inclusive leadership goes beyond an optimal midpoint<sup>2</sup>.

#### *Analytic Approach to Testing Mediation*

After completing regression-based orthogonal polynomial trend analysis to provide more robust support for the observed inverted curvilinear effect of inclusive leadership on individuals' quality of upward communication, I proceeded to test Hypotheses 3a through 14 in my model, which hypothesized various psychologically-based mediators. To do this, I followed Baron and Kenny's (1986) classic approach to testing mediation using regression analysis to estimate coefficients for each hypothesis. For mediation to exist using the Baron and Kenny (1986) approach, four conditions are necessary: (a) The independent variable (IV) should be related to the dependent variable (DV), although this requirement has been relaxed by Kenny, Kashy, and Bolger (1998) in subsequent work (cf. Mathieu & Taylor, 2006) (b) the IV should be related to the mediator; (c) the mediator should be related to the DV, controlling for the IV; and (d) for full mediation, the effect of the IV on the DV is non-significant when the mediator's effect on the DV is included. If the fourth condition is not met, partial mediation is concluded.

---

<sup>2</sup> In addition to testing the hypothesized curvilinear effect through trend analysis and ANOVA, I also used analysis of covariance (ANCOVA) to control for the number of words individuals wrote (i.e., upward communication quantity) while conducting pairwise comparisons across conditions. Results of this analysis confirmed that the highest quality of feedback emerged in the moderate inclusiveness condition, compared to the low inclusiveness condition ( $p=.055$ ), as well as the high inclusiveness condition ( $p<.01$ ).

In order to test the mediated hypotheses predicting inclusive leadership's effect on upward communication *quantity*, I first created dummy coded variables (0/1) for both the low and high inclusive leadership conditions, which were then entered into the regression model as independent predictors. This implies that the moderate inclusiveness condition was the omitted reference group in the analysis. For purposes of testing the mediated hypotheses predicting upward communication *quality*, I used the aforementioned linear and quadratic contrast variables as the independent predictors of inclusive leadership, along with the linear and quadratic terms of the proposed mediators (e.g., psychological safety, social exchange, etc.). This approach was necessary, given that I hypothesized inverted curvilinear relationships across multiple stages of the model (i.e., from inclusive leadership to upward communication quality, and from the various mediators to upward communication quality) (see Edwards & Lambert, 2007 for a discussion of multi-stage moderation and mediation). As a result, testing mediation of the upward communication quality hypotheses necessitated the use of regression-based orthogonal polynomial mediated trend analysis.

#### *Tests of Mediation – Results*

Results from my tests of mediation are detailed in Tables 5, 6, and 7. All reported estimates are unstandardized. In Hypothesis 3, I proposed that psychological safety would mediate the relationship between inclusive leadership and upward communication quantity, where inclusive leadership would positively predict psychological safety (H3a) and psychological safety would positively predict the quantity of upward communication individuals' provided (H3b). Using Baron and Kenny's (1986) approach to assessing mediation, in path c I found a significant effect of inclusive leadership on individuals' quantity of upward communication, in both the low ( $b = 86.06, p < .01$ ) and moderate

inclusiveness conditions ( $b= 126.22, p<.001$ ), and a marginal effect in the high inclusiveness condition ( $b= 101.91, p<.10$ ). Testing path a, in which inclusive leadership predicted psychological safety showed that relative to the dummy coded reference group (i.e., moderate inclusiveness leadership condition), psychological safety was lower in both the high inclusiveness ( $b= -.27, p<.05$ ) and low inclusiveness ( $b= -.12, n.s.$ ) conditions, providing inconsistent support for Hypothesis 3a. I then tested Hypothesis 3b, in which upward communication quality was regressed on the low and high dummy coded independent variable and the proposed mediator of psychological safety. This test did not yield a significant association of psychological safety on upward communication quality ( $b= 6.37, n.s.$ ). Thus, mediation was not established and Hypothesis 3 was not supported.

For Hypothesis 4, I posited that psychological safety would mediate the relationship between inclusive leadership and individuals' upward communication quality. As reported earlier, using the linear and quadratic contrasts as predictors of feedback quality in step c, yielded a significant, negative quadratic term ( $b= -.30, p<.01$ ), indicating an inverted curvilinear relationship existed that could be mediated. Although there was a significant quadratic effect of inclusive leadership on psychological safety ( $b= -.13, p<.05$ ) in step a, controlling for inclusive leadership and adding psychological safety and its squared term to the model did not yield a significant association of the quadratic term of psychological safety on upward communication quality ( $b= .09, n.s.$ ). Thus, Hypothesis 4 was not supported.

In Hypothesis 5, I predicted that individuals' expectancy beliefs about communicating upward would mediate the inclusive leadership-upward communication linkage. In step a, results from the regression analysis showed no significant effect of inclusive leadership on individuals' expectancy beliefs across any of the three conditions

(low, moderate or high) (Hypothesis 3a). Thus, this lack of a significant path from the independent variable to the mediator suggested no mediation was present. Thus, Hypothesis 5 (5a and 5b) was not supported.

Similarly, Hypothesis 6 predicted that individuals' instrumentality beliefs about speaking up would mediate the inclusive leadership-upward communication relationship. In testing path a, where inclusive leadership predicted instrumentality beliefs, I found a significant negative effect for the low inclusiveness condition ( $b = -.56, p < .01$ ), but not the moderate or high inclusiveness conditions, lending partial support for Hypothesis 6a. Similarly, in Hypothesis 6b I predicted that instrumentality beliefs about providing feedback would predict upward communication quantity. After controlling for inclusive leadership, I found that instrumentality beliefs significantly predicted upward communication quantity ( $b = 13.71, p < .05$ ), providing support for Hypothesis 6b, although the overall relationship between low inclusive leadership and feedback quantity was still significant. Thus, these results suggest that instrumentality beliefs partially mediated the observed relationship between inclusive leadership and upward communication quantity.

To test the significance of this mediated model, I created a bias-corrected confidence interval (95% percentile), computed from the 1,000 bootstrap estimates with adjusted formulas (see Shrout & Bolger, 2002; Stine, 1989). Although researchers have typically conducted follow-up tests of mediation models using the Sobel test to assess their significance, scholars have shown that the Sobel test is limited by distributional assumptions of normality (Preacher & Hayes, 2004; MacKinnon, Lockwood, Hoffman, West, & Sheets, 2002). Therefore, to allow for this normality assumption to be relaxed, and consistent with recent guidance from the literature, I ran bootstrapped confidence intervals instead. I used

the constrained nonlinear regression module (CNLR) in SPSS Version 17.0 to estimate coefficients from 1,000 bootstrapped samples with replacement from the full sample. Results from the 95<sup>th</sup> percentile bias-adjusted confidence interval (-14.43, 2.27) included zero, providing tenuous support for mediation. As such, Hypothesis 6 was only partially supported

For Hypotheses 7 and 8, I predicted that the effect of inclusive leadership on individuals' quality of upward communication would be mediated by their expectancy and instrumentality beliefs about speaking up to management. Testing the effects of the linear and quadratic contrasts on individuals' expectancy beliefs (H7a) did not yield any significant main effects on the mediator. Thus, Hypothesis 7 was not supported. In contrast, inclusive leadership did have a strong positive linear effect on individuals' instrumentality beliefs ( $b = .39, p < .001$ ), supporting Hypothesis 8a. However, when I included the quadratic and linear instrumentality terms in the regression, controlling for the linear and quadratic forms of inclusive leadership, I did not find significant effects of the curvilinear instrumentality term ( $b = .08, n.s.$ ). Thus, Hypothesis 8 was also not supported.

For the remaining hypotheses predicting the mediating effects of social exchange (H9 & H10), social anxiety (H11 & H13), and self-censorship (H12 & H14), the initial paths (i.e., path a) on which the mediator was regressed on the independent variable (i.e., inclusive leadership) did not yield any statistically significant coefficients. Therefore, this implied that none of these variables could mediate the curvilinear relationship found originally. As such, Hypotheses 9, 10, 11, 12, 13, and 14 were not supported.

### *Discussion*

This experimental study helps to provide further support for my primary assertion that high levels of inclusive leadership may produce diminishing returns in terms of the quality of

upward communication individuals' provide to their leaders. Although I did not find strong support for any of the proposed mediators in this study, a few of them seemed to be trending in the hypothesized direction (e.g., self-censorship, social exchange, social anxiety), suggesting other potential explanations for the preponderance of null results. One possibility is that imprecise measurement of the focal constructs may be to blame, given that many of the measures were created for the purposes of this study. At the same time, however, a few interesting findings from these null results should also be noted. For example, although prior field work has shown the positive mediating influence of psychological safety on individuals' upward communication to managers, this study did not provide any evidence to indicate that psychological safety was salient in participants' minds as they provided input to the leader. One possible explanation for this somewhat surprising finding is that participants in the study lacked the familiarity and interpersonal knowledge of the leader that would otherwise be present in real-life organizational settings. In addition, psychological safety was referenced in my study at the school level (i.e., with the administration), rather than at the leader-level. As a result, students' perceived psychological safety with the current administration may not have been viewed as critical to their decision to communicate upward or remain silent.

Although this study helps to build on Study 1's findings, by providing additional support for the inverted-U hypothesis, it is also not without several limitations. Most importantly, I did not find strong empirical support for the hypothesized mediators, despite the fact the curvilinear relationship between inclusive leadership and upward communication quality was replicated. As such, this raises new questions as to why individuals seemingly engage in a lower quality of communication at both low and high levels of inclusive leadership. One possible explanation is that participants may have viewed a new school

administrator as much too distant a leader for them to be worried about future interactions or consequences. For instance, in real-life settings, employees often have to interact with their supervisors frequently, even daily. These leaders may also be situated at different levels within the organizational hierarchy, which can influence individuals' upward communication decisions greatly (Detert & Treviño, 2010). In such environments, the risks of communicating upwards are clearly much more salient than they would be in this experimental task, since students may not have a great deal of contact with the administration. Another possible limitation of this study is that like Study, 1, this investigation was conducted in an academic setting where the norms of behavior are often quite different than in for-profit organizations and where individuals' perceptions of leaders are influenced by a variety of individual-, task-, and organizational-related factors. Given these notable shortcomings, a third study using a sample of real-life employees was conducted in an effort to extend these findings and provide greater generalizability.

**Table 5**

**Study 2 – Tests of Mediation (Hypotheses 3a-6b)**

Test	Path	Path/effect	<i>b</i>	<i>SE</i>	<i>t</i>	<i>p</i>
H3a, H3b	c	Low IL → UC Quantity	86.06	15.16	-2.65	.009
	c	Moderate IL → UC Quantity	126.22	10.28	12.27	.000
	c	High IL → UC Quantity	101.91	14.22	-1.71	.090
	a	Low IL → Psychological safety	-.12	.22	-1.36	.176
	a	Moderate IL → Psychological safety	.19	.15	1.23	.222
	a	High IL → Psychological safety	-.27	.21	-2.18	.031
	b	Low IL → UC Quantity	86.57	15.25	-2.52	.013
	b	Moderate IL → UC Quantity	124.95	10.36	12.06	.000
	b	High IL → UC Quantity	103.66	14.52	-1.47	.145
	b	Psychological safety → UC Quantity	6.37	6.27	1.02	.312
H4	c	Linear Contrast → UC Quality	-.09	.17	-.55	.585
	c	Quadratic Contrast → UC Quality	-.30	.09	-3.16	.002
	a	Linear Contrast → Psychological safety	-.08	.11	-.73	.467
	a	Quadratic Contrast → Psychological safety	-.13	.06	-2.04	.043
	b	Linear Contrast → UC Quality	-.10	.17	-.61	.541
	b	Quadratic Contrast → UC Quality	-.31	.10	-3.22	.002
	b	Psychological safety → UC Quality	-.19	.68	-.27	.784
	b	Psychological safety <sup>2</sup> → UC Quality	.09	.67	.13	.893
H5a, H5b	c	Low IL → UC Quantity	86.06	15.16	-2.65	.009
	c	Moderate IL → UC Quantity	126.22	10.28	12.27	.000
	c	High IL → UC Quantity	101.91	14.22	-1.71	.090
	a	Low IL → Expectancy	-.03	.23	-.09	.929
	a	Moderate IL → Expectancy	-.01	.16	-.08	.940
	a	High IL → Expectancy	.04	.22	.23	.819
	b	Low IL → UC Quantity	87.25	14.87	-2.60	.010
	b	Moderate IL → UC Quantity	125.98	10.09	12.49	.000
b	High IL → UC Quantity	101.87	14.02	-1.72	.088	
b	Expectancy → UC Quantity	15.24	5.96	2.56	.012	
H6a, H6b	c	Low IL → UC Quantity	86.06	15.16	-2.65	.009
	c	Moderate IL → UC Quantity	126.22	10.28	12.27	.000
	c	High IL → UC Quantity	101.91	14.22	-1.71	.090
	a	Low IL → Instrumentality	-.56	.22	-2.90	<b>.004</b>
	a	Moderate IL → Instrumentality	.06	.15	.42	.677
	a	High IL → Instrumentality	.21	.21	.74	.461
	b	Low IL → UC Quantity	92.76	15.38	-2.12	.036
	b	Moderate IL → UC Quantity	125.34	10.17	12.32	.000
	b	High IL → UC Quantity	99.52	14.16	-1.82	.071
	b	Instrumentality → UC Quantity	13.71	6.33	2.16	<b>.033</b>



**Table 6****Study 2 – Tests of Mediation (Hypotheses 7-10)**

Test	Path	Path/effect	<i>b</i>	<i>SE</i>	<i>t</i>	<i>p</i>
H7	c	Linear Contrast → UC Quality	-.09	.17	-.55	.585
	c	Quadratic Contrast → UC Quality	-.30	.09	-3.16	.002
	a	Linear Contrast → Expectancy	.04	.11	.31	.755
	a	Quadratic Contrast → Expectancy	.00	.06	.08	.939
	b	Linear Contrast → UC Quality	-.09	.17	-.52	.607
	b	Quadratic Contrast → UC Quality	-.30	.10	-3.15	.002
	b	Expectancy → UC Quality	-.22	.16	-1.38	.169
	b	Expectancy <sup>2</sup> → UC Quality	-.02	.09	-.24	.812
H8	c	Linear Contrast → UC Quality	-.09	.17	-.55	.585
	c	Quadratic Contrast → UC Quality	-.30	.09	-3.16	.002
	a	Linear Contrast → Instrumentality	.39	.11	3.65	.000
	a	Quadratic Contrast → Instrumentality	-.08	.06	-1.30	.196
	b	Linear Contrast → UC Quality	-.12	.18	-.67	.507
	b	Quadratic Contrast → UC Quality	-.30	.10	-3.07	.003
	b	Instrumentality → UC Quality	.14	.16	.90	.370
	b	Instrumentality <sup>2</sup> → UC Quality	.08	.12	.64	.526
H9a, H9b	c	Low IL → UC Quantity	86.06	15.16	-2.65	.009
	c	Moderate IL → UC Quantity	126.22	10.28	12.27	.000
	c	High IL → UC Quantity	101.91	14.22	-1.71	.090
	a	Low IL → Social exchange	-.22	.23	-1.04	.300
	a	Moderate IL → Social exchange	.02	.16	.14	.892
	a	High IL → Social exchange	.05	.22	.13	.894
	b	Low IL → UC Quantity	89.46	14.96	-2.43	.017
	b	Moderate IL → UC Quantity	125.73	10.10	12.45	.000
b	High IL → UC Quantity	101.71	14.03	-1.71	.090	
b	Social exchange → UC Quantity	14.65	5.82	2.52	.013	
H10	c	Linear Contrast → UC Quality	-.09	.17	-.55	.585
	c	Quadratic Contrast → UC Quality	-.30	.09	-3.16	.002
	a	Linear Contrast → Social exchange	.13	.11	1.18	.240
	a	Quadratic Contrast → Social exchange	-.03	.06	-.54	.589
	b	Linear Contrast → UC Quality	-.08	.17	-.47	.638
	b	Quadratic Contrast → UC Quality	-.31	.10	-3.21	.002
	b	Social exchange → UC Quality	-.17	.16	-1.08	.284
	b	Social exchange <sup>2</sup> → UC Quality	-.05	.10	-.49	.628

**Table 7**

**Study 2 – Tests of Mediation (Hypotheses 11a-14)**

Test	Path	Path/effect	<i>b</i>	<i>SE</i>	<i>t</i>	<i>p</i>	
H11a, H11b	c	Low IL → UC Quantity	86.06	15.16	-2.65	.009	
	c	Moderate IL → UC Quantity	126.22	10.28	12.27	.000	
	c	High IL → UC Quantity	101.91	14.22	-1.71	.090	
	a	Low IL → Social anxiety	-.10	.22	-.19	.851	
	a	Moderate IL → Social anxiety	-.06	.15	-.40	.693	
	a	High IL → Social anxiety	.27	.21	1.54	.125	
	b	Low IL → UC Quantity	-41.00	15.10	-2.72	.008	
	b	Moderate IL → UC Quantity	125.70	10.24	12.27	.000	
	b	High IL → UC Quantity	-21.45	14.29	-1.50	.136	
	b	Social anxiety → UC Quantity	-8.80	6.11	-1.44	.153	
	H12a, H12b	c	Low IL → UC Quantity	86.06	15.16	-2.65	.009
		c	Moderate IL → UC Quantity	126.22	10.28	12.27	.000
c		High IL → UC Quantity	101.91	14.22	-1.71	.090	
a		Low IL → Self-censorship	.20	.22	.88	.378	
a		Moderate IL → Self-censorship	.08	.15	.50	.617	
a		High IL → Self-censorship	-.21	.21	-.97	.335	
b		Low IL → UC Quantity	90.14	14.70	-2.52	.013	
b		Moderate IL → UC Quantity	127.16	9.96	12.77	.000	
b		High IL → UC Quantity	99.62	13.80	-2.00	.048	
b		Self-censorship → UC Quantity	-17.81	5.92	-3.01	.003	
H13		c	Linear Contrast → UC Quality	-.09	.17	-.55	.585
		c	Quadratic Contrast → UC Quality	-.30	.09	-3.16	.002
	a	Linear Contrast → Social anxiety	.18	.11	1.68	.095	
	a	Quadratic Contrast → Social anxiety	.05	.06	.76	.449	
	b	Linear Contrast → UC Quality	-.16	.17	-.95	.345	
	b	Quadratic Contrast → UC Quality	-.32	.09	-3.36	.001	
	b	Social anxiety → UC Quality	.25	.14	1.79	.076	
	b	Social anxiety <sup>2</sup> → UC Quality	-.15	.11	-1.30	.196	
H14	c	Linear Contrast → UC Quality	-.09	.17	-.55	.585	
	c	Quadratic Contrast → UC Quality	-.30	.09	-3.16	.002	
	a	Linear Contrast → Self-censorship	-.20	.11	-1.83	.069	
	a	Quadratic Contrast → Self-censorship	.00	.06	-.02	.983	
	b	Linear Contrast → UC Quality	-.07	.17	-.39	.695	
	b	Quadratic Contrast → UC Quality	-.30	.09	-3.15	.002	
	b	Self-censorship → UC Quality	.10	.15	.68	.499	
	b	Self-censorship <sup>2</sup> → UC Quality	.17	.13	1.36	.177	

## VIII. STUDY 3

I conducted the third and final study at a large biotechnology and pharmaceuticals services provider headquartered in the southeast United States. I sent two online surveys to 1,492 employees operating within a single division of the organization, approximately one month apart in an effort to minimize common method variance (see Podsakoff, MacKenzie, Lee, & Podsakoff, 2003 for a review). The first survey captured measures of the independent variables in the model, and the second survey captured measures of the dependent variables and proposed mediators. In the second survey, employees were presented with a request from their immediate supervisor to provide written ideas on how to enhance the organization's effectiveness over the next five years. This written communication served as the primary dependent variable of interest and was evaluated for both quantity and quality.

