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REMEMBER THE FOLLOWERS: A LOOK AT HOW FOLLOWER TRAITS INFLUENCE THE OUTCOMES OF HUMBLE LEADERSHIP BEHAVIORS

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REMEMBER THE FOLLOWERS: A LOOK AT HOW FOLLOWER TRAITS INFLUENCE THE OUTCOMES OF HUMBLE LEADERSHIP BEHAVIORS

A DISSERTATION APPROVED FOR THE
MICHAEL F. PRICE COLLEGE OF BUSINESS

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To my family

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Table of Contents

Acknowledgments iii

Table of Contents iv

List of Tables vi

List of Figures ix

Abstract x

CHAPTER 1: REVIEW OF THE LITERATURE 1

Definition 2

Measurement 9

Nomological Network 13

Antecedents 19

Moderators 21

Outcomes 25

General Discussion of the Literature 31

CHAPTER 2: HYPOTHESIS DEVELOPMENT 32

Follower Traits 35

Leader Experience 50

Three-Way Interactions 51

CHAPTER 3: STUDY DESIGN 54

CHAPTER 4: RESULTS 64

CHAPTER 5: DISCUSSION AND CONCLUSIONS 94

References 105

Appendix A – Recruiting Advertisement Script 113

Appendix B – Humble Leadership Manipulation Summary 114

Appendix C – Items for Study Variables 117

Appendix D – Pilot Study Humble Condition 125

Appendix E – Pilot Study Non-Humble Condition 132

Appendix F – Pre-Survey Study 138

Appendix G – Post-Survey Study 153

Appendix H – First Task 160

Appendix H – Second Task 161

List of Tables

Table 1. Dimensions of Humility.....5

Table 2. Measures of Humility 10

Table 3. The Nomological Networks of Humility 15

Table 4. Moderators of Humble Leadership 26

Table 5. Outcomes of Humble Leadership 27

Table 6. Experimental Conditions 54

Table 7. Pilot-study Means, Standard Deviations, Correlations, & Reliabilities 56

Table 8. Pilot-study t-tests 56

Table 9. Proposed Budget 62

Table 10. Actual Budget 62

Table 11. Means, Standard Deviations, and Reliabilities for All Variables 65

Table 12. Humble Leadership x Follower Proactivity 69

Table 13. Indirect Effects of Humble Leadership x Follow Proactivity onto Leader Satisfaction through Empowerment.....71

Table 14. Indirect Effects of Humble Leadership x Follow Proactivity onto Follower Task Performance through Empowerment 71

Table 15. Humble Leadership x Follower Cognitive Ability 72

Table 16. Indirect Effects of Humble Leadership x Follow Cognitive Ability onto Leader Satisfaction through Empowerment.....73

Table 17. Indirect Effects of Humble Leadership x Follow Cognitive Ability onto Follower Task Performance through Empowerment.....73

Table 18. Humble Leadership x Follower LGO 74

Table 19. Indirect Effects of Humble Leadership x Follow LGO onto Leader Satisfaction through PS Fit 75
Table 20. Indirect Effects of Humble Leadership x Follow LGO onto Follower Task Performance through PS Fit.....75
Table 21. Humble Leadership x Follower Openness.....76
Table 22. Indirect Effects of Humble Leadership x Follow Openness onto Leader Satisfaction through PS Fit 77
Table 23. Indirect Effects of Humble Leadership x Follow Openness onto Follower Task Performance through PS Fit.....77
Table 24. Humble Leadership x Follower Agreeableness 78
Table 25. Indirect Effects of Humble Leadership x Follow Agreeableness onto Leader Satisfaction through PS Fit 79
Table 26. Indirect Effects of Humble Leadership x Follow Agreeableness onto Follower Task Performance through PS Fit.....79
Table 27. Humble Leadership x Leader Experience.....80
Table 28. Humble Leadership x Leader Experience x Follower Proactivity.....81
Table 29. Effect of Proactive Personality on Leader Satisfaction by Condition 82
Table 30. Effect of Proactive Personality on Follower Task Perf. by Condition 82
Table 31. Humble Leadership x Leader Experience x Follower Cognitive Ability 84
Table 32. Effect of Cognitive Ability on Leader Satisfaction by Condition 84
Table 33. Effect of Cognitive Ability on Follower Task Performance by Condition.....85
Table 34. Humble Leadership x Leader Experience x Follower LGO 87
Table 35. Effect of Follower LGO on Leader Satisfaction by Condition.....87