### *Sample*

I worked closely with the senior director for global human resources over several weeks to launch this study, which was framed internally as part of an ongoing focus on leadership development. For this reason, no incentives were provided to employees to participate in this research effort. The 1,492 division employees who were asked to participate represented nearly eight percent of the organization's entire workforce, and spanned a wide range of positions across the organizational hierarchy, including managers (28.0%), professionals (e.g., specialists/analysts) (58.6%), and administrative staff (13.4%). Respondents to the survey were primarily female (69.8%) and younger (69.8% were 35 years

old or below). Additionally, the vast majority of employees had less than five years of work experience with the organization (71.0%), and had been in their current jobs for less than five years (87.6%).

During the initial data collection phase, 611 employees provided at least partially completed responses to the online survey (41.0% response rate). For the second survey, administered roughly one month afterwards, 580 participants once again completed at least a portion of the survey, resulting in a slight drop in response rate (38.9%). However, during this second phase of data collection, the online survey company used to administer and host the survey experienced a technical malfunction that caused 152 records not to be identifiable. Because I had no way to link these respondents back to their time 1 survey data, these records were regrettably excluded from the analysis, resulting in a much lower sample size than would otherwise be the case. After removing cases from the analysis with incomplete data, this left a final sample of 159 individuals.

### *Study Design*

I sent two online questionnaires approximately one month apart to employees via an email with an embedded survey link. In Survey 1, I asked employees questions about their perceptions of their immediate boss's leadership style (i.e., the person who performed their annual performance review). Employees were asked to provide self-report ratings of their perceptions of job satisfaction, personality, work group climate and other demographic variables (e.g., organizational tenure, job tenure, gender, education, etc.). In Survey 2, employees began by answering items related to their frequency of upward communication behavior within the organization, and the extent to which they had ideas for organizational improvement. About midway through the second survey, I presented employees with a

voluntary request for input from their immediate boss, in which they were asked the following question: “*What can the XYZ group do to increase organizational performance in the next five years?*” Survey logic was created to require employees to provide an answer to this question, as a way to ensure individuals would not skip the opportunity to provide input. However, participants could still choose to remain silent by simply typing in the words, “none” in the text box. In this way, individuals’ upward communication was still a purely discretionary behavior. After providing their typed comments and ideas into the online text box, participants answered a series of questions about their reactions to the upward communication process and what they were experiencing psychologically as they completed the task. These latter measures were captured in order to test the mediated model.

### *Measures*

All measures, unless otherwise noted, were assessed on a 1 to 7-point Likert scale, where 1=*Strongly Disagree*, and 7=*Strongly Agree*.

#### Inclusive Leadership

Inclusive leadership was measured using Ashford et al.’s (1998) six-item measure of management openness ( $\alpha=.95$ ), which was used previously in Study 2 as a manipulation check. These items were, “*I feel free to make recommendations to my boss to change existing practices,*” “*Good ideas get communicated upward because my boss is very approachable,*” “*Good ideas get serious consideration from my boss,*” “*My boss is interested in ideas and suggestions from people at my level in the organization,*” “*When suggestions are made to my boss, they receive fair evaluation,*” and “*My boss takes action on recommendations made from people at my level.*”

### Upward Communication Quantity and Quality

As in Study 1 and Study 2, upward communication quantity was measured as the number of words individuals typed in their comments to management. Upward communication quality was assessed by two independent coders who were not associated with the organization. Because neither coder had relevant insight into how the organization evaluated good ideas, nor had the ability to evaluate their true feasibility or potential for implementation, I instructed both coders to look for an ‘actionable component’ to the ideas (e.g., Cannon & Witherspoon, 2005), as well as facets of upward communication (e.g., clarity of expression, constructive or improvement-oriented, thoughtfulness – see Dutton & Ashford, 1993; Van Dyne & LePine, 1998) that often characterize quality communication. Each coder rated the same single item-measure of upward communication quality used in the previous studies – “*I would describe this statement/comment as high quality.*” After both coders met to discuss and resolve differences across ratings, interrater agreement ( $r_{wg}=.83$ ) provided justification for averaging these individual measures into an overall composite of upward communication quality (see Bliese, 2000; James, Demaree, & Wolf, 1993).

### *Tested Mediators*

#### Psychological Safety

Once again, I measured psychological safety using items referenced at the work unit level and adapted from Edmondson’s (1999) previously used scale ( $\alpha=.78$ ). A sample item (reverse coded) is “*People in this work unit sometimes reject others for being different.*”

#### Expectancy and Instrumentality Beliefs

I measured individuals’ expectancy beliefs about communicating upward using a three-item composite ( $\alpha=.85$ ), adapted from Jones’ (1986) self-efficacy scale. A sample item

is, “*I did not anticipate any problems speaking up to my boss.*” Instrumentality beliefs about communicating upward were assessed using the same three items used in Study 2, but referenced instead at the immediate supervisor level (e.g., “*I thought my ideas would be acted upon by my boss*”) ( $\alpha=.87$ ).

### Social Exchange

I measured employees’ perceptions of social exchange using Bernerth, Armenaki, Feild, Giles, and Walker’s (2007) recently validated eight-item leader-member social exchange (LMSX) scale ( $\alpha=.95$ ). Two sample items include, “*My efforts are reciprocated by my boss,*” and “*My relationship with my boss is composed of comparable exchanges of giving and taking.*”

### Social Anxiety and Self-censorship

I created an eight-item composite measure adapted from Leary’s (1983) evaluation apprehension scale ( $\alpha=.92$ ) to assess individuals’ social anxiety about communicating upward. I assessed employees’ willingness to engage in self-censorship tendencies using a shortened five-item ( $\alpha=.90$ ) version of Hayes et al.’s (2005) scale that was used in Study 2. A sample item is, “*It was difficult for me to express my thoughts and opinions because I thought my boss wouldn’t agree with what I said.*”

### Controls

I controlled for a few key individual-difference variables, such as gender (0=female, 1=male), job level (Manager, Professional, Administrative), and individuals’ self-reported job satisfaction. I measured job satisfaction using Edwards and Rothbard’s (1999) three-item scale ( $\alpha=.94$ ). A sample item is, “*In general, I am satisfied with my job.*”

## *Results*

Means, standard deviations, and correlations are displayed in Table 8. All continuous measures were mean-centered, following the recommendations of Aiken and West (1991).

OLS hierarchical regression analysis was used to test my hypotheses in SPSS Version 17.0.

Once again, Hypothesis 1 predicted that higher levels of inclusive leadership would be associated with a higher quantity of upward communication. In Step 1, I added the control variables for employees' gender, rank in the organization, and job satisfaction. In Step 2, I added the linear term for inclusive leadership into the hierarchical regression model, but did not find a significant positive association between inclusive leadership and upward communication quantity as predicted ( $\beta = -.11$ , *n.s.*). Thus, Hypothesis 1 was once again not supported. To test Hypothesis 2, which predicted an inverted curvilinear function for inclusive leadership and communication quality, I included the same controls as before, while also adding in the amount of upward communication individuals provided. In Step 2, I added in the linear term for inclusive leadership to the baseline model, but did not find a significant correlation ( $\beta = .06$ , *n.s.*). In Step 3, I added in the quadratic term for inclusive leadership to test the hypothesized inverted curvilinear effect. However, unlike in Studies 1 and 2, I did not find a significant quadratic term ( $\beta = -.07$ ,  $p = .405$ ), despite the fact the negative sign on the coefficient indicated the proper inverted curvilinear trend. Therefore, Hypothesis 2 was not supported.



**Table 8**

**Study 3 - Means, Standard Deviations and Correlations among All Tested Variables**

Variable	M	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1. Inclusive L'ship	5.46	1.25	(.95)																							
2. Inclusive L'ship <sup>2</sup>	31.35	12.11	-.65**																							
3. Psychological safety	4.73	1.12	.52**	-.23**	(.78)																					
4. Psychological safety <sup>2</sup>	23.62	10.16	-.17**	.23**	-.34**																					
5. Expectancy	5.26	1.31	.50**	-.36**	.35**	-.20**	(.85)																			
6. Expectancy <sup>2</sup>	29.43	12.06	-.46**	.51**	-.26**	.10	-.66**																			
7. Instrumentality	5.12	1.31	.43**	-.28**	.22**	-.09	.61**	-.39**	(.87)																	
8. Instrumentality <sup>2</sup>	27.93	11.82	-.36**	.40**	-.16*	.06	-.39**	.55**	-.63**																	
9. Social exchange	4.87	1.37	.43**	-.26**	.36**	-.21**	.66**	-.40**	.62**	-.41**	(.95)															
10. Social exchange <sup>2</sup>	25.61	12.16	-.32**	.34**	-.26**	.24**	-.36**	.49**	-.36**	.56**	-.53**															
11. Social anxiety	3.39	1.31	-.24**	.15	-.24**	-.03	-.46**	.19**	-.25**	.08	-.30**	.05	(.92)													
12. Social anxiety <sup>2</sup>	13.17	9.51	-.09	.26**	-.08	.14	-.11*	.30**	-.03	.25**	-.02	.28**	.21**													
13. Self-censorship	3.19	1.34	-.32**	.15	-.35**	.03	-.54**	.29**	-.40**	.21**	-.43**	.15**	.76**	.19**	(.90)											
14. Self-censorship <sup>2</sup>	11.99	9.67	-.12	.22**	-.09	.05	-.25**	.46**	-.19**	.42**	-.16**	.35**	.16**	.64**	.37**											
15. Job satisfaction	5.10	1.39	.44**	-.16**	.50**	-.26**	.17*	.02	.18*	-.05	.22**	-.13	-.03	.07	-.16*	-.01	(.94)									
16. Gender (0=F, 1=M)	.29	.45	.07	-.05	-.01	-.07	.09	-.06	.13	-.14	.13	-.08	.13	.01	.12	-.09	-.09									
17. JobLevel - Manager	.22	.42	-.11*	.07	.02	-.06	.05	-.07	.06	-.12	-.08	.05	-.13	.01	-.14	-.03	-.03	.09								
18. JobLevel - Professional	.58	.50	-.04	-.03	-.12*	.01	-.03	.12	-.11	.17*	.00	.01	.09	-.02	.09	-.07	-.07	-.03	-.63**							
19. JobLevel - Admins	.14	.35	.07	-.02	.02	.03	-.07	-.04	.02	-.08	.01	-.05	.09	.03	.09	.11	.06	-.11*	-.21**	-.47**						
20. Orgtenure: 0 to 2 yrs.	.43	.50	.06	-.05	.03	-.06	.15	-.15	.09	-.15	.27**	-.20**	.14	.00	.01	.00	.06	.05	-.17**	.23**	.00					
21. Orgtenure: 2 to 5 yrs.	.34	.48	-.14**	.06	-.13**	.07	-.15*	.17*	-.18*	.24**	-.23**	.12	.03	.02	.07	-.06	-.13**	.03	-.08	.03	.08	-.55**				
22. Orgtenure: 5 to 10 years	.14	.34	.01	-.01	.01	-.05	-.05	-.01	.04	-.13	-.12	.01	-.07	-.11	.03	-.02	.00	-.05	.29**	-.23**	-.01	-.39**	-.36**			
23. Orgtenure: 10 to 15 years	.06	.24	.13**	-.01	.19**	.03	.09	-.04	.16*	-.01	.14	-.05	-.19*	.10	-.20*	.19*	.15**	-.03	.02	-.11*	-.10*	-.20**	-.19**	-.13**		
24. UC Quantity (no. of words)	31.84	35.31	-.06	.14**	-.03	.03	.02	.03	-.05	.12*	-.10	.15**	-.09	.03	-.08	.02	-.01	-.06	.07	-.02	-.02	.03	.01	-.05	-.03	
25. UC Quality	4.01	1.19	.01	.07	-.07	.00	.05	-.09	-.06	.03	-.05	.05	-.10*	-.08	-.10	-.06	.02	-.07	.09	-.09	-.04	-.10	.07	.06	-.08	.66**

Notes. N=159; p<.05\*, p<.01\*\* Coefficient alphas for scales are in parentheses along the diagonal.

**Table 9****Study 3 - Results of Hierarchical Regression Analysis Predicting Upward Communication (UC) Quantity and Upward Communication (UC) Quality**

Variable	DV = UC Quantity (H1)		DV = UC Quality (H2)		
	Step 1	Step 2	Step 1	Step 2	Step 3
Gender	-.08	-.07	.01	.00	.01
Manager	.20	.17	-.23	-.21	-.22
Professional	.11	.08	-.29*	-.27*	-.29*
Administrative	.03	.01	-.18	-.17	-.18
Job satisfaction	.00	.05	.02	-.01	.01
UC quantity (words)	---	<b>-.11</b>	.69***	.69***	.70***
Inclusive leadership	---	---	---	.06	.00
Inclusive leadership <sup>2</sup>	---	---	---	---	<b>-.07</b>
R <sup>2</sup>	.03	.04	.48***	.48	.49
Adjusted R <sup>2</sup>	.00	.00	.46	.46	.46
ΔF	.86	1.38	23.42***	.82	.70

Note. \* $p < .05$ ;  $p < .001$ \*\*  $N = 161$ . Statistics in bold represent tests of hypotheses. Estimates are standardized.

*Tests of Mediation – Results*

Although Hypotheses 1 and 2 were not supported, I chose to conduct mediation tests for my proposed mechanisms, given the possibility that indirect effects could still be at work (see Kenny, Kashy, & Bolger, 1998) through the suppression of omitted variables (see Shrout & Bolger, 2002; Mathieu & Taylor, 2006). The results of these tests are provided in Tables 10 and 11.

In Hypothesis 3, I posited that the association between inclusive leadership and upward communication quantity would be mediated by psychological safety. Path a, which regressed psychological safety on inclusive leadership, produced a significant correlation ( $b = .52, p < .001$ ), supporting Hypothesis 3a. Path b included both psychological safety and inclusive leadership as antecedents of upward communication quantity. However, after controlling for inclusive leadership, psychological safety did not transmit an indirect effect ( $b = -.14, n.s.$ ), refuting Hypothesis 3b. Thus, Hypothesis 3 was not supported. Hypothesis 4

predicted that psychological safety would mediate the inclusive leadership-upward communication quality linkage. After controlling for both the linear and curvilinear inclusive leadership terms, while including the linear and quadratic terms for psychological safety in the regression equation, no significant association between the squared term of psychological safety and upward communication quality was observed ( $b = -.05, n.s.$ ). Thus, Hypothesis 4 was not supported.

For Hypothesis 5, I predicted an indirect effect of individuals' expectancy beliefs on the inclusive leadership-upward communication quantity relationship. The test of the initial indirect path (a) yielded a significant positive association between inclusive leadership and upward communication quantity ( $b = .46, p < .001$ ), supporting Hypothesis 5a. However, Hypothesis 5b, and Hypothesis 5 more generally, were not supported since the influence of expectancy beliefs after controlling for inclusive leadership was not statistically significant ( $b = 2.69, p = .225$ ). Hypothesis 6 predicted that another motivational mechanism – instrumentality beliefs about speaking up – would mediate the relationship between inclusive leadership and upward communication quantity. Hypothesis 6a was supported, as the path from inclusive leadership predicting instrumentality beliefs was highly significant ( $b = .40, p < .001$ ). However, instrumentality beliefs did not significantly predict the amount of communication individuals' provided ( $b = 1.19, n.s.$ ) after controlling for inclusive leadership (Hypothesis 6b). Thus, Hypothesis 6 was not supported. Hypotheses 7 predicted that expectancy and instrumentality beliefs about communicating with management would mediate the link between inclusive leadership and individuals' quality of upward communication. However, after including the linear and squared terms for both expectancy and instrumentality in their respective regression equations, no evidence for expectancy

( $b=.06, n.s.$ ) or instrumentality ( $b=.03, n.s.$ ) as a significant mediator was found. Thus, Hypotheses 7 and 8 were not supported.

Hypothesis 9 predicted that the amount of communication employees provided their bosses would be mediated by the extent to which they had a high degree of social exchange with their leaders. Path a, in which social exchange was regressed on inclusive leadership was highly significant ( $b=.40, p<.001$ ), fulfilling the initial test for establishing mediation, and providing support for Hypothesis 9a. However, when social exchange was included as a primary predictor of communication quantity, after controlling for inclusive leadership, this indirect effect was not transmitted ( $b= -2.07, p=.330$ ) (Hypothesis 9b). As such, Hypothesis 9 was not supported.