Table 36. Effect of Follower LGO on Follower Task Performance by Condition 87

Table 37. Humble Leadership x Leader Experience x Follower Openness.....88

Table 38. Effect of Follower Openness on Leader Satisfaction by Condition 89

Table 39. Effect of Follower Openness on Follower Task Performance by Condition..89

Table 40. Humble Leadership x Leader Experience x Follower Agreeableness.....90

Table 41. Effect of Follower Agreeableness on Leader Satisfaction by Condition.....91

Table 42. Effect of Follower Agreeableness on Task Perf. by Condition 91

Table 43. Summary of Significant Findings 92

List of Figures

Figure 1. Overview of Humble Leadership 3

Figure 2. How follower traits affect humble leadership outcomes 36

Figure 3. The Interaction between Leader Humility and Follower Proactive Personality on Leader Satisfaction.....70

Figure 4. The Interaction between Humble Leadership and Leader Experience on Follower Task Performance.....81

Figure 5. The Three-way Interaction between Humble Leadership, Leader Experience, and Proactive Personality.....83

Figure 6. The Three-way Interaction between Humble Leadership, Leader Experience, and Follower Cognitive Ability 85

Figure 7. The Three-way Interaction between Humble Leadership, Leader Experience, and Follower Cognitive Ability 88

ABSTRACT

Leadership styles and leader behaviors are some of the most studied topics in the management literature. Recently, the study of humble leadership has been gaining interest and popularity. Humble leadership has been shown to increase follower retention, job satisfaction, and performance. Although there has been prior research using leader and situational variables as moderators, there is little research on how follower traits might moderate the relationship between humble leadership and follower and organizational outcomes. It is important to understand how followers might react differently to humble leaders.

This dissertation primarily looks at how follower traits influence the effectiveness of humble leadership. I designed a 2x2 lab experiment in which a confederate, acting as the session leader, manipulated his behavior to display a humble leadership style in half of the conditions. I found that proactive employees respond better to humble leadership and that this conditional effect between humble leadership and leader satisfaction is mediated by empowerment. I also found that followers have lower task performance when their leader is both inexperienced and displays humble leadership behaviors. Finally, I discovered three-way interactions between humble leadership, leader experience level, and follower characteristics.

In the first chapter, I begin with a review of the humble leadership literature. In the second chapter of my dissertation, I develop a model and my hypotheses. The third chapter includes the analyses of my lab study. The fourth and final chapter of my dissertation will be a discussion of what I have learned. Here, I will describe how my research has contributed to the leadership literature generally and the humble leadership

literature specifically. Finally, I will discuss how my study has opened up avenues for future research and suggest specific future studies that future scholars can do in order to continue to move this important research stream forward.

CHAPTER 1: LITERATURE REVIEW

Recent news has been full of stories about leaders who are arrogant, overconfident, and narcissistic. These leaders have been at the forefront of acquisition mistakes, cover-ups, and accounting scandals. They often ignore feedback from others and show a lack of empathy (Maccoby, 2004). Because of these adverse effects, the idea of humble leadership has been gaining interest and popularity. Humble leadership involves a willingness to view oneself accurately, and appreciation of others' strengths and contributions, and modeling teachability (Owens, Johnson, & Mitchell, 2013; Owens & Hekman, 2016). Humble leadership has been shown to have many positive effects on followers, such as more job satisfaction (e.g., Owens, Johnson, & Mitchell, 2013) and higher feelings of empowerment among subordinates (e.g., Ou, Tsui, Kinicki, Waldman, Xiao, & Song, 2014). Humble leadership has also been shown to positively affect employee retention (e.g., Owens et al., 2013), employee job performance (e.g., Owens, Wallace, & Waldman, 2015), and team performance (e.g., Rego et al., 2017; Owens & Hekman, 2016).