I then proceeded to test social exchange as a potential mediator of the inclusive leadership-upward communication quality relationship, as predicted in Hypothesis 10. Once again, the data demonstrated a clear linkage between inclusive leadership and social exchange beliefs ( $b=.40, p<.001$ ) in path a. Path b included both linear and curvilinear social exchange predictors of upward communication quality, while also controlling for both the linear and quadratic forms of inclusive leadership. Tests of this regression model yielded a significant association between the quadratic social exchange term and communication quality ( $b=.16, p<.05$ ), while the curvilinear predictor of inclusive leadership was non-significant ( $b=.06, p=.269$ ), thereby providing evidence of an indirect effect. Tests of significance computed from 1,000 bootstrapped estimates confirmed the presence of indirect effects as the 95<sup>th</sup> bias-corrected confidence interval excluded zero (.012, .132). However, given that the sign of the quadratic social exchange term was positive, this implied that social exchange beliefs would be higher at high levels of inclusive leadership, compared to

moderate levels, in contrast to what was hypothesized. Thus, Hypothesis 10 was only partially supported.

I then tested Hypotheses 11 and 12, which predicted that individuals' social anxiety about communicating upward and perceived need to engage in self-censorship behaviors, respectively, would mediate the linkage between inclusive leadership and the amount of upward communication they provided to their immediate supervisor. Testing the association of inclusive leadership on individuals' social anxiety about speaking up produced a significant negative relationship ( $b = -.21, p < .01$ ), in support of Hypothesis 11a. Regressing upward communication quantity on individuals' social anxiety perceptions while controlling for inclusive leadership, produced a marginally significant association between social anxiety and upward communication quantity ( $b = -3.66, p < .10$ ), providing initial support for Hypothesis 11b and indirect effects. I estimated coefficients from 1,000 bootstrapped samples with replacement, and found that the 95<sup>th</sup>-percentile bias corrected confidence interval excluded zero (.061, 2.196), thereby providing confirming evidence for indirect effects. In short, this suggests that individuals' lowered social anxiety about speaking up to their supervisor yielded an increase in the amount of upward communication they provided. Thus, Hypothesis 11 was supported.

With Hypothesis 12, I made a similar prediction to Hypothesis 11 by suggesting that individuals' perceived need to self-censor their comments and suggestions would be lower in the presence of highly inclusive leaders. This first path of this hypothesis was supported (i.e., Hypothesis 12a), as demonstrated by the highly significant negative association ( $b = -.29, p < .001$ ) between inclusive leadership and individuals' perceived need to engage in self-censorship. Hypothesis 12b, in which self-censorship was predicted to mediate the

relationship between inclusive leadership and upward communication quantity, yielded a marginally significant association for self-censorship on upward communication quantity ( $b = -3.61, p < .10$ ). I then proceeded to test this indirect effect for significance by creating 1,000 bootstrapped estimates. While the 90<sup>th</sup> percentile bias corrected confidence interval excluded zero (.084, 2.347), the 95<sup>th</sup> percentile bias corrected confidence interval did not (-.017, 2.600), thus providing limited support for indirect effects. Therefore, Hypothesis 12 was only partially supported.

In Hypothesis 13, I predicted that individuals' anxiety about communicating upwards would mediate the relationship between inclusive leadership and upward communication quality. Path a, regressing social anxiety on inclusive leadership was significant ( $b = -.26, p < .01$ ). However, after controlling for inclusive leadership (both the linear and quadratic terms), I found a significant linear association between social anxiety and upward communication quality ( $b = -.24, p < .01$ ), but no significant correlation for the quadratic form of social anxiety ( $b = .02, n.s.$ ). Thus, Hypothesis 13 was not supported.

Finally, Hypothesis 14 suggested that highly inclusive leadership would lead to lower quality upward communication because individuals would feel less of a need to engage in self-censorship. Similar to the findings for social anxiety, a strong negative association between inclusive leadership and self-censorship emerged ( $b = -.29, p < .001$ ). However, after including both the linear and quadratic forms of self-censorship and inclusive leadership as predictors of upward communication quality, no significant correlation between the quadratic form of self-censorship and upward communication quality was found ( $b = .02, n.s.$ ), suggesting indirect effects were not present. Thus, Hypothesis 14 was not supported.

**Table 10**

**Study 3 – Tests of Mediation (Hypotheses 3a-8)**

Test	Path	Path/effect	<i>b</i>	<i>SE</i>	$\beta$	<i>t</i>	<i>p</i>
H3a, H3b	c	<i>IL</i> → UC Quantity	-2.31	1.73	-.10	-1.33	.184
	a	<i>IL</i> → Psychological safety	.52	.04	.52	13.09	<b>.000</b>
	b	<i>IL</i> , Psychological Safety → UC Quantity	-2.22	1.99	-.10	-1.12	.266
	b	<i>IL</i> , <i>Psychological Safety</i> → UC Quantity	-.14	2.10	-.01	-.07	.946
H4	c	<i>IL</i> → UC Quality	.12	.11	.12	1.07	.287
	c	<i>IL</i> <sup>2</sup> → UC Quality	.08	.06	.15	1.39	.167
	a	<i>IL</i> → Psychological Safety	.52	.04	.52	13.09	.000
	b	<i>IL</i> → UC Quality	.23	.13	.23	1.74	.084
	b	<i>IL</i> <sup>2</sup> → UC Quality	.11	.06	.21	1.81	.072
	b	<i>Psychological safety</i> → UC Quality	-.17	.10	-.16	-1.62	.108
	b	<i>Psychological safety</i> <sup>2</sup> → UC Quality	-.05	.06	-.07	-.79	.431
H5a, H5b	c	<i>IL</i> → UC Quantity	-2.31	1.73	-.10	-1.33	.184
	a	<i>IL</i> → Expectancy	.46	.06	.50	7.50	<b>.000</b>
	b	<i>IL</i> , Expectancy → UC Quantity	-3.24	2.03	-.14	-1.59	.113
	b	<i>IL</i> , <i>Expectancy</i> → UC Quantity	2.69	2.21	.11	1.22	.225
H6a, H6b	c	<i>IL</i> → UC Quantity	-2.31	1.73	-.10	-1.33	.184
	a	<i>IL</i> → Instrumentality	.40	.07	.43	6.02	<b>.000</b>
	b	<i>IL</i> , Instrumentality → UC Quantity	-2.21	1.98	-.10	-1.12	.266
	b	<i>IL</i> , <i>Instrumentality</i> → UC Quantity	1.19	2.13	.05	.56	.577
H7	c	<i>IL</i> → UC Quality	.12	.11	.12	1.07	.287
	c	<i>IL</i> <sup>2</sup> → UC Quality	.08	.06	.15	1.39	.167
	a	<i>IL</i> → Expectancy	.46	.06	.50	7.50	.000
	b	<i>IL</i> → UC Quality	.15	.12	.15	1.21	.226
	b	<i>IL</i> <sup>2</sup> → UC Quality	.07	.06	.14	1.18	.239
	b	<i>Expectancy</i> → UC Quality	.05	.12	.05	.44	.660
	b	<i>Expectancy</i> <sup>2</sup> → UC Quality	.06	.07	.10	.82	.415
H8	c	<i>IL</i> → UC Quality	.12	.11	.12	1.07	.287
	c	<i>IL</i> <sup>2</sup> → UC Quality	.08	.06	.15	1.39	.167
	a	<i>IL</i> → Instrumentality	.40	.07	.43	6.02	.000
	b	<i>IL</i> → UC Quality	.19	.12	.20	1.62	.107
	b	<i>IL</i> <sup>2</sup> → UC Quality	.09	.06	.17	1.43	.156
	b	<i>Instrumentality</i> → UC Quality	-.07	.11	-.07	-.66	.511
	b	<i>Instrumentality</i> <sup>2</sup> → UC Quality	.03	.07	.05	.47	.642

**Table 11**

**Study 3 – Tests of Mediation (Hypotheses 9a-14)**

Test	Path	Path/effect	<i>b</i>	<i>SE</i>	$\beta$	<i>t</i>	<i>p</i>
H9a, H9b	c	<i>IL</i> → UC Quantity	-2.31	1.73	-.10	-1.33	.184
	a	<i>IL</i> → Social exchange	.40	.06	.43	6.39	<b>.000</b>
	b	<i>IL</i> , Social exchange → UC Quantity	-1.50	1.92	-.07	-.78	.438
	b	<i>IL</i> , <i>Social exchange</i> → UC Quantity	-2.07	2.12	-.08	-.98	.330
H10	c	<i>IL</i> → UC Quality	.12	.11	.12	1.07	.287
	c	<i>IL</i> <sup>2</sup> → UC Quality	.08	.06	.15	1.39	.167
	a	<i>IL</i> → Social exchange	.40	.06	.43	6.39	.000
	b	<i>IL</i> → UC Quality	.21	.11	.22	1.87	.064
	b	<i>IL</i> <sup>2</sup> → UC Quality	.06	.06	.12	1.11	.269
	b	<i>Social exchange</i> → UC Quality	-.14	.10	-.13	-1.41	.161
	b	<i>Social exchange</i> <sup>2</sup> → UC Quality	.16	.07	.20	2.22	<b>.028</b>
H11a, H11b	c	<i>IL</i> → UC Quantity	-2.31	1.73	-.10	-1.33	.184
	a	<i>IL</i> → Social anxiety	-.21	.07	-.24	-3.12	<b>.002</b>
	b	<i>IL</i> , Social anxiety → UC Quantity	-2.51	1.83	-.11	-1.37	.172
	b	<i>IL</i> , <i>Social anxiety</i> → UC Quantity	-3.66	2.03	-.15	-1.80	<b>.074</b>
H12a, H12b	c	<i>IL</i> → UC Quantity	-2.31	1.73	-.10	-1.33	.184
	a	<i>IL</i> → Self-censorship	-.29	.07	-.32	-4.28	<b>.000</b>
	b	<i>IL</i> , Self-censorship → UC Quantity	-2.95	1.92	-.13	-1.54	.126
	b	<i>IL</i> , <i>Self-censorship</i> → UC Quantity	-3.61	2.09	-.14	-1.73	<b>.086</b>
H13	c	<i>IL</i> → UC Quality	.12	.11	.12	1.07	.287
	c	<i>IL</i> <sup>2</sup> → UC Quality	.08	.06	.15	1.39	.167
	a	<i>IL</i> → Social anxiety	-.26	.09	-.22	-2.92	.004
	b	<i>IL</i> → UC Quality	.09	.11	.09	.81	.419
	b	<i>IL</i> <sup>2</sup> → UC Quality	.08	.06	.16	1.38	.169
	b	<i>Social anxiety</i> → UC Quality	-.24	.09	-.22	-2.64	.009
	b	<i>Social anxiety</i> <sup>2</sup> → UC Quality	.02	.08	.02	.24	.814
H14	c	<i>IL</i> → UC Quality	.12	.11	.12	1.07	.287
	c	<i>IL</i> <sup>2</sup> → UC Quality	.08	.06	.15	1.39	.167
	a	<i>IL</i> → Self-censorship	-.29	.07	-.32	-4.28	.000
	b	<i>IL</i> → UC Quality	.10	.12	.10	.85	.396
	b	<i>IL</i> <sup>2</sup> → UC Quality	.08	.06	.16	1.35	.180
	b	<i>Self-censorship</i> → UC Quality	-.13	.10	-.12	-1.30	.197
	b	<i>Self-censorship</i> <sup>2</sup> → UC Quality	.02	.07	.02	.24	.812



## *Discussion*

While this field study was intended to provide additional support for my primary thesis that high levels of inclusive leadership lead to diminishing returns in the form of lower quality upward communication, no support for this assertion was found in this particular setting. In addition, just as in Studies 1 and 2, Hypothesis 1 was not supported, which predicted that the more inclusive the leader, the higher quantity of communication they would receive from their subordinates. One plausible explanation for why this hypothesis was not supported across all three studies is that highly inclusive leaders may solicit and proactively receive good ideas from their subordinates in the natural, day-to-day course of affairs. Because such leaders are seen as highly approachable and amenable to receiving input from below, individuals may not feel the need to withhold their comments or suggestions until a more public opportunity to provide input arises. This suggests that highly inclusive leaders may not stand to gain much from more large-scale input-seeking forums, since they are likely to receive good ideas regardless. Future research should explore the different means through which leaders capture good ideas and how they may have different implications for the quality of ideas individuals' share.

Although this study did not provide significant support for the presence of an inverted U-shaped relationship between inclusive leadership and upward communication quality, it did provide evidence for the importance of individuals' social exchange expectations with their leader as a predictor of communication quality. Contrary to my hypothesis, more inclusive leaders were associated with individuals' feeling a greater sense of responsibility and reciprocity towards the leader, which encouraged them to express a higher quality of upward communication. This indirect effect suggests that highly inclusive leaders may help

to encourage better input and ideas from their followers by creating a relational dynamic that fosters a mutual “give and take,” since norms of reciprocity and exchange can be powerful motivators (e.g., Gouldner, 1960).

A second key finding of this study is that inclusive leaders help to lower both individuals’ anxiety and apprehension about communicating upward to management, as well as their perceived need to engage in self-censorship. By essentially reducing employees’ concerns that they will be called out or embarrassed by their boss for saying something that is not consistent with current organizational practices, highly inclusive leaders may help to foster feelings of trust and liking with their subordinates that motivates them to provide the leader with something of value (i.e., good ideas for organizational improvement). In this way, highly inclusive leaders help reduce the possibility that systemic organizational silence (e.g., Morrison & Milliken, 2000) can develop within the ranks. Future research should explore in greater detail the specific behaviors inclusive leaders engage in to help facilitate this sense of mutual obligation.

Although this study offers some interesting insights into the psychological and relational processes that motivate individuals to express a higher quantity and quality of upward communication, the overall lack of significant findings likely preclude the possibility of this study being included in any future publication effort. However, for purposes of understanding why these null results may have emerged, I offer a few potential hypotheses. First, the dramatic reduction in sample size caused by the failure of the two surveys to link together properly may have contributed to a sample with less statistical power and unaccounted for variance. This seems plausible, given that an analysis of non-respondents (see Rogelberg & Stanton, 2007) (i.e., those who were not identifiable but provided data)

indicated no significant differences in ratings of upward communication quantity ( $F=1.46$ ,  $p<.10$ ) or upward communication quality ( $F=1.05$ ,  $p=.414$ ) when comparing non-respondents against the final sample.

Other possible reasons for the abundance of non-significant findings was the length of both surveys (each one nearly 20 minutes), no tangible incentives for participants to respond, and survey fatigue caused by the organization engaging in at least one other survey effort during the same time period, despite my objections. Although I offered to provide some form of incentive to encourage employee participation, this idea was nixed by the human resources executive who felt that the organization had a strong enough internal culture around survey completion that made this unnecessary. In hindsight, this assumption may have been somewhat flawed. Furthermore, despite our best efforts to stagger the introduction of these two surveys in order to minimize employees' survey fatigue, my research study was "trumped" by an organization-wide employee satisfaction survey across all 20,000+ employees that sought to measure many of the same factors I was capturing (e.g., psychological safety, climate, leadership, etc.). As such, it is possible that employees may have been less motivated to participate in my research effort, despite backing from the division's vice president, given that they were already completing these other surveys.

In short, while the results of this study are hardly conclusive, and offer limited support for my basic arguments, they are still encouraging in that the negative sign on the quadratic inclusive leadership term was consistent with the hypothesized inverted U-shaped relationship between inclusive leadership and upward communication quality. Furthermore, this study does provide some initial evidence that expectations of social exchange, as well as perceptions of social anxiety and self-censorship requirements, may contribute to how

individuals decide to communicate with managers. Going forward, it will be necessary to provide support in the field for my thesis that upward communication quality diminishes beyond an optimal midpoint as a function of inclusive leadership. This exploratory investigation provides encouraging support for future research to uncover these effects across a broader sample of organizations.

### *Supplemental Analysis*

While I did not find evidence for the hypothesized inverted U-shaped relationship between inclusive leadership and upward communication quality in the preceding study when using management openness (see Ashford et al., 1998) as the independent measure of inclusiveness, this curvilinear finding did emerge when I used leader-member exchange (LMX) as the primary measure of inclusive leadership. As such, the following supplemental analysis is included as “food for thought” as to why higher levels of LMX may facilitate a lower quality of upward communication.

The basic tenet of LMX is that leaders have unique exchange relationships with their followers that differ in their level of quality, and it is this variance in the strength of the relationship that has important implications for both leader and follower outcomes (Cogliser & Schriesheim, 2000; Graen & Uhl-Bien, 1995; Gerstner & Day, 1997). LMX theory suggests that by developing trust, respect and mutual obligations to each other over time, a leader-follower relationship transforms from one purely defined by individual interests to one based more upon shared interests (Uhl-Bien, Marion, & McKelvey, 2007).

### *Measures*

### Leader-Member Exchange (LMX)

I measured leader-member exchange using Graen and Uhl-Bien's (1995) validated seven-item LMX-7 scale ( $\alpha=.90$ ). These items are: "*I know where I stand with my boss,*" "*My boss understands my job problems and needs,*" "*My boss recognizes my potential,*" "*My boss would use his/her power to help me solve work related problems,*" "*My boss would "bail me out" at his/her expense,*" "*I defend and justify decisions made by my boss when he/she is not present to do so,*" and "*I have an effective working relationship with my boss.*"

### Upward Communication Quantity & Quality

As in the prior studies, upward communication quantity was measured as the number of words individuals typed in their communication to their boss, while upward communication quality was assessed by averaging the ratings of two independent coders on a single-item – "*I would describe this statement/comment as high quality.*" After both coders met to discuss and resolve differences across ratings, interrater reliability proved sufficient ( $ICC(2)=.83, p<.001$ ) (e.g., Bliese, 2000; Greguras & Robie, 1998).