Because the humble leadership literature has grown quickly in recent years (Frostenson, 2015; Owen & Hekman, 2016), it is important to review what is known about humble leadership. Therefore, I will structure this literature review by examining the definition of humble leadership, how it is measured, and compare it to some similar constructs. I will also review what previous research has found regarding the antecedents, moderators, and outcomes of humble leadership. I start by examining the definition of humility and humble leadership. There have been some dissimilarities in how humility has been defined in the past (Tangney, 2000). These differences can have important

implications because if different scholars use various definitions, it is difficult to come to a consensus on what humble leadership is and how it affects organizations. These differences have the potential to slow down the progress of the humble leadership literature (Davis, Worthington, & Hook, 2010; Krumrei-Mancuso & Rouse, 2016). Therefore, in this section, I show the similarities and differences among humble leadership definitions and then use these previous definitions to propose a useful definition for future scholars to use when studying humble leadership. I then examine the different ways prior researchers have measured humility. After reviewing the measurement of humble leadership, I also illustrate the nomological network of humble leadership. Next, I review the antecedents of humble leadership, moderators that affect the effectiveness of humble leadership, and the outcomes of humble leadership that have been previously studied. An overview of the antecedents, moderators, and outcomes of humble leadership is shown below in Figure 1.

Definition of Humble Leadership

Although humility is a familiar concept with deep, philosophical roots, organizational scholars have struggled with a consistent and precise definition. As mentioned above, humility has been considered to be a trait (e.g., Lee & Ashton, 2004), an orientation (e.g., Morris et al., 2005), and a meta-attitude (e.g., Greenberg, 2005) by different scholars (Owens et al., 2011). Some researchers have focused on the behaviors of humble leadership (e.g., Owens & Hekman, 2012; Ashton & Lee, 2005; Owens et al., 2013), while others have stressed a need to better understand humble leadership from a cognitive perspective (e.g., Ou et al., 2014). These differences can make it difficult for scholars to come to a consensus about the best way to study humble leadership.