### Controls

I controlled for individuals' gender, job level, organizational tenure, personality traits and job satisfaction. Gender (0=female, 1=male), job level (manager, professional and administrative), and organizational tenure (0 to 2 years, 2 to 5 years, 5 to 10 years, 10 to 15 years) were dummy coded variables in the regression model. In an effort to minimize survey length, I used Donnellan, Oswald, Baird, & Lucas's (2006) mini-IPIP scales to capture measures of individuals' extraversion, agreeableness and conscientiousness. This 20-item scale uses four items to measure each relevant personality dimension, and has previously demonstrated acceptable internal consistencies across five studies ( $\alpha$  at or above .60)

(Donnellan, Oswald, Baird, & Lucas, 2006). In this particular study, however, internal consistency estimates of individuals' extraversion ( $\alpha=.63$ ), agreeableness ( $\alpha=.66$ ) and conscientiousness ( $\alpha=.53$ ) proved adequate, but not particularly robust. In addition to measuring these Big 5 dimensions, I also included a four-item composite measure of individuals' proactive personality (see Detert & Burris, 2007). A sample item is, "*I am always looking for better ways to do things*" ( $\alpha=.84$ ). Finally, I controlled for individuals' job satisfaction using Edwards and Rothbard's (1999) previously noted three-item scale ( $\alpha=.94$ ).

### *Results*

Means, standard deviations, and correlations for all tested variables in this supplemental analysis are displayed in Table 12. Scale alphas are presented along the diagonal of the correlation matrix. All continuous measures were mean-centered to facilitate interpretation of the form of the interaction. OLS hierarchical regression analysis was used to test Hypotheses 1 and 2, the results of which are presented in Table 13.

**Table 12: Study 3 – Supplemental Analysis: Means, Standard Deviations and Correlations Among All Tested Variables**

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28		
1. LMX	5.08	1.30	(.90)																													
2. LMX <sup>2</sup>	27.51	11.82	-.61**																													
3. Psychological safety	4.73	1.12	.51**	-.26**	(.78)																											
4. Psychological safety <sup>2</sup>	23.62	10.16	-.18**	.24**	-.34**																											
5. Expectancy	5.26	1.31	.49**	-.30**	.35**	-.20**	(.85)																									
6. Expectancy <sup>2</sup>	29.43	12.06	-.42**	.46**	-.26**	.10	-.66**																									
7. Instrumentality	5.12	1.31	.46**	-.27**	.22**	-.09	.61**	-.39**	(.87)																							
8. Instrumentality <sup>2</sup>	27.93	11.82	-.36**	.46**	-.16*	.06	-.39**	.55**	-.63**																							
9. Social exchange	4.87	1.37	.49**	-.29**	.36**	-.21**	.66**	-.40**	.62**	-.41**	(.95)																					
10. Social exchange <sup>2</sup>	25.61	12.16	-.37**	.48**	-.26**	.24**	-.36**	.49**	-.36**	.56**	-.53**																					
11. Social anxiety	3.39	1.31	-.14	.05	-.24**	-.03	-.46**	.19**	-.25**	.08	-.30**	.05	(.92)																			
12. Social anxiety <sup>2</sup>	13.17	9.51	.00	.19*	-.08	.14	-.11*	.30**	-.03	.25**	-.02	.28**	.21**																			
13. Self-censorship	3.19	1.34	-.27**	.08	-.35**	.03	-.54**	.29**	-.40**	.21**	-.43**	.15**	.76**	.19**	(.90)																	
14. Self-censorship <sup>2</sup>	11.99	9.67	-.11	.21**	-.09	.05	-.25**	.46**	-.19**	.42**	-.16**	.35**	.16**	.64**	.37**																	
15. Job satisfaction	5.10	1.39	.47**	-.21**	.50**	-.26**	.17*	.02	.18*	-.05	.22**	-.13	-.03	.07	-.16*	-.01	(.94)															
16. Extraversion	4.12	1.16	-.02	.08	.03	.10*	-.07	-.02	-.02	.06	-.11	.08	.02	-.09	.04	-.08	.03															
17. Agreeableness	5.70	.77	.03	.13**	.16**	.13**	-.10	.06	-.15	.10	-.12	.10	-.02	-.10	-.15	-.16*	.12*	.19**														
18. Conscientiousness	5.76	.89	.14**	.06	.17**	.03	.01	.07	-.03	.09	.01	.10	-.03	.08	-.18*	.12	.12*	.02	.27**													
19. Proactive personality	6.05	.70	.16**	.02	.06	.10*	.00	-.01	.01	.05	-.04	.04	.02	.03	.00	.00	.17**	.16**	.26**	.32**												
20. Gender (0=F, 1=M)	.29	.45	.07	-.10*	-.01	-.07	.09	-.06	.13	-.14	.13	-.08	.13	.01	.12	-.09	-.09	.06	-.10*	-.15**	.04											
21. JobLevel - Manager	.22	.42	-.07	.05	.02	-.06	.05	-.07	.06	-.12	-.08	.05	-.13	.01	-.14	-.03	-.03	.07	.10*	-.05	-.04	.09										
22. JobLevel - Professional	.58	.50	-.09	-.03	-.12*	.01	-.03	.12	-.11	.17*	.00	.01	.09	-.02	.09	-.07	-.07	.04	-.09	-.01	.00	-.03	-.63**									
23. JobLevel - Admins	.14	.35	.10*	.00	.02	.03	-.07	-.04	.02	-.08	.01	-.05	.09	.03	.09	.11	.06	-.12**	.00	.07	-.01	-.11*	-.21**	-.47**								
24. Orgtenure: 0 to 2 yrs.	.43	.50	.10*	-.13**	.03	-.06	.15	-.15	.09	-.15	.27**	-.20**	.14	.00	.01	.00	.06	.00	.00	.03	.04	.05	-.17**	.23**	.00							
25. Orgtenure: 2 to 5 yrs.	.34	.48	-.15**	.107*	-.13**	.07	-.15*	.17*	-.18*	.24**	-.23**	.12	.03	.02	.07	-.06	-.13**	-.02	-.06	-.10*	.02	.03	-.08	.03	.08	-.55**						
26. Orgtenure: 5 to 10 years	.14	.34	-.01	.02	.01	-.05	-.05	-.01	.04	-.13	-.12	.01	-.07	-.11	.03	-.02	.00	.00	.04	.01	-.05	-.05	.29**	-.23**	-.01	-.39**	-.36**					
27. Orgtenure: 10 to 15 years	.06	.24	.14**	-.01	.19**	.03	.09	-.04	.16*	-.01	.14	-.05	-.19*	.10	-.20*	.19*	.15**	.04	.03	.11*	-.01	-.03	.02	-.11*	-.10*	-.20**	-.19**	-.13**				
28. UC Quantity (no. of words)	31.84	35.31	-.08	.11*	-.03	.03	.02	.03	-.05	.12*	-.10	.15**	-.09	.03	-.08	.02	-.01	.05	.03	.07	.05	-.06	.07	-.02	-.02	.03	.01	-.05	-.03			
29. UC Quality	4.01	1.19	-.07	.01	-.07	.00	.05	-.09	-.06	.03	-.05	.05	-.10*	-.08	-.10	-.06	.02	-.01	-.04	.15*	.02	-.07	.09	-.09	-.04	-.10	.07	.06	-.08	.66**		

Notes.  $N=159$ ;  $p<.05^*$ ,  $p<.01^{**}$ ; Coefficient alphas for scales are in parentheses along the diagonal.

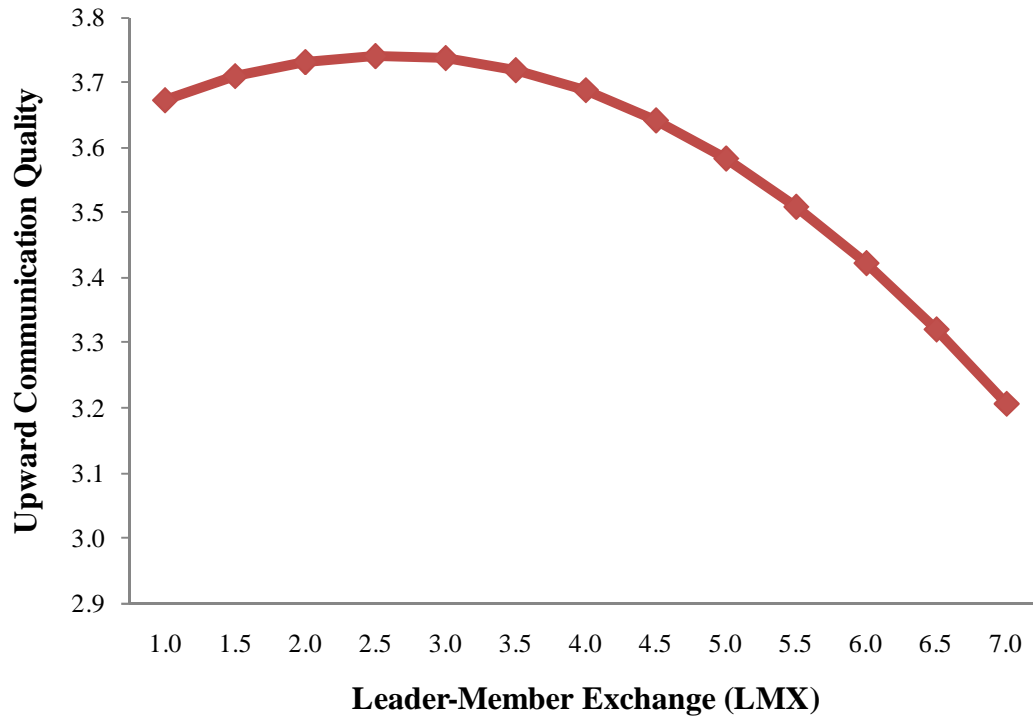
Hypothesis 1 predicted that higher levels of inclusive leadership would be positively associated with more upward communication, measured in terms of the number of words individuals wrote in their responses to management. In Step 1, control variables were included in the hierarchical regression model, including gender, organizational tenure, rank, personality traits and job satisfaction. In Step 2, the inclusive leadership term (i.e., LMX) was added to the regression model. As in the prior studies, no significant positive association was found between inclusive leadership and individuals' quantity of communication provided ( $\beta = -.17, p = .139$ ). Thus, Hypothesis 1 was not supported.

As the primary hypothesis of interest across all three studies, Hypothesis 2 suggested that high levels of inclusive leadership would encourage individuals to engage in a lower quality of leader-directed communication. In Step 1, I added the same control variables as before, while also adding in quantity of communication (i.e., word count), which emerged as a significant predictor of upward communication quality ( $\beta = .68, p < .001$ ). In Step 2, I added the linear effect of LMX, but no significant association was found ( $\beta = -.01, n.s.$ ). In Step 3, I added the quadratic term for LMX and found a significant negative coefficient predicting upward communication ( $\beta = -.18, p < .05$ ), indicating the presence of an inverted curvilinear relationship. In contrast, the linear LMX term was not significant ( $\beta = -.15, p = .122$ ). Therefore, just as in Studies 1 and 2, Hypothesis 2 was supported. This finding is illustrated graphically in Figure 3.



**Figure 3**

**Study 3 – Supplemental Analysis: Upward Communication Quality as a Function of Leader-Member Exchange (LMX)**



**Table 13**

**Study 3 – Supplemental Analysis: Results of Hierarchical Regression Analysis – LMX Predicting Upward Communication (UC) Quantity and Upward Communication (UC) Quality**

Variable	DV=UC Quantity (H1)		DV=UC Quality (H2)		
	Step 1	Step 2	Step 1	Step 2	Step 3
Gender (0=F, 1=M)	-.08	-.06	.03	.03	.03
Manager	.21	.18	-.25	-.25	-.27*
Professional	.12	.06	-.34*	-.35*	-.37*
Administrative	.05	.01	-.23*	-.23*	-.25*
Job satisfaction	.01	.07	.05	.05	.08
Org tenure (0-2 yrs.)	-.12	-.07	-.09	-.09	-.13
Org tenure (2-5 yrs.)	-.07	-.03	-.04	-.04	-.06
Org tenure (5-10 yrs.)	-.05	-.03	-.06	-.05	-.09
Org tenure (10-15 yrs.)	-.05	-.02	-.15	-.14	-.13
Extraversion	.11	.12	-.07	-.07	-.06
Agreeableness	-.07	-.08	-.04	-.04	-.03
Conscientiousness	.10	.11	.10	.10	.14*
Proactive personality	.03	.04	-.05	-.05	-.06
UC quantity (no. of words)	---	-.14	.68**	.68**	.68**
LMX	---	<b>-.17</b>	---	-.01	-.15
LMX <sup>2</sup>	---	---	---	---	<b>-.18*</b>
R <sup>2</sup>	.05	.07	.51	.51	.53
Adjusted R <sup>2</sup>	-.03	-.02	.46	.46	.47
ΔF	.67	2.21	10.72**	.02	4.46*

Note. \* $p < .05$ ; \*\* $p < .001$ ;  $N = 159$ . Statistics in bold represent tests of hypotheses.

To test Hypotheses 3a through 14, I once again used Baron and Kenny's (1986) regression-based approach to testing for mediation, supplemented with guidance from Edwards and Lambert (2007) when dealing with multiple stage moderation. The measures used to test the proposed mediators (i.e., psychological safety, expectancy and instrumentality beliefs, social exchange, social anxiety, and self-censorship) were the same as those used in the write-up for Study 3. These tests of mediation results are presented in Tables 14 and 15.

**Table 14**

**Study 3 – Supplemental Analysis: Tests of Mediation (Hypotheses 3a-8)**

Test	Path	Path/effect	<i>b</i>	<i>SE</i>	$\beta$	<i>t</i>	<i>p</i>
H3a, H3b	c	<i>LMX</i> → UC Quantity	-2.62	1.71	-.12	-1.53	.128
	a	<i>LMX</i> → Psychological safety	.57	.05	.51	12.62	<b>.000</b>
	b	<i>LMX</i> , Psychological Safety → UC Quantity	-2.62	1.98	-.12	-1.33	.187
	b	<i>LMX</i> , <i>Psychological Safety</i> → UC Quantity	.11	2.12	.01	.05	.958
H4	c	<i>LMX</i> → UC Quality	-.10	.10	-.10	-.96	.336
	c	<i>LMX</i> <sup>2</sup> → UC Quality	-.03	.06	-.05	-.51	.612
	a	<i>LMX</i> → Psychological Safety	.57	.05	.51	12.62	.000
	b	<i>LMX</i> → UC Quality	-.08	.12	-.08	-.66	.512
	b	<i>LMX</i> <sup>2</sup> → UC Quality	-.03	.06	-.04	-.41	.681
	b	<i>Psychological safety</i> → UC Quality	-.05	.10	-.05	-.48	.635
	b	<i>Psychological safety</i> <sup>2</sup> → UC Quality	-.02	.06	-.02	-.26	.798
H5a, H5b	c	<i>LMX</i> → UC Quantity	-2.62	1.71	-.12	-1.53	.128
	a	<i>LMX</i> → Expectancy	.44	.06	.49	7.29	<b>.000</b>
	b	<i>LMX</i> , Expectancy → UC Quantity	-3.57	1.99	-.16	-1.79	.075
	b	<i>LMX</i> , <i>Expectancy</i> → UC Quantity	2.84	2.19	.11	1.30	.196
H6a, H6b	c	<i>LMX</i> → UC Quantity	-2.62	1.71	-.12	-1.53	.128
	a	<i>LMX</i> → Instrumentality	.42	.06	.46	6.55	<b>.000</b>
	b	<i>LMX</i> , Instrumentality → UC Quantity	-2.95	2.00	-.13	-1.48	.141
	b	<i>LMX</i> , <i>Instrumentality</i> → UC Quantity	1.63	2.16	.07	.76	.451
H7	c	<i>LMX</i> → UC Quality	-.10	.10	-.10	-.96	.336
	c	<i>LMX</i> <sup>2</sup> → UC Quality	-.03	.06	-.05	-.51	.612
	a	<i>LMX</i> → Expectancy	.44	.06	.49	7.29	.000
	b	<i>LMX</i> → UC Quality	-.11	.11	-.12	-.99	.325
	b	<i>LMX</i> <sup>2</sup> → UC Quality	-.05	.06	-.10	-.85	.398
	b	<i>Expectancy</i> → UC Quality	.16	.12	.15	1.27	.208
	b	<i>Expectancy</i> <sup>2</sup> → UC Quality	.10	.07	.16	1.38	.171
H8	c	<i>LMX</i> → UC Quality	-.10	.10	-.10	-.96	.336
	c	<i>LMX</i> <sup>2</sup> → UC Quality	-.03	.06	-.05	-.51	.612
	a	<i>LMX</i> → Instrumentality	.42	.06	.46	6.55	.000
	b	<i>LMX</i> → UC Quality	-.06	.11	-.06	-.54	.587
	b	<i>LMX</i> <sup>2</sup> → UC Quality	-.04	.07	-.08	-.67	.503
	b	<i>Instrumentality</i> → UC Quality	.01	.11	.01	.10	.924
	b	<i>Instrumentality</i> <sup>2</sup> → UC Quality	.07	.07	.11	.97	.332

**Table 15**

**Study 3 – Supplemental Analysis: Tests of Mediation (Hypotheses 9a-14)**

Test	Path	Path/effect	<i>b</i>	<i>SE</i>	$\beta$	<i>t</i>	<i>p</i>
H9a, H9b	c	<i>LMX</i> → UC Quantity	-2.62	1.71	-.12	-1.53	.128
	a	<i>LMX</i> → Social exchange	.60	.08	.49	7.40	<b>.000</b>
	b	<i>LMX</i> , Social exchange → UC Quantity	-1.84	1.96	-.08	-.94	.350
	b	<i>LMX</i> , <i>Social exchange</i> → UC Quantity	-1.30	1.59	-.07	-.82	.413
H10	c	<i>LMX</i> → UC Quality	-.10	.10	-.10	-.96	.336
	c	<i>LMX</i> <sup>2</sup> → UC Quality	-.03	.06	-.05	-.51	.612
	a	<i>LMX</i> → Social exchange	.60	.08	.49	7.40	.000
	b	<i>LMX</i> → UC Quality	-.04	.11	-.04	-.32	.748
	b	<i>LMX</i> <sup>2</sup> → UC Quality	-.09	.06	-.16	-1.45	.150
	b	<i>Social exchange</i> → UC Quality	-.07	.10	-.06	-.67	.503
b	<i>Social exchange</i> <sup>2</sup> → UC Quality	.22	.08	.26	2.80	<b>.006</b>	
H11a, H11b	c	<i>LMX</i> → UC Quantity	-2.62	1.71	-.12	-1.53	.128
	a	<i>LMX</i> → Social anxiety	-.14	.09	-.12	-1.54	.125
	b	<i>LMX</i> , Social anxiety → UC Quantity	-2.25	1.78	-.10	-1.27	.207
	b	<i>LMX</i> , <i>Social anxiety</i> → UC Quantity	.61	1.74	.03	.35	.725
H12a, H12b	c	<i>LMX</i> → UC Quantity	-2.62	1.71	-.12	-1.53	.128
	a	<i>LMX</i> → Self-censorship	-.30	.09	-.25	-3.29	<b>.001</b>
	b	<i>LMX</i> , Self-censorship → UC Quantity	-3.33	1.86	-.15	-1.80	.074
	b	<i>LMX</i> , <i>Self-censorship</i> → UC Quantity	-3.58	2.05	-.14	-1.75	<b>.083</b>
H13	c	<i>LMX</i> → UC Quality	-.10	.10	-.10	-.96	.336
	c	<i>LMX</i> <sup>2</sup> → UC Quality	-.03	.06	-.05	-.51	.612
	a	<i>LMX</i> → Social anxiety	-.14	.09	-.12	-1.54	.125
	b	<i>LMX</i> → UC Quality	-.13	.10	-.13	-1.25	.212
	b	<i>LMX</i> <sup>2</sup> → UC Quality	-.05	.06	-.08	-.76	.452
	b	<i>Social anxiety</i> → UC Quality	-.27	.09	-.25	-3.01	.003
b	<i>Social anxiety</i> <sup>2</sup> → UC Quality	.07	.08	.08	.90	.367	
H14	c	<i>LMX</i> → UC Quality	-.10	.10	-.10	-.96	.336
	c	<i>LMX</i> <sup>2</sup> → UC Quality	-.03	.06	-.05	-.51	.612
	a	<i>LMX</i> → <i>Self-censorship</i>	-.30	.09	-.25	-3.29	.001
	b	<i>LMX</i> → UC Quality	-.16	.11	-.16	-1.43	.155
	b	<i>LMX</i> <sup>2</sup> → UC Quality	-.05	.06	-.10	-.87	.387
	b	<i>Self-censorship</i> → UC Quality	-.19	.10	-.18	-2.01	.047
	b	<i>Self-censorship</i> <sup>2</sup> → UC Quality	.06	.07	.07	.78	.434

As seen in Tables 14 and 15, no support was found for the proposed mediators of psychological safety, expectancy and instrumentality beliefs (i.e., Hypotheses 3, 4, 5, 6, 7, 8 and 9). However, Hypothesis 10 was partially supported, as social exchange beliefs transmitted an indirect effect between inclusive leadership and upward communication quality. While I did not find support for Hypotheses 11 and 13 and the indirect effect of social anxiety on either the quantity (H11) or quality (H13) of individuals' upward communication, respectively, there was some evidence to suggest that higher levels of LMX was associated with less self-censorship ( $b = -3.58, p < .10$ ), resulting in a greater quantity of upward communication. Thus, Hypothesis 12 was marginally supported. Finally, individuals' perceived need to engage in self-censorship did not mediate the inclusive leadership-quality communication relationship. As such, Hypothesis 14 was not supported.

### *Discussion*

The purpose of this supplemental analysis was to provide additional support for the inverted curvilinear relationship between inclusive leadership and upward communication quality found in Studies 1 and 2, while using a measure (i.e., LMX) that on the surface may not necessarily be viewed as belonging to the same family of inclusive leadership constructs. However, the fact that this relationship emerged in this field study offers interesting avenues for further exploration. For instance, just as Harris and Kacmar (2006) demonstrated that individuals who have a strong reciprocity-oriented relationship with their boss can find themselves burdened by the need to perform and thus, experience increased stress levels, perhaps individuals who had similarly strong relationships with their supervisor felt compelled to provide input at any and all costs, irrespective of its quality. Or, as seems to have been the case in the prior studies, leaders who share a positive rapport with their

subordinates may get their input periodically and without the need for formal channels. Thus, additional work is needed to further uncover the psychological mechanisms behind why individuals provide a lower quality of upward communication when their input is solicited by highly approachable and inclusive leaders.

## **IX. GENERAL DISCUSSION**

The purpose of this investigation was to challenge conventional wisdom that “more is better” by demonstrating that highly inclusive leadership may have a ‘dark side’ when it comes to accomplishing the goal of getting high quality comments, ideas, and suggestions from one’s followers. In two of three settings (archival and lab), I provide initial evidence for an inverted curvilinear relationship between inclusive leadership and upward communication quality, such that quality begins to go down beyond a certain optimum threshold. Furthermore, by highlighting the limited positive influence of inclusive leadership on individuals’ leader-directed communication behavior, I offer support for those scholars who have suggested studying leadership as a more complex and intricate relational phenomenon that may be nonmonotonic in its influence (e.g., Fleishman, 1995; Fleishman & Harris, 1962; Judge, Piccolo, & Ilies, 2004)

In this dissertation, I make several contributions to both the upward communication and leadership literatures. First, by introducing the idea of upward communication quality, I highlight the importance of studying individuals’ quality of contributions and ideas within their organizations, rather than just the amount or frequency of these contributions. Although the fear of speaking up (e.g., Kish-Gephart, et al., 2009) has regrettably contributed to the spirals of silence seen in many organizations today (e.g., Bowen & Blackmon, 2003), scholars have overemphasized the need for employees to speak up more frequently and in greater numbers, without considering the potential consequences of these actions. While research is still needed to uncover new ways to unlock the gates of fear that preclude many

front-line employees from speaking up at work, the current investigation highlights how a broader focus that includes *both* quantity and quality considerations can help to move the upward communications literature forward in a meaningful way. Through this expanded focus on both the quantity and quality of ideas individuals contribute to improving the organization, scholars broadly interested in issues of upward communication can help to improve the depth and precision of our theory-building, while simultaneously helping to integrate several conceptually-related literatures (e.g., issue selling, issue crafting, employee voice, persuasion, and creativity).

A second contribution of this work is demonstrating how various psychological influences, such as instrumentality beliefs and social exchange expectations, may provide indirect influences on individuals' upward communication behavior. As seen in Study 2, participants were motivated to provide more upward communication when they felt that the leader would act upon their concerns in some meaningful way. In this way, leaders can increase employees' motivation to engage in the upward communication process by heightening their instrumentality beliefs, which research has shown is a strong antecedent of procedural justice perceptions (see Avery & Quiñones, 2002). Building upon these findings, Study 3 also demonstrated that individuals' quality of written communication was largely determined by the extent to which they felt strong bonds of social exchange with their immediate supervisor. Specifically, the greater employees' perceived need to reciprocate and engage in acts of social exchange with their leader, the more communication employees provided and the higher the quality of this communication. Taken together, these findings raise an interesting and potentially difficult practical challenge for managers. On the one hand, highly inclusive leaders can get more upward communication from their followers



because individuals feel more comfortable expressing their true thoughts and opinions around their leader and believe that these leaders will act upon their concerns. At the same time, however, the observed inverted curvilinear relationship between inclusive leadership and upward communication quality suggests that individuals' quality of comments and ideas may actually be poorer when leaders adopt a highly inclusive style. Although clear theoretical guidance for why inclusive leaders get lower quality communication was not evident in this exploratory set of studies, understanding how leaders can potentially bound the negative influence of inclusive leadership through tactics such as more targeted communication solicitations (e.g., "give me your one best idea" rather than open-ended invitations for input), or eliminating anonymity may provide a way for leaders to handle this delicate balance. Just as managers must sometimes take harsh action to do what is necessary to ensure organizational effectiveness (Molinsky & Margolis, 2005), highly inclusive leaders may need to place self-imposed constraints on their availability and willingness to consider others' input, if they are to get the very best ideas from their workforce.

A third contribution this work makes to our collective understanding of upward communication and management issues is the attention it draws to the dark side of inclusive leadership. With recent trends in management practice seemingly skewed towards highlighting only the beneficial aspects of inclusiveness, this research echoes Fleishman and Harris's (1962) early admonition that effective leadership is often found at an optimal 'middle point' that is constrained on both sides. Most recently, Grant and Schwartz (2011, p. 61) shared similar sentiments, arguing persuasively that "a wealth of psychological research has focused on demonstrating the well-being and performance benefits of positive traits, states, and experiences. This focus has obscured the prevalence and importance of

nonmonotonic inverted-U-shaped effects, whereby positive phenomena reach inflection points at which their effects turn negative.”

Taking Grant and Schwartz’s (2011) admonition to heart may move scholars in the direction of developing new theories of leadership that are more precise and contextually bounded. Just as the original Ohio State leadership studies’ espousal of both consideration and structure for effective leadership paved the way for modern leadership perspectives to gain wider acceptance, so too can fresh conceptual work on the need for “bounded inclusiveness” open the bridge to new developments in leadership theory.

Although this work makes important contributions to both the upward communication and leadership literatures, this research is not without several limitations worth considering. Perhaps the most glaring shortcoming of this initial research effort is that it did not yield conclusive results as to *why* inclusive leadership lowers upward communication quality, nor provide sufficient insight into how leaders may effectively limit the negative influence of inclusiveness on communication quality. Although individuals did express a lower quality of upward communication to more inclusive leaders when given the opportunity to provide input, these initial studies provide only tepid support for my underlying assumption that highly inclusive leaders promote a work environment that encourages cognitive laziness. Thus, it remains to be seen why inclusive leaders might unintentionally lower the quality of communication they receive from their subordinates. One possible explanation for future research to consider is that highly inclusive leaders are simply better at soliciting informal communication and ideas from their workforce quite regularly, rather than waiting for more formal, but infrequent mechanisms, such as employee feedback surveys, to garner individuals’ input. As such, when it came time to offer their ideas and suggestions,

participants had very little to share that hadn't been already communicated to their supervisor. Furthermore, given that all three forums for expressing leader-directed communication were more formal across these studies, testing these ideas across other contexts where communication is more informal and spontaneous (e.g., team meetings) and potentially influenced by social contagion effects, would be a useful way to explore this possibility in greater depth.

Related to this point, another important limitation of this work is that only written forms of communication were captured and evaluated for quality. However, today's modern workplace is one where individuals often have multiple forums at their disposal for expressing their ideas and concerns, ranging from personal, one-on-one meetings with supervisors to more large-scale employee gatherings where individuals are given the opportunity to communicate their concerns to senior leadership. These latter settings typically require individuals to express their ideas verbally and in person to the leader(s). Thus, it is possible that the inverted curvilinear relationship between inclusive leadership and upward communication quality found across this particular set of studies is limited only to forums where written communication is expressed. Going forward, it will be interesting for researchers to consider how individuals' communication quality varies as a function of inclusive leadership in environments where individuals are required to share their ideas verbally and in person. In such cases, one might hypothesize individual-differences having a larger footprint, such that individuals who are more introverted and/or better at self-monitoring, may produce a higher quality of upward communication than their more loquacious, spontaneous colleagues (e.g., Grant, Gino, and Hofmann, in press).

In light of these limitations, there are clearly numerous opportunities for new research efforts to address these shortcomings and enhance our knowledge and understanding of how individuals come to share good ideas with their supervisors. In the final section of this dissertation, I turn my attention to explicating additional avenues for future research that may hold promise in our ongoing quest to better understand how leadership and other important contextual influences shape individuals' upward communication behaviors.

## **X. FUTURE RESEARCH**

This initial exploration into the inverted curvilinear relationship between inclusive leadership and upward communication quality opens up a variety of interesting and noteworthy avenues for future research. As a logical first step, constructively replicating the findings presented here across a wider variety of organizations and samples would be a valuable contribution to the literature and help to strengthen the conclusions that can be drawn from this work. In addition to replicating these results using individuals in North America, these new investigations should also seek to expand geographic boundaries and explore how upward communication quality differs across various cultures and contexts, given that status norms and power distance expectations often operate differently outside of developed Western nations (Hofstede, 1980). Across Eastern nations, the high degree of power distance and regard for institutional hierarchy and norms may make the expression of low quality communication less prevalent and infrequent compared to their Western counterparts. Future research should explore this possibility.

Perhaps the most important issue left unresolved by the current investigation is why high levels of inclusive leadership leads to a lowering of individuals' upward communication quality. Although several psychological mechanisms were proposed for why this phenomenon exists, surprisingly little mediating evidence was found to support the various predictions. In fact, despite some initial support in Studies 2 and 3 for the assertion that inclusive leaders enhance followers' instrumentality and social exchange beliefs, the lack of

consistent results across both studies suggests the potential for alternative explanations. Additionally, the surprising lack of significant correlations between psychological safety and upward communication, both in terms of quantity and quality, raises interesting questions as to why this correlation was non-significant, particularly in light of prior research showing a significant linkage between the two variables.

In addition, throughout the current investigation, a single-item measure was used to assess upward communication quality in light of the large datasets and the manually intensive time and effort needed to evaluate each of these comments for quality individually. However, going forward, developing a more robust, multi-dimensional scale of upward communication quality and understanding how its various dimensions relate to one another (e.g., Chan, 1998) would be an important and useful theoretical contribution. For instance, as an initial starting point, scholars might consider dimensions of clarity, constructive tone, thoughtfulness, and actionability, as possible drivers of upward communication quality and whether or not these dimensions compensate for one another, such that different combinations of communication quality are possible, depending on the particular context and the individual(s) rating it. Similarly, considering how source credibility perceptions might also factor into leaders' evaluations of idea quality might shed further insight into the psychological processes that shape how and why individuals provide the input they do to their leaders. For example, the source credibility literature (e.g., Giffin, 1967; Hovland & Weiss, 1951) has long pointed to the importance of an individual's perceived reputation and standing within their organization as a prime determinant of whether or not their ideas were received favorably by management. For this reason, individuals who have accumulated a large number of idiosyncrasy credits (Hollander, 1958) over time may actually engage in

lower quality of upward communication more frequently because they have proven themselves over time and have the ability to say things that are not necessarily meaningful or beneficial.

A third potentially fruitful avenue for future research is exploring how the recent widespread proliferation of social networking sites, such as Facebook and Twitter, particularly among younger generations, may be contributing to a lower quality of upward communication across modern organizations. Although the rise of social media has greatly enhanced the ability of individuals to be able to network and communicate instantaneously, one drawback of having “instant newsfeeds” is that it allows for, and even celebrates the expression of unfiltered, often irrelevant, obsequious communication. Given that today’s emerging workforce has grown up in an era where instantaneous gratification and the expression of ideas at any point in time is viewed as the “new normal” (Twenge, 2006; Twenge, Campbell, Hoffman, & Lance, 2010), this mindset may easily begin to seep into modern organizations, as highly inclusive leaders reinforce and give younger employees the perceived license to express a lower quality of upward communication without carefully considering the consequences and context in which they raise it.

Another interesting idea for researchers to explore in the future is how followers perceive their leaders’ competence when they are highly inclusive. Although inclusiveness may signal friendliness and openness to new ideas, it may also have the unintended effect of diminishing confidence in the leader, particularly if the leader requests employees’ input frequently. To illustrate, consider a senior manager who is eager to engage his/her employees and takes the time to listen to everyone’s opinions and ideas in a team meeting. Although the leader may improve employees’ perceptions of procedural justice and fairness

by giving everyone a say in the process, he/she may also create doubts and negative attributions in subordinates' minds about the leader's strength, competence and motives (e.g., Ferris, Bhawuk, Fedor & Judge, 1995; Johns & Saks, 2005). Even worse, if management fails to act on a majority of the concerns raised by employees in that meeting, employee morale is likely to suffer (Tucker & Singer, 2009), thereby defeating the very purpose the leader intended to achieve by being inclusive.

Highly approachable leaders may also face more practical challenges when adopting an inclusive approach, such as the loss of time, productivity and the ability to act decisively on behalf of the organization. Soliciting and listening to employee input is frequently a time-consuming process, and does not always come with a guaranteed payoff for the organization. In fact, getting too many ideas from below may actually be counterproductive to the leader's ability to be effective. According to recent meta-analytical work by Scheibehenne, Greifeneder, and Todd (2010), when individuals have too many choices to consider, their motivation to choose among available options, as well as their satisfaction with their final selection can actually diminish. Along similar lines, decision-making researchers have also found that individuals often make poorer judgments and decisions when presented with too many ideas (as opposed to less) in part because of the increased cognitive load and processing capabilities it requires (O'Reilly, 1980; Edmunds & Morris, 2000). For these reasons, leaders who attempt to get more input from their followers may actually find themselves becoming more frustrated by choice overload, and thus, choose to do nothing at all, rather than investing the time and effort needed to sift through a number of employee suggestions. Therefore, in the same way this research has shown some of the unintended



consequences of inclusive leadership on upward communication quality, future work should investigate other ways in which leaders' efforts to be inclusive can potentially backfire.

In closing, in this dissertation I have sought to grapple with an untested assumption that has plagued the upward communications literature in recent years – namely, that more upward communication is synonymous with better upward communication. Through a series of archival, lab and field studies, I provide strong initial evidence challenging this assumption, and in doing so, provide greater theoretical insight into how leaders can unintentionally harm organizational effectiveness by adopting an overly inclusive style. Going forward, it will be the creative and persistent work of scholars and practitioners alike to determine better ways through which leaders can reap the benefits of inclusiveness while minimizing its costs. In this way, organizations and the leaders that guide them can play a vital and important role in shaping new 21<sup>st</sup> century work environments that encourage individuals to speak well, not more.

## REFERENCES

- Adams, J. S. (1963). Toward an understanding of inequity. *Journal of Abnormal and Social Psychology, 67*, 422-436.
- Adams, J. S. (1965) Inequity in social exchange. In L. Berkowitz (Ed.), *Advances in experimental social psychology* (Vol. 2, pp. 267-299). New York, NY: Academic Press.
- Aiken, L. S., & West, S. G. (1991). *Multiple regression: Testing and interpreting interactions*. Thousand Oaks, CA: Sage.
- Amabile, T. M. (1982). Social psychology of creativity: A consensual assessment technique. *Journal of Personality and Social Psychology, 43*, 997-1013.
- Amabile, T. M. (1983). The social psychology of creativity: a componential conceptualization. *Journal of Personality and Social Psychology, 45*, 357-376.
- Amabile, T. M. (1988). A model of creativity and innovation in organizations. In B. M. Staw & L. L. Cummings (Eds.), *Research in organizational behavior* (Vol. 10, pp. 123-167). Greenwich, CT: JAI Press.
- Amabile, T. M. (1996). *Creativity in context*. Boulder, Colorado: Westview Press.
- Ames, D. R., & Flynn, F. J. (2007). What breaks a leader: The curvilinear relation between assertiveness and leadership. *Journal of Personality and Social Psychology, 92*, 307-324.
- Arnold, J. A., Arad, S., Rhoades, J. A., & Drasgow, F. (2000). The empowering leadership questionnaire: The construction and validation of a new scale for measuring leader behaviors. *Journal of Organizational Behavior, 21*, 249-269.
- Ashford, S. J. (1998). Championing charged issues: The case of gender-equity within organizations. In R. M. Kramer & M. A. Neale (Eds.), *Power and influence in organizations* (pp. 349-380). Thousand Oaks, CA: Sage.
- Ashford, S. J., Rothbard, N. P., Piderit, S. K., & Dutton, J. E. (1998). Out on a limb: The role of context and impression management in selling gender-equity issues. *Administrative Science Quarterly, 43*, 23-57.
- Atwater, L. E. , Rousch, P., & Fischthal, A. (1995). The influence of upward feedback on self and follower ratings of leadership. *Personnel Psychology, 48*, 35-59.
- Atwater, L. E., Waldman, D. A., Atwater, D., & Cartier, P. (2000). An upward feedback field experiment: Supervisors' cynicism, reactions, and commitment to subordinates. *Personnel Psychology, 53*, 275-297.

- Avery, D. R. and Quiñones, M. A. (2002). Disentangling the effects of voice: the incremental roles of opportunity, behavior, and instrumentality in predicting procedural fairness'. *Journal of Applied Psychology*, 87, 81-86.
- Avolio, B. J. (1999). *Full Leadership Development: Building the Vital Forces in Organizations*. Thousand Oaks, CA: Sage.
- Avolio, B. J. (2005). *Leadership development in balance: Made/Born*. Hillsdale, NJ: Erlbaum.
- Avolio, B. J., & Bass, B. M. (1995). Individual consideration viewed at multiple levels of analysis – A multilevel framework for examining the diffusion of transformational leadership. *Leadership Quarterly*, 6, 199-218.
- Avolio, B. J., Walumbwa, F. O., & Weber, T. J. (2009). Leadership: Current theories, research, and future directions. *Annual Review of Psychology*, 60, 421-449.
- Baer, M., & Frese, M. (2003). Innovation is not enough: Climates for initiative and psychological safety, process innovations, and firm performance. *Journal of Organizational Behavior*, 24, 45-68.
- Bakker, A.B. & Schaufeli, W.B. (2008). Positive organizational behavior: Engaged employees in flourishing organizations. *Journal of Organizational Behavior*, 29, 147-154.
- Bandura, A., & Locke, E.A. (2003). Negative self-efficacy and goal effects revisited. *Journal of Applied Psychology*, 88, 87-99.
- Bansal, P. (2003). From issues to actions: The importance of individual concerns and organizational values in responding to natural environmental issues. *Organization Science*, 14, 51-527.
- Barling, J., Weber, T., & Kelloway, E. K. (1996). Effects of transformational leadership training on attitudinal and financial outcomes: A field experiment. *Journal of Applied Psychology*, 81, 827-832.
- Baron, R.A. (1990). Countering the effects of destructive criticism: The relative efficacy of four interventions. *Journal of Applied Psychology*, 73, 199-207.
- Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic and statistical considerations. *Journal of Personality and Social Psychology*, 51, 1173-1182.
- Baumeister, R. F., & Leary, M. R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin*, 117, 497-529.

- Bass, B. M. (1985). *Leadership and performance beyond expectations*. New York, NY: Free Press.
- Bass, B. M. (1990). *Bass and Stogdill's handbook of leadership*. New York, NY: Free Press.
- Bass, B. M., Avolio, B. J., Jung, D. I., & Berson, Y. (2003). Predicting unit performance by assessing transformational and transactional leadership. *Journal of Applied Psychology*, 88, 207-218.
- Bass, B. M., & Steidlmeier, P. (1999). Ethics, character, and authentic transformational leadership behavior. *Leadership Quarterly*, 10(2), 181-217.
- Bazerman, M. (1993). *Judgment in managerial decision making* (3rd ed.). New York, NY: Wiley.
- Bell, B. S., & Kozlowski, S. W. J. (2002). A typology of virtual teams. *Group & Organization Management*, 27, 14-49.
- Berger, C. R., & Calabrese, R. J. (1975). Some explorations in initial interactions and beyond: Toward a developmental theory of interpersonal communication. *Human Communication Research*, 1, 99-112.
- Bernerth, J. B., Armenakis, A. A., Feild, H. S., Giles, W. F., & Walker, H.J. (2007). Leader-member social exchange (LMSX): Development and validation of a scale. *Journal of Organizational Behavior*, 28(8), 979-1003.
- Berry, J. W. & Tugman, J. (2010). Impact of creativity's components: Aiming for precision. Paper presented at the annual meeting of the Society for Industrial and Organizational Psychology, Atlanta, Georgia.
- Blau, P. M. (1964). *Exchange and power in social life*. New York, NY: Wiley.
- Bliese, P. D. (2000). Within-group agreement, non-independence, and reliability: Implications for data aggregation and analyses. In K. J. Klein & S. W. J. Kozlowski (Eds.), *Multilevel theory, research, and methods in organizations: Foundations, extensions, and new directions* (pp. 349-381). San Francisco, CA: Jossey-Bass.
- Bolino, M. C. (1999). Citizenship and impression management: Good soldiers or good actors? *Academy of Management Review*, 24, 82-98.
- Bono, J. E., & Judge, T. A. (2003). Self-concordance at work: Toward understanding the motivational effects of transformational leaders. *Academy of Management Journal*, 46, 554-571.
- Bono, J. E., & Judge, T. A. (2004). Personality and transformational and transactional leadership: A meta-analysis. *Journal of Applied Psychology*, 89, 901-910.

- Bowen, F., & Blackmon, K. (2003). Spirals of silence: The dynamic effects of diversity on organizational voice. *Journal of Management Studies*, 40(6), 1393-1417.
- Bradac, J. J. (2001). Theory comparison: uncertainty reduction, problematic integration, uncertainty management, and other curious constructs. *Journal of Communication*, 51, 456-476.
- Brockner, J., & Wiesenfeld, B. M. (1996). An integrative framework for explaining reactions to decisions: Interactive effects of outcomes and procedures. *Psychological Bulletin*, 120, 189-208.
- Brown, R. J., & Wade, G. (1987). Superordinate goals and intergroup behavior: The effect of role ambiguity and status on intergroup attitudes and task performance. *European Journal of Social Psychology*, 17, 131-142.
- Burns, J. M. (1978). *Leadership*. New York, NY: Harper & Row.
- Burris, E. R., Detert, J. D., & Chiaburu, D. S. (2008). Quitting before leaving: Attachment and detachment in employee voice. *Journal of Applied Psychology*, 93, 912-922.
- Campbell, D. T. (1960). Blind variation and selective retention in creative thought as in other knowledge processes. *Psychology Review*, 67, 380-400.
- Campbell, D. T., & Fiske, D. W. (1959). Convergent and discriminant validation by the multitrait-multimethod matrix. *Psychological Bulletin*, 56, 81-105.
- Cannon, M., & Witherspoon, R. (2005). Actionable feedback: Unlocking the power of learning and performance improvement. *Academy of Management Executive*, 19(2), 120-134.
- Carmeli, A., Brueller, D., & Dutton, J. E. (2009). Learning behaviors in the workplace: The role of high-quality interpersonal relationships and psychological safety. *Systems Research and Behavioral Science*, 26, 81-98.
- Carmeli, A., & Gittell, J. H. (2009). High quality relationships, psychological safety and learning from failures in work organizations. *Journal of Organizational Behavior*, 30(6), 720-729.
- Carmeli, A., Reiter-Palmon, R., & Ziv, E. (2010). Inclusive leadership and employee involvement in creative tasks in the workplace: The mediating role of psychological safety. *Creativity Research Journal*, 22(3), 250-260.
- Carson, J. B., Tesluk, P. E., & Marrone, J. A. (2007). Shared leadership in teams: An investigation of antecedent conditions and performance. *Academy of Management Journal*, 50(5), 1217-1234.

- Cartwright, S. & Holmes, N. (2006). The meaning of work: The challenge of regaining employee engagement and reducing cynicism. *Human Resource Management Review*, 16, 199-208.
- Chan, D. (1998). Functional relations among constructs in the same content domain at different levels of analysis: A typology of composition models. *Journal of Applied Psychology*, 83, 234-246.
- Chiaburu, D. S., Marinova, S. V., & Van Dyne, L. (2008). Should I do it or not? An initial model of cognitive processes predicting voice behaviors. In L. T. Kane & M. R. Powell (Eds.), *Citizenship in the 21st century* (pp. 127-153). New York: Nova Science.
- Christian, M., Bradley, J., Wallace, J., & Burke, M. (2009). Workplace safety: A meta-analysis of the roles of person and situation factors. *Journal of Applied Psychology*, 94(5), 1103-1127.
- Cogliser, C. C., & Schriesheim, C. A. (2000). Exploring work unit context and leader-member exchange: A multilevel perspective. *Journal of Organizational Behavior*, 21, 487-511.
- Cohen, J. (1992). A power primer. *Psychological Bulletin*, 112, 155-159.
- Conger, J. A., & Kanungo, R. N. (1998). *Charismatic Leadership in Organizations*. Thousand Oaks, CA: Sage.
- Cook, K., Kramer, R. M., Thom, D. H., Stepanikova, I., Mollborn, S. B., & Cooper, R. M. (2004). Trust and distrust in physician-patient relationships: Antecedents and consequences. In R. M. Kramer & K. S. Cook (Eds.), *Trust in Organizations: Dilemmas and Approaches* (pp. 65-98). New York, NY: Russell Sage.
- Coombs, C., & Avrunin, G. S. (1977). Single peaked preference functions and theory of preference. *Psychological Review*, 84(2), 216-230.
- Cortina, L. M., & Magley, V. J. (2003). Raising voice, risking retaliation: Events following interpersonal mistreatment in the workplace. *Journal of Occupational Health Psychology*, 8(4), 247-265.
- Crandell, C. (2010). Bad innovation: BP's bad suggestion box. Accessed online on March 17, 2011 from <http://www.thestreet.com/story/10785375/bad-innovation-bps-big-suggestion-box.html>.
- Crant, M. J. (2003). Speaking up when encouraged: Predicting voice behavior in a naturally-occurring setting. Paper presented at the annual meeting of the Academy of Management, Seattle.

- Creed, W. E. D., Scully, M. A., & Austin, J. R. (2002). Clothes make the person? The tailoring of legitimating accounts and the social construction of identity. *Organization Science*, 13, 475-496.
- Cropanzano, R., Prehar, C. A., & Chen, P. Y. (2002). Using social exchange theory to distinguish procedural from interactional justice. *Group & Organizational Management*, 27, 324-351.
- Cropley, A. J. (2000). Defining and measuring creativity: Are creativity tests worth using? *Roeper Review*, 23, 72-79.
- Csikszentmihalyi, M., & Wolfe, R. (2000). New conceptions and research approaches to creativity: Implications of a systems perspective for creativity in education. In K.A. Heller (Ed.), *International handbook of giftedness and talent* (pp. 81-93). Oxford, UK: Elsevier Science.
- Day, D. V., Gronn, P., & Salas, E. (2004). Leadership capacity in teams. *Leadership Quarterly*, 15, 857-880.
- DeDreu, C. K.W., & West, M. A. (2001). Minority dissent and team innovation: The importance of participation in decision making. *Journal of Applied Psychology*, 86, 1191-1201.
- Detert, J. R. (2003). To speak or not to speak: The multi-level influences on voice and silence in organizations. Unpublished doctoral dissertation, Harvard University.
- Detert, J. R., & Burris, E. R. (2007). Leadership behavior and employee voice: Is the door really open? *Academy of Management Journal*, 50(4), 869-884.
- Detert, J. R., & Edmondson, A. C. (2008). The nature and sources of implicit theories of voice. Presented at the Academy of Management Annual Meeting in Anaheim, CA.
- Detert, J. R., & Treviño, L. K. (2010). Speaking up to higher ups: How supervisors and skip-level leaders influence employee voice. *Organization Science*, 21(1), 1-22.
- Diehl, M., & Stroebe, W. (1987). Productivity loss in brainstorming groups: Toward the solution of a riddle. *Journal of Personality and Social Psychology*, 53(3), 497-509.
- Donnellan, M. B., Oswald, F.L., Baird, B. M., & Lucas, R. E. (2006). The mini-IPIP scales: Tiny-yet-effective measures of the big five factors of personality. *Psychological Assessment*, 18, 192-203.
- Dunbar, K. (1995). *How scientists really reason: Scientific reasoning in real-world laboratories*. In R. J. Sternberg & J. E. Davidson (Eds.), *The nature of insight* (pp. 365-395). Cambridge, MA: The MIT Press.

- Dunning, D., Heath, C., & Suls, J. M. (2004). Flawed self-assessment: Implications for health, education, and the workplace. *Psychological Science in the Public Interest*, 5, 69-106.
- Dutton, J. E., & Ashford, S. J. (1993). Selling issues to top management. *Academy of Management Review*, 18(3), 397-428.
- Dutton, J. E., Ashford, S. E., Lawrence, K., & Miner-Rubino, K. (2002). Red light, green light: Making sense of the organizational context for issue selling. *Organization Science*, 13, 355–369.
- Dutton, J. E., Ashford, S. J., O’Neill, R. M., Hayes, E., & Wierba, E. E. (1997). Reading the wind: How middle managers assess the context for selling issues to top managers. *Strategic Management Journal*, 18, 407-425.
- Dutton, J. E., Ashford, S. J., O’Neill, R. M., & Lawrence, K. A. (2001). Moves that matter: Issue selling and organizational change. *Academy of Management Journal*, 44, 716-736.
- Dvir, T., Eden, D., Avolio, B. J., & Shamir, B. (2002). Impact of transformational leadership on follower development and performance: A field experiment. *Academy of Management Journal*, 45, 735-744.
- Edmondson, A. C. (1996). Learning from mistakes is easier said than done: Group and organizational influences on the detection and correction of human error. *Journal of Applied Behavioral Science*, 32, 5-32.
- Edmondson, A. C. (1999). Psychological safety and learning behavior in work teams. *Administrative Science Quarterly*, 44(2), 350-383.
- Edmondson, A. C. (2003). Speaking up in the operating room: How team leaders promote learning in interdisciplinary action teams. *Journal of Management Studies*, 40, 1419-1452.
- Edmondson, A. C. (2004). Psychological safety, trust, and learning in organizations: A group-level lens. In R. M. Kramer, & K. S. Cook (Eds.), *Trust and Distrust in Organizations: Dilemmas and Approaches* (pp.239-272). New York, NY: Russell Sage Foundation.
- Edmunds, A., & Morris, A. (2000). The problem of information overload in business organizations: A review of the literature. *International Journal of Information Management*, 20, 17-28.
- Edwards, M., & Jabs, L. (2009). When safety culture backfires: Unintended consequences of half-shared governance in a high tech workplace. *Social Science Journal*, 46(4), 707-723.



- Edwards, J. R., & Lambert, L. S. (2007). Methods for integrating moderation and mediation: A general analytical framework using moderated path analysis. *Psychological Methods*, 12, 1-22.
- Edwards, J. R., & Rothbard, N. P. (1999). Work and family stress and well-being: An examination of person-environment fit in the work and family domains. *Organizational Behavior and Human Decision Processes*, 77, 85-129.
- Elgin, B. (2005). Managing Google's idea factory. *Business Week*, Accessed online on March 19, 2011 from [http://www.businessweek.com/print/magazine/content/05\\_40/b3953093.htm?chan=g](http://www.businessweek.com/print/magazine/content/05_40/b3953093.htm?chan=g).
- Elsbach, K. D., & Kramer, R. M. (2003). Assessing creativity in Hollywood pitch meetings: Evidence for a dual process model of creativity judgments. *Academy of Management Journal*, 46, 283-301.
- Erickson, B., Lind, A. A., Johnson, B. C., & O'Barr, W. M. (1978). Speech style and impression formation in a court setting: The effects of powerful and powerless speech. *Journal of Experimental Social Psychology*, 14, 266-279.
- Etzioni, A. (1961). *A comparative analysis of complex organizations*. New York, NY: Free Press.
- Farrell, D., & Rusbult, C. E. (1992). Exploring the exit, voice, loyalty, and neglect typology: The influence of job satisfaction, quality of alternatives, and investment size. *Employee Responsibilities and Rights Journal*, 5, 201-218.
- Fast Company. (2010). The world's most innovative companies. Accessed online on March 19, 2011 from <http://www.fastcompany.com/mic/2010>.
- Ferris, G. R., Bhawuk, D. P. S., Fedor, D. F., & Judge, T. A. (1995). Organizational politics and citizenship: Attributions of intentionality and construct definition. In M. J. Martinko (Ed.), *Advances in attribution theory: An organizational perspective* (pp. 231-252). Delray Beach, FL: St. Lucie Press.
- Fineman, S. (2006). On being positive: Concerns and counterpoints. *Academy of Management Review*, 31, 270-291.
- Fleishman, E. A. (1995). Consideration and structure: Another look at their role in leadership research. In F. Dansereau & F. J. Yammarino (Eds.), *Leadership: The multiple-level approaches* (pp. 51-60). Stamford, CT: JAI Press.
- Fleishman, E. A., & Harris, E. F. (1962). Patterns of leadership behavior related to employee grievances and turnover. *Personnel Psychology*, 15, 43-56.

- Ford, C. M. & Gioia, D. A. (2000). Factors influencing creativity in the domain of managerial decision making. *Journal of Management*, 26, 705-732.
- Fragale, A. R. (2006). The power of powerless speech: The effects of speech style and task interdependence on status conferral. *Organizational Behavior and Human Decision Processes*, 101(2), 243-261.
- Fredrickson, B. L. (2001). The role of positive emotions in positive psychology: The broaden-and-build theory of positive emotions. *American Psychologist*, 56, 218-226.
- Frohman, A. L. (1997). Igniting organizational change from below: The power of personal initiative. *Organizational Dynamics*, 25, 39-53.
- Fuller, B., Jr., & Marler, L. E. (2009). Change driven by nature: A meta-analytic review of the proactive personality literature. *Journal of Vocational Behavior*, 75, 329-345.
- Garlick, R. (2010). Managing in an era of mistrust: Maritz poll reveals employees lack trust in their workplace. Accessed online on January 14, 2011 from <http://www.pitchengine.com/maritz/managing-in-an-era-of-mistrust--maritz-poll-reveals-employees-lack-trust-in-their-workplace-/56905/>.
- Gates, B. (1999). *Business @ the Speed of Thought*. New York, NY: Warner Books.
- George, J. M. (2007). Creativity in organizations. *Academy of Management Annals*, 1, 439-477.
- George, J. M., & Zhou, J. (2001). When openness to experience and conscientiousness are related to creative behavior: An interactional approach. *Journal of Applied Psychology*, 86, 513-524.
- Germano, C. A. (1992). *The bottom line of quality*. Memphis, TN: Federal Express Corporation.
- Gerstner, C. R., & Day, D. V. (1997). Meta-analytic review of leader-member exchange theory: Correlates and construct issues. *Journal of Applied Psychology*, 82, 827-844.
- Giffin, K. (1967). The contribution of studies of source credibility to a theory of interpersonal trust in the communication process. *Psychological Bulletin*, 68(2), 104-120.
- Goldman, H. H. (2005). The origins and development of quality initiatives in American business. *The TQM Magazine*, 17(3), 217-215.
- Gouldner, A. W. (1960). The norm of reciprocity: A preliminary statement. *American Sociological Review*, 25(2), 161-178.

- Graen, G. B., & Uhl-Bien, M. (1995). Relationship-based approach to leadership: Development of leader-member exchange LMX theory of leadership over 25 years: Applying a multi-level multi-domain perspective. *Leadership Quarterly*, 6, 219-247.
- Grant, A. M., & Ashford, S. J. (2008). The dynamics of proactivity at work. *Research in Organizational Behavior*, 28, 3-34.
- Grant, A. M., Gino, F., & Hofmann, D. A., (In press). Reversing the extraverted leadership advantage: The role of employee proactivity. Forthcoming in the *Academy of Management Journal*.
- Grant, A. M., Parker, S., & Collins, C. (2009). Getting credit for proactive behavior: Supervisor reactions depend on what you value and how you feel. *Personnel Psychology*, 62(1), 31-55.
- Grant, A. M., & Schwartz, B. (2011). Too much of a good thing: The challenge and opportunity of the inverted U. *Perspectives on Psychological Science*, 6(1), 61-76.
- Grant, D., Hardy, C., Oswick, C., & Putnam, L. (2004). *The Sage handbook of organizational discourse*. London, England: Sage.
- Greguras, G. J., & Robie, C. (1998). A new look at within-source interrater reliability of 360-degree feedback ratings. *Journal of Applied Psychology*, 83, 960-968.
- Guilford, J. P. (1950). Creativity. *American Psychologist*, 5, 444-454.
- Hackman, R. J., & Wageman, R. (1995). Total Quality Management: Empirical, conceptual, and practical issues. *Administrative Science Quarterly*, 40(2), 309-342.
- Hardy, C., Palmer, I., & Phillips, N. (2000). Discourse as a strategic resource. *Human Relations*, 53(9), 1227-1248.
- Harkins, S. (1987). Social loafing and social facilitation. *Journal of Experimental and Social Psychology*, 23, 1-18.
- Harris, K. J., & Kacmar, K. M. (2006). Too much of a good thing: The curvilinear effect of leader-member exchange on stress. *Journal of Social Psychology*, 146, 65-84.
- Hayes, A. F., Glynn, C. J., & Shanahan, J. (2005). Willingness to self-censor: A construct and measurement tool for public opinion research. *International Journal of Public Opinion Research*, 17(3), 298-323.
- Hayes, A. F., Shanahan, J., & Glynn, C. F. (2001). Willingness to express one's opinion in a realistic situation as a function of perceived support for that opinion. *International Journal of Public Opinion Research*, 13(1), 45-58.

- Hayes, A., Scheufele, D., & Huges, M. (2006). Nonparticipation as Self-Censorship: Publicly Observable Political Activity in a Polarized Opinion Climate. *Political Behavior*, 28(3), 259-283.
- Hayes, A. F., Uldall, B. R. & Glynn, C. J. (2010). Validating the Willingness to Self-Censor Scale II: Inhibition of Opinion Expression in a Conversational Setting. *Communication Methods and Measures*, 4(3), 256-272.
- Heller, F., & Yukl, G. A. (1969). Participation, managerial decision-making, and situational variables. *Organizational Behavior and Human Performance*, 4, 227-241.
- Hennessey, B. A. & Amabile, T. M. (2010). Creativity. *Annual Review of Psychology*, 61, 569-598.
- Hirschman, A. O. (1970). *Exit, voice, and loyalty: Responses to decline in firms, organizations, and states*. Cambridge, MA: Harvard University Press.
- Hitt, M. A., Bierman, L., Bierman, L., Shimizu, K., & Kochhar, R. (2001). Direct and moderating effects of human capital on strategy and performance in professional service firms: A resource-based perspective. *Academy of Management Journal*, 44, 13-28.
- Hofmann, D. A., & Stetzer, A. (1996). A cross-level investigation of factors influencing unsafe behaviors and accidents. *Personnel Psychology*, 49(2), 307-339.
- Hofstede, G. (1980). *Culture's consequences: International differences in work-related values*. Newbury Park, CA: Sage.
- Hollander, E. P. (1958). Conformity, status, and idiosyncrasy credit. *Psychological Review*, 65, 117-127.
- House, R. J. (1971). A path goal theory of leader effectiveness. *Administrative Science Quarterly*, 16(3), 321-339.
- House, R. J., & Rizzo, J. R. (1972). Role conflict and ambiguity as critical variables in a model of organizational behavior. *Organizational Behavior and Human Performance*, 7, 467-505.
- Hovland, C. I., & Weiss, W. (1951). The influences of source credibility on communication effectiveness. *Public Opinion Quarterly*, 15, 635-650.
- Howard-Grenville, J. A. (2007). Developing issue-selling effectiveness over time: Issue selling as resourcing. *Organization Science*, 18(4), 560-577.

- Howell, J. M., & Hall-Merenda, K. E. (1999). The ties that bind: The impact of leader-member exchange, transformational and transactional leadership, and distance on predicting follower performance. *Journal of Applied Psychology*, 84, 680-694.
- James, L. R., Demaree, R. G., & Wolf, G. (1993). rWG: An assessment of within-group interrater agreement. *Journal of Applied Psychology*, 78, 306-309.
- Johns, G., & Saks, A. M. (2005). *Organizational behaviour: Understanding and managing life at work* (6<sup>th</sup> ed.). Toronto, Canada: Pearson Education Canada, Inc.
- Jones, G. R. (1986). Socialization tactics, self-efficacy, and newcomers' adjustments to organizations. *Academy of Management Journal*, 29, 262-279.
- Judge, T. A., & Piccolo, R. F. (2004). Transformational and transactional leadership: A meta-analytic test of their relative validity. *Journal of Applied Psychology*, 89(5), 755-768.
- Judge, T. A., Piccolo, R. F., & Ilies, R. (2004). The forgotten ones? The validity of consideration and initiating structure in leadership research. *Journal of Applied Psychology*, 89, 36-51.
- Kahai, S. S., Sosik, J. J., & Avolio, B. J. (2004). Effects of participative and directive leadership in electronic groups. *Group & Organization Management*, 29(1), 67-105.
- Kampylis, P. G., & Valtanen, J. (2010). Redefining creativity – Analyzing definitions, collocations, and consequences. *Journal of Creative Behavior*, 44, 191-214.
- Kang, S. C., Morris, S. S., & Snell, S. A. (2007). Relational archetypes, organizational learning, and value creation: Extending the human resource architecture. *Academy of Management Review*, 32, 236-256.
- Karau, S., & Williams, K. 1993. Social loafing: A meta-analytic review and theoretical integration. *Journal of Personality and Social Psychology*, 65, 681-706.
- Kashdan, T. B. (2007). Social anxiety spectrum and diminished positive experience: Theoretical synthesis and meta-analysis. *Clinical Psychology Review*, 27, 348-365.
- Kassing, J. W. (2000). Investigating the relationship between superior-subordinate relationship quality and employee dissent. *Communication Research Reports*, 17, 58-69.
- Kearns, D. T., & Nadler, D. A. (1992). *Prophets in the dark: How Xerox reinvented itself and beat back Japanese*. New York, NY: Harper Collins Publishers.
- Kelley, T., & Littman, J. (2001). *The art of innovation: Lessons in creativity from IDEO, America's leading design firm*. New York, NY: Currency Books.

- Kenny, D. A., Kashy, D. A., & Bolger, N. (1998). Data analysis in social psychology. In D. Gilbert, S. Fiske, & G. Lindzey (Eds.), *The handbook of social psychology* (Vol. 1, 4<sup>th</sup> ed., pp. 233-265). Boston, MA: McGraw-Hill.
- Keppel, G. (1982). *Design and analysis: A researcher's handbook*. Englewood Cliffs, NJ: Prentice Hall.
- Kilgour, M., & Koslow, S. (2009). Why and how do creative thinking techniques work?: Trading off originality and appropriateness to make more creative advertising. *Journal of the Academy of Marketing Science*, 37, 298-309.
- Kipnis, D., Schmidt, S. M., & Wilkinson, I. (1980). Intraorganizational influence tactics: Explorations in getting one's way. *Journal of Applied Psychology*, 65, 440-452.
- Kirkman, B. L., & Rosen, B. (1997). A model of work team empowerment. In R. W. Woodman & W. A. Pasmore (Eds.), *Research in organizational change and development* (Vol. 10, pp. 131-167). Greenwich, CT: JAI Press.
- Kirkman, B. L., & Rosen, B. (1999). Beyond self-management: Antecedents and consequences of team empowerment. *Academy of Management Journal*, 42, 58-74.
- Kirkpatrick, S. & Locke, E. (1996). Direct and indirect effects of three core charismatic leadership components on performance and attitudes. *Journal of Applied Psychology*, 81, 36-51.
- Kish-Gephart, J. J., Detert, J. R., Treviño, L. K., & Edmondson, A. C. (2009). Silenced by fear: The nature, sources, and consequences of fear at work. *Research in Organizational Behavior*, 29, 163-193.
- Klein, K. J., Ziegert, J. C., Knight, A. P., & Xiao, Y. (2006). Dynamic delegation: Shared, hierarchical, deindividualized leadership in extreme action teams. *Administrative Science Quarterly*, 51, 590-621.
- Knight, D., Durham, C. & Locke, E. (2001). The relationship of team goals, incentives and efficacy to strategic risk, tactical implementation and performance. *Academy of Management Journal*, 44, 326-338.
- Kohut, A. (2010). The people and their government: Distrust, discontent, anger and partisan rancor. Accessed online on January 14, 2011 from <http://people-press.org/reports/pdf/606.pdf>.
- Korsgaard, M. A., & Roberson, L. (1995). Procedural justice in performance evaluation: The role of instrumental and non-instrumental voice in performance appraisal discussion. *Journal of Management*, 21, 657-669.

- Koska, M. T. (1990). High-quality care and hospital profits: Is there a link? *Hospitals*, 64, 62-63.
- Latané, B., Williams, K., & Harkins, S. (1979). Many hands make light work: The causes and consequences of social loafing. *Journal of Personality and Social Psychology*, 37, 822-832.
- Leary, M. R. (1983). A brief version of the Fear of Negative Evaluation Scale. *Personality and Social Psychology Bulletin*, 9, 371-375.
- LePine, J.A., & Van Dyne, L. (2001). Voice and cooperative behavior as contrasting forms of contextual performance: Evidence of differential relationships with big five personality characteristics and cognitive ability. *Journal of Applied Psychology*, 86, 326-336.
- Levinson, H. (1965). Reciprocation: The relationship between man and organization. *Administrative Science Quarterly*, 9, 370-390.
- Liao, H., & Chuang, A. C. (2007). Transforming service employees and climate: A multilevel, multisource examination of transformational leadership in building long-term service relationships. *Journal of Applied Psychology*, 92, 1006-1019.
- Litchfield, R. (2008). Brainstorming reconsidered: A goal-based view. *Academy of Management Review*, 33, 649-668.
- Liu, W., Zhu, R., & Yang, Y. (2010). I warn you because I like you: Voice behavior, employee identifications, and transformational leadership. *Leadership Quarterly*, 21(1), 189-202.
- Locke, E. A., & Latham, G. P. (2002). Building a practically useful theory of goal setting and task motivation: A 35-year odyssey. *American Psychologist*, 57, 705-717.
- Locke, E. A., Shaw, K. N., Saari, L. M., & Latham, G. P. (1981). Goal setting and task performance: 1969-1980. *Psychological Bulletin*, 90, 125-152.
- Lockwood, N. R. (2007). Leveraging employee engagement for a competitive advantage. *2007 SHRM Research Quarterly*, 52(3), 1-12.
- Lowe, K. B., & Gardner, W. L. (2000). Ten years of the Leadership Quarterly: Contributions and challenges for the future. *Leadership Quarterly*, 11, 459-514.
- Loyd, D. L., Phillips, K. W., Whitson, J., & Thomas-Hunt, M. C. (2010). Expertise in your midst: How congruence between status and speech style affects reactions to unique knowledge. *Group Processes and Intergroup Relations*, 13(3), 379-395.

- Lyons, T. F. (1971). Role clarity, need for clarity, satisfaction, tension, and withdrawal. *Organizational Behavior and Human Performance*, 6(1), 99-110.
- MacKinnon, D. P., Lockwood, C. M., Hoffman, J. M., West, S. G., & Sheets, V. (2002). A comparison of methods to test mediation and other intervening variable effects. *Psychological Methods*, 7, 83-104.
- March, J. G., & Simon, H. A. (1958). *Organizations*. New York, NY: Wiley.
- Mathieu, J. E., & Taylor, S. R. (2006). Clarifying conditions and decision points for meditational type inferences in Organizational Behavior. *Journal of Organizational Behavior*, 27, 1031-1056.
- McFarlin, D. B., & Sweeney, P. D. (1996). Does having a say matter only if you get your way? Instrumental and value-expressive effects of employee voice. *Basic Applied Social Psychology*, 16, 289-303.
- McGregor, D. (1960). *The human side of enterprise*. New York, NY: McGraw-Hill.
- McGuire, W. J. (1997). Creative hypothesis generating in psychology: Some useful heuristics. *Annual Review of Psychology*, 48, 1-30.
- McInerney, F., & White, S. (1995). *The total quality corporation: How 10 major companies turned quality and environmental challenges to competitive advantage in the 1990s*. New York, NY: Truman Talley Books/Dutton.
- McNatt, D. B., & Judge, T. A. (2004). Boundary conditions of the Galatea effect: A field experiment and constructive replication. *Academy of Management Journal*, 47, 550-565.
- McNeely, B. L., & Meglino, B. M. (1994). The role of dispositional and situational antecedents in prosocial organizational behavior: An examination of the intended beneficiaries of prosocial behavior. *Journal of Applied Psychology*, 79, 836-844.
- Meyerson, D. E., & Scully, M. A. (1995). Tempered radicalism and the politics of ambivalence and change. *Organization Science*, 6, 585-600.
- Miceli, M. P., Near, J. P., & Dworkin, T. M. (2008). *Whistle-blowing in Organizations*. New York, NY: Routledge.
- Miller, K. I., & Monge, P. R. (1986). Participation, satisfaction, and productivity: A meta-analytic review. *Academy of Management Journal*, 29(4), 727-753.
- Milliken, F. J., Morrison, E. W., & Hewlin, P. F. (2003). An exploratory study of employee silence: Issues that employees don't communicate upward and why. *Journal of Management Studies*, 40(6), 1453-1473.



- Mintzberg, H., Raisinghani, H., & Théorét, A. (1976). The structure of unstructured decision processes. *Administrative Science Quarterly*, 21, 246-275.
- Molinsky, A., & Margolis, J. (2005). Necessary evils and interpersonal sensitivity in organizations. *Academy of Management Review*, 30, 245-268.
- Morgeson, F. P., DeRue, D. S., & Karam, E. P. (2010). Leadership in teams: A functional approach to understanding leadership structures and processes. *Journal of Management*, 36, 5-39.
- Morrison, E. W. (2006). Doing the job well: An investigation of pro-social rule breaking. *Journal of Management*, 32(1), 5-28.
- Morrison, E. W., & Milliken, F. J. (2000). Organizational silence: A barrier to change and development in a pluralistic world. *Academy of Management Review*, 25(4), 706-725.
- Morrison, E. W., & Phelps, C. C. (1999). Taking charge at work: Extrarole efforts to initiate workplace change. *Academy of Management Journal*, 42, 403-419.
- Morrison, E., Wheeler-Smith, S. L., & Kamdar, D. (2011). Speaking up in groups: A cross-level study of group voice climate and voice. *Journal of Applied Psychology*, 96(1), 183-191.
- Mumford, M. D., & Gustafson, S. B. (1988). Creativity syndrome: Integration, application and innovation. *Psychological Bulletin*, 103, 27-43.
- Nembhard, I. M., & Edmondson, A. C. (2006). Making it safe: The effects of leader inclusiveness and professional status on psychological safety and improvement efforts in health care teams. *Journal of Organizational Behavior*, 27, 941-966.
- Nikolaou, I., Vakola, M., & Bourantas, D. (2008). Who speaks up at work? Dispositional influences on employees' voice behavior. *Personnel Review*, 37(6), 666-679.
- Oldham, G. R., & Cummings, A. 1996. Employee creativity: Personal and contextual factors at work. *Academy of Management Journal*, 39, 607-634.
- O'Reilly, C. (1980). Individuals and information overload in organizations: Is more necessarily better? *Academy of Management Journal*, 23, 684-696.
- Osborn, A. F. (1953). *Applied imagination: Principles and procedures of creative thinking*. New York, NY: Scribner.
- O'Toole, J., & Lawler, E.D.I. (2006). *The new American workplace*. New York, NY: Palgrave Macmillan.

- Padilla, A., Hogan, R., & Kaiser, R. B. (2007). The toxic triangle: Destructive leaders, vulnerable followers, and conducive environments. *Leadership Quarterly*, 18, 176-194.
- Paletz, S. B. F., & Peng, K. (2008). Implicit theories of creativity across cultures: Novelty and appropriateness in two product domains. *Journal of Cross-Cultural Psychology*, 39, 286-302.
- Patall, E.A., Cooper, H., & Robinson, J.C. (2008). The effects of choice on intrinsic motivation and related outcomes: A meta-analysis of research findings. *Psychological Bulletin*, 134, 270-300.
- Paulus, P. B., & Yang, H. (2000). Idea generation in groups: A basis for creativity in organizations. *Organizational Behavior and Human Decision Processes*, 82(1), 76-87.
- Pearce, C. L., & Conger, J. A. (2003). *Shared leadership: Reframing the hows and whys of leadership*. Thousand Oaks, CA: Sage.
- Pearce, C. L., & Sims, H. P. (2002). Vertical versus shared leadership as predictors of the effectiveness of change management teams: An examination of aversive, directive, transactional, transformational, and empowering leader behaviors. *Group Dynamics, Theory, Research, and Practice*, 6(2), 172-197.
- Peterson, R. S. (1999). Can you have too much of a good thing? The limits of voice for improving satisfaction with leaders. *Personality and Social Psychology Bulletin*, 25(3), 313-324.
- Pfeffer, J. (1998). *The human equation: Building profits by putting people first*. Boston, MA: Harvard Business School Press.
- Plucker, J. A. (2004). Generalization of creativity across domains: Examination of the method effect hypothesis. *Journal of Creative Behavior*, 38, 1-12.
- Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88, 879-903.
- Podsakoff, P. M., MacKenzie, S. B., Moorman, R. H., & Fetter, R. (1990). Transformational leader behaviors and their effects on followers' trust in leader, satisfaction, and organizational citizenship behavior. *Leadership Quarterly*, 1, 107-142.
- Powell, T. C. (1995). Total quality management as competitive advantage: A review and empirical study. *Strategic Management Journal*, 16, 15-37.

- Powell, W. W., & Snellman, K. (2004). The knowledge economy. *Annual Review of Sociology*, 30, 199-220.
- Preacher, K. J., & Hayes, A. F. (2004). SPSS and SAS procedures for estimating indirect effects in simple mediation models. *Behavior Research Methods, Instruments, & Computers*, 36, 717-731.
- Premeaux, S., & Bedeian, A. G. (2003). Breaking the silence: The moderating effects of self-monitoring in predicting speaking up in the workplace. *Journal of Management Studies*, 40(6), 1537-1562.
- Ramlall, S. (2004). A review of employee motivation theories and their implications for employee retention within organizations. *Journal of American Academy of Business*, 5, 52-63.
- Reichers, A. E., Wanous, J. P., & Austin, J. T. (1997). Understanding and managing cynicism about organizational change. *Academy of Management Executive*, 11(1), 48-59.
- Robert Half International, Inc. (2009). Hold the meetings – they’re a waste of time. Ref. PR-01819. Accessed online on April 24, 2010 from [http://www.roberthalf.co.nz/EMEA/New%20Zealand/Press%20Releases/2009%20Press%20Releases/260509\\_Hold\\_the\\_meetings.pdf](http://www.roberthalf.co.nz/EMEA/New%20Zealand/Press%20Releases/2009%20Press%20Releases/260509_Hold_the_meetings.pdf).
- Roberto, M. (2002). Lessons from Everest: The interaction of cognitive bias, psychological safety, and system complexity. *California Management Review*, 45(1), 136-158.
- Robison, J. (2010). Despite the downturn, employees remain engaged. *Gallup Management Journal*. Accessed online on February 4, 2010 from <http://gmj.gallup.com/content/125036/Despite-Downturn-Employees-Remain-Engaged.aspx>.
- Rogelberg, S. G., Leach, D. J., Warr, P. B., & Burnfield, J. L. (2006). “Not another meeting! Are meeting time demands related to employee well-being? *Journal of Applied Psychology*, 91(1), 83-96.
- Rogelberg, S. G. & Stanton, J. (2007). Understanding and dealing with organizational survey nonresponse. *Organizational Research Methods*, 10, 195-209.
- Rusbult, C. E., Farrell, D., Rogers, G., & Mainous, A. G., III. (1988). Impact of exchange variables on exit, voice, loyalty, and neglect: An integrative model of responses to declining job satisfaction. *Academy of Management Journal*, 31, 599-627.
- Ryan, K. D., & Oestreich, D. K. (1998). *Driving fear out of the workplace: Creating the high-trust, high-performance organization*. San Francisco, CA: Jossey-Bass.

- Saks, A. M. (2006). Antecedents and consequences of employee engagement. *Journal of Managerial Psychology*, 21, 600-619.
- Savitz, A.W. (2006). *The triple bottom line*. San Francisco, CA: Jossey-Bass.
- Schaubroeck, J., Lam, S. S. K., & Cha, S. E. (2007). Embracing transformational leadership: Team values and the impact of leader behavior on team performance. *Journal of Applied Psychology*, 92, 1020-1030.
- Scheibehenne, B., Greifeneder, R., & Todd, P. M. (2010). Can there ever be too many options? A meta-analytic review of choice overload. *Journal of Consumer Research*, 37, 409-425.
- Seibert, S. E., Kraimer, M. L., & Crant, J. M. (2001). What do proactive people do? A longitudinal model linking proactive personality and career success. *Personnel Psychology*, 54, 845-873.
- Settoon, R., Bennett, N., & Liden, R. (1996). Social exchange in organizations: Perceived organizational support, leader-member exchange, and employee reciprocity. *Journal of Applied Psychology*, 81(3), 219-227.
- Shah, A.M., & Wolford, G. (2007). Buying behavior as a function of parametric variation of number of choices. *Psychological Science*, 18, 369-370.
- Shalley, C. E. (1991). Effects of productivity goals, creativity goals, and personal discretion on individual creativity. *Journal of Applied Psychology*, 76, 179-185.
- Shamir, B., House, R. J., & Arthur, M. B. (1993). The motivational effects of charismatic leadership: A self-concept based theory. *Organization Science*, 4(4), 577-594.
- Shapiro, R. J. (1968). Creative research scientists. *Psychologia Africana*, Supplement No. 4.
- Shortell, S. M., Rousseau, D. M., Gillies, R. R., Devers, K. J., & Simons, T. L. (1991). Organizational assessment in intensive care units (ICUs): Construct development, reliability, and validity of the ICU nurse-physician questionnaire. *Medical Care*, 29, 709-726.
- Shrout, P. E., & Bolger, N. (2002). Mediation in experimental and nonexperimental studies: New procedures and recommendations. *Psychological Methods*, 7, 422-445.
- Simsek, Z., & Veiga, J. F. (2001). A primer on internet organizational surveys. *Organizational Research Methods*, 4(3), 218-235.
- Singer, E., Von Thurn, D. R., & Miller, E. R. (1995). Confidentiality assurances and responses: A quantitative review of the experimental literature. *Public Opinion Quarterly*, 59, 66-77.

- Singh, J., & Wilkes, R. E. (1996). When consumers complain: A path analysis of the key antecedents of consumer complaint response estimates. *Journal of the Academy of Marketing Science*, 24(4), 350-365.
- Snyder, M. (1974). The self-monitoring of expressive behavior. *Journal of Personality and Social Psychology*, 30, 526-537.
- Snyder, M., & Gangestad, S. (1986). On the nature of self-monitoring: Matters of assessment, matters of validity. *Journal of Personality and Social Psychology*, 51, 125-139.
- Sonenshein, S. (2006). Crafting social issues at work. *Academy of Management Journal*, 49, 1158-1172.
- Sprague, J., & Rudd, G. L. (1988). Boat-rocking in the high-technology culture. *American Behavioral Scientist*, 32, 169-193.
- Srivastava, A., Bartol, K., & Locke, E. A. (2006). Empowering leadership in management teams: Effects on knowledge sharing, efficacy, and performance. *Academy of Management Journal*, 49(6), 1239-1251.
- Staw, B. M., Sandelands, L. E., & Dutton, J. E. (1981). Threat-rigidity effects in organizational behavior: A multilevel analysis. *Administrative Science Quarterly*, 26, 501-524.
- Stine, R. (1989). An introduction to bootstrap methods: Examples and ideas. *Sociological Methods and Research*, 18, 243-291.
- Strauss, G. (1963). Some notes on power equalization. In H. Levitt (Ed.), *The social science of organizations* (pp.40-84). Englewood Cliffs, NJ: Prentice-Hall.
- Strauss, G. (1977). Managerial practices. In J. R. Hackman & J. L. Suttle (Eds.), *Improving life at work: Behavioral science approaches to organizational change*. Santa Monica, CA: Goodyear Publishing.
- Streibel, B. J. (2003). *The manager's guide to effective meetings*. New York, NY: McGraw-Hill.
- Tangirala, S., & Ramanujam, R. (2008a). Employee silence on critical work issues: The cross-level effects of procedural justice climate. *Personal Psychology*, 61, 37-68.
- Tangirala, S., & Ramanujam, R. (2008b). Exploring nonlinearity in employee voice: The effects of personal control and organizational identification. *Academy of Management Journal*, 51, 1189-1203.

- Tannenbaum, R., & Schmidt, W. H. (1958). How to choose a leadership pattern. *Harvard Business Review*, 36, 95-101.
- Taylor, S. E., & Fiske, S. T. (1978). Salience, attention, and attribution: Top of the head phenomena. In L. Berkowitz (Ed.), *Advances in experimental social psychology* (Vol. 11, pp. 249-288). San Diego, CA: Academic Press.
- Terwiesch, C., & Ulrich, K. T. (2009). *Innovation tournaments: Creating and selecting exceptional opportunities*. Boston, MA: HBS Press.
- Tetlock, P. E. (1983). Accountability and the complexity of thought. *Journal of Personality and Social Psychology*, 45, 74-83.
- Tiedens, L. Z., & Fragale, A. R. (2003). Power moves: Complementarity in dominant and submissive nonverbal behavior. *Journal of Personality and Social Psychology*, 84(3), 558-568.
- Thomas, J. P., Whitman, D. S., & Viswesvaran, C. (2010). Employee proactivity in organizations: A comparative meta-analysis of emergent proactive constructs. *Journal of Occupational and Organizational Psychology*, 83(2), 275-300
- Tobia, P. M., & Becker, M. C. (1990). Making the most of meeting time. *Training and Development Journal*, 44, 34-38.
- Todorov, A., Chaiken, S., & Henderson, M. (2002). The heuristic systematic model of social information processing. In J. Dillard & M. Pfau (Eds.), *The persuasion handbook* (pp. 195-211). Thousand Oaks, CA: Sage.
- Tucker, A. L., & Singer, S. J. (2009). Going through the motions: An empirical test of management involvement in process improvement. *Harvard Business Review Working Paper*, No. 10-047.
- Turban, D. B., & Cable, D. M. (2003). Firm reputation and applicant pool characteristics. *Journal of Organizational Behavior*, 24(6), 733-751.
- Turnley, W. H., & Feldman, D. C. (1999). The impact of psychological contract violations on exit, voice, loyalty, and neglect. *Human Relations*, 52, 895-922.
- Tushman, M. L., & O'Reilly, C. A. (2002). *Winning Through Innovation*. Boston, MA: HBS Press.
- Twenge, J. M. (2006). *Generation Me: Why today's young Americans are more confident, assertive, entitled – and more miserable than ever before*. New York, NY: Free Press Simon and Schuster.

- Twenge, J. M., Campbell, S. M., Hoffman, B. J., & Lance, C. E. (2010). Generational differences in work values: Leisure and extrinsic values increasing, social and intrinsic values decreasing. *Journal of Management*, 36(5), 1117-1142.
- Uhl-Bien, M., Marion, R., & McKelvey, B. (2007). Complexity leadership theory: Shifting leadership from the Industrial Age to the knowledge era. *Leadership Quarterly*, 18, 298-318.
- Vancouver, J. B., & Kendall, L. N. (2006). When self-efficacy negatively relates to motivation and performance in a learning context. *Journal of Applied Psychology*, 91, 1146-1153.
- Van Dyne, L., Ang, S., & Botero, I. C. (2003). Conceptualizing employee silence and employee voice as multidimensional constructs. *Journal of Management Studies*, 40(6), 1359-1392.
- Van Dyne, L., Cummings, L.L., & McLean Parks, J. (1995). Extra-role behaviors: In pursuit of construct and definitional clarity. In L. L. Cummings & B. M. Staw (Eds.), *Research in Organizational Behavior*, 17, 215-285. Greenwich, CT: JAI Press.
- Van Dyne, L., & LePine, J. A. (1998). Helping and voice extra-role behaviors: Evidence of construct and predictive validity. *Academy of Management Journal*, 47(1), 108-119.
- Van Eerde, W., & Thierry, H., (1996). Vroom's expectancy models and work-related criteria: A meta-analysis. *Journal of Applied Psychology*, 81, 575-586.
- Vecchio, R. P., Justin, J. E., & Pearce, C. L. (2010). Empowering leadership: An examination of mediating mechanisms within a hierarchical structure. *Leadership Quarterly*, 21(3), 530-542.
- Vogelgesang, G. (2008). How leader interactional transparency can impact follower psychological safety and role engagement. *Dissertation Abstracts International Section A*, 68, 5137. Retrieved from PsycINFO database.
- Vroom, V. H. (1964). *Work and motivation*. New York, NY: Wiley.
- Vroom, V. H., & Yetton, P. (1973). *Leadership and Decision Making*. Pittsburgh, PA: University of Pittsburgh Press.
- Wagner, J. A., & Gooding, R. Z. (1987a). Effects of societal trends on participation research. *Administrative Science Quarterly*, 32, 241-262.
- Wagner, J. A., & Gooding, R. Z. (1987b). Shared influence and organizational behavior: A meta-analysis of situational variables expected to moderate participation-outcome relationships. *Academy of Management Journal*, 30, 524-541.

- Walumbwa, F. O., Avolio, B. J., & Zhu, W. (2008). How transformational leadership weaves its influence on individual job performance: The role of identification and efficacy beliefs. *Personnel Psychology*, 61, 793-825.
- Walumbwa, F. O., & Schaubroeck, J. (2009). Leader personality traits and employee voice behavior: Mediating roles of ethical leadership and work group psychological safety. *Journal of Applied Psychology*, 94(5), 1275-1286.
- Wang, H., Law, K. S., Hackett, R. D., Wang, D. X., Chen, Z. X. (2005). Leader-member exchange as a mediator of the relationship between transformational leadership and followers' performance and organizational citizenship behavior. *Academy of Management Journal*, 48, 420-432.
- Wanous, J. P., Reichers, A. E., & Austin, J. T. (2000). Cynicism about organizational change: Measurement, antecedents and correlates. *Group and Organization Management*, 25, 132-153.
- Wayne, S. J., Shore, L. M., & Liden, R. C. 1997. Perceived organizational support and leader-member exchange: A social exchange perspective. *Academy of Management Journal*, 40, 82-111.
- West, M. A. (1990). The social psychology of innovation in groups. In M. A. West & J. L. Farr (Eds.), *Innovation and Creativity at Work: Psychological and Organizational Strategies*, (pp.4-36). Oxford, England: John Wiley & Sons.
- Whitchurch, E. R., Wilson, T. D., & Gilbert, D. T. (2011). "He loves me, he loves me not...": Uncertainty can increase romantic attraction. *Psychological Science*, 22(2), 172-175.
- Withey, M. J., & Cooper, W. H. (1989). Predicting exit, voice, loyalty and neglect. *Administrative Science Quarterly*, 34, 521-539.
- Yerkes, R. M., & Dodson, J. D. (1908). The relation of strength of stimulus to rapidity of habit formation. *Journal of Comparative Neurology and Psychology*, 18(5), 459-482.
- Yong, J., & Wilkinson, A. (2001). Rethinking total quality management. *Total Quality Management*, 12(2), 247-258.
- Yukl, G. A. (1994). *Leadership in organizations* (3<sup>rd</sup> ed.). Englewood Cliffs, NJ: Prentice Hall.
- Yukl, G. & Falbe, C. M. (1990). Influence tactics and objectives in upward, downward, and lateral influence attempts. *Journal of Applied Psychology*, 75, 132-140.
- Yukl, G., Falbe, C. M., & Youn, J. Y. (1993). Patterns of influence behavior for managers. *Group and Organization Management*, 18, 5-28.



- Yukl, G. A., Gordon, A., & Taber, T. (2002). A hierarchical taxonomy of leadership behavior: Integrating a half century of behavior research. *Journal of Leadership and Organizational Studies*, 9, 15-32.
- Yukl, G., & Tracey, B. (1992). Consequences of influence tactics used with subordinates, peers, and the boss. *Journal of Applied Psychology*, 77, 525-535.
- Zhang, X., & Bartol, K. M. (2010). Linking empowering leadership and employee creativity: The influence of psychological empowerment, intrinsic motivation, and creative process engagement. *Academy of Management Journal*, 53(1), 107-128.
- Zhou, J. (2003). When the presence of creative coworkers is related to creativity: Role of supervisor close monitoring, developmental feedback, and creative personality. *Journal of Applied Psychology*, 88, 413-422.
- Zhou, J., & George, J. M. (2001). When job dissatisfaction leads to creativity: Encouraging the expression of voice. *Academy of Management Journal*, 44, 682-696.
- Zhou, J., & Shalley, C. E. (2008). *Handbook of organizational creativity*. New York, NY: Taylor and Francis Group.