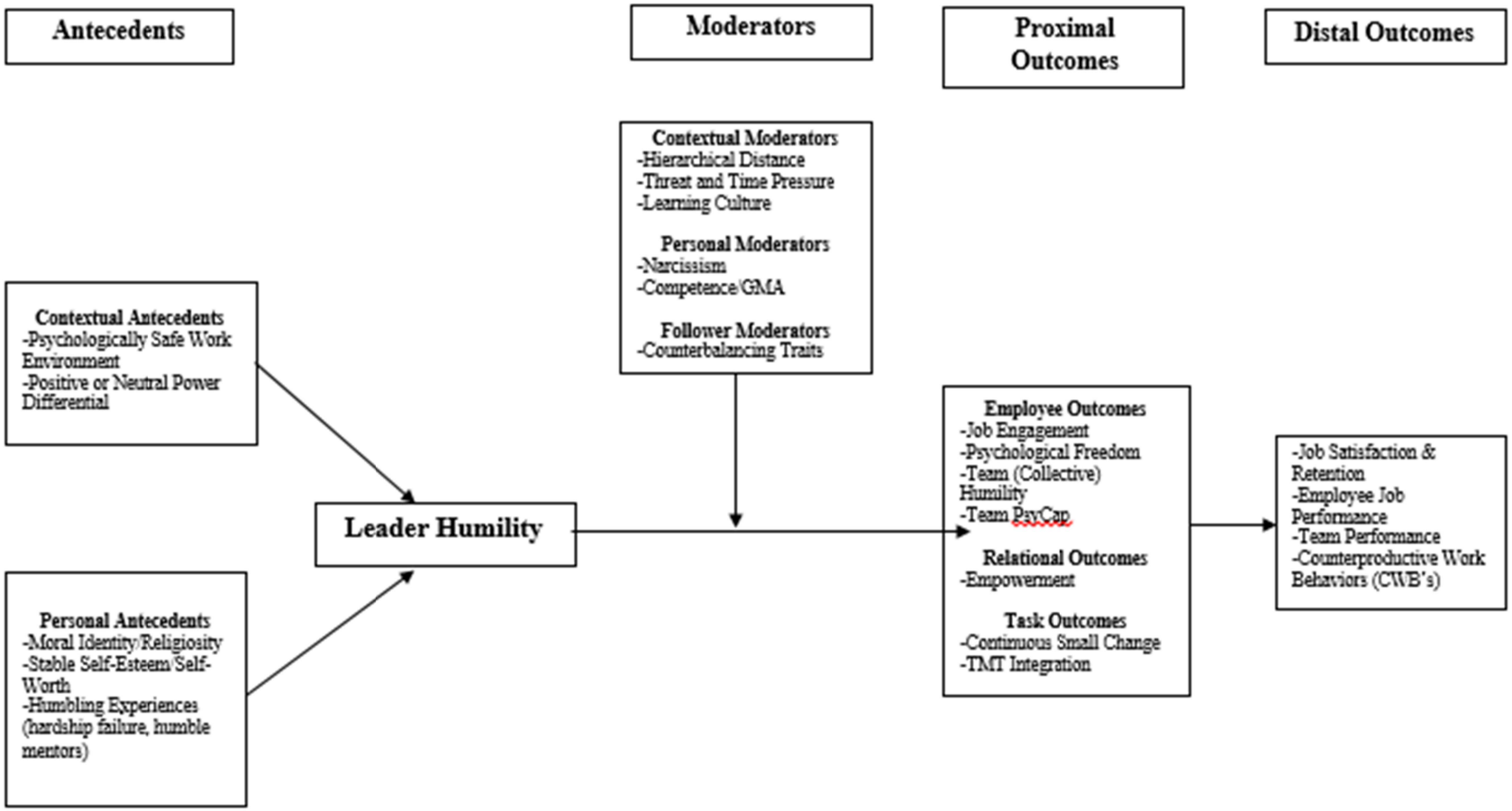

Figure 1. Overview of Humble Leadership

In this review, I will first look at the definitions of humble leadership provided by Owens and Hekman (2012) and Ou et al. (2014). I will then review the definitions given by other scholars then suggest ways to improve humble leadership research through achieving more consensus in the definition of humble leadership. A summary of the similarities and differences among these different definitions is shown below in Table 1.

Table 1

Dimensions of Humility

	Authors				
Dimension	Owens et al. (2013)	Ou et al. (2014)	Tangney (2000)	Morris et al. (2005)	Krumrei-Mancuso & Rouse (2016)
Willingness to Admit Mistakes/Openness to Feedback	X	X	X[1]	X	X
Self-Awareness	X	X	X[2]	X	
Appreciation of Others	X	X	X		X
Transcendence		X[3]	X	X	
Low Self-Focus		X			
Independence of Intellect & Ego					X
Lack of Overconfidence					X

Owens Definition. In their 2012 article, Owens and Hekman studied humble leadership behaviors and listed three dimensions of humble leadership that emerged from their grounded theory research. These are the same three dimensions listed by Owens, Johnson, and Mitchell (2013), who tested these behavioral dimensions quantitatively through a series of eight studies conducted both in the lab and in the field. The three

[1] Tangney listed “willingness to admit mistakes” and “receptiveness to new ideas and feedback” as two separate dimensions whereas other authors combined these two into a single dimension

[2] Tangney listed "willingness to admit mistakes" and "receptiveness to new ideas and feedback" as two separate dimensions whereas other authors combined these two into a single dimension

[3] Ou et al. listed “a self-view of accepting that something is greater than the self” and “self-transcendent pursuit” as two separate dimensions whereas other authors combined these two into a single dimension

dimensions listed are 1) willingness to see self accurately, 2) appreciation of others' strengths and contributions, and 3) teachability. The first dimension - willingness to see self accurately - includes admitting mistakes, verbalizing gaps in knowledge or experience, and taking responsibility for failure (Owen & Hekman, 2012). Other scholars have also suggested that self-knowledge and self-evaluation is an important part of humility (e.g., Argandona, 2015). Humble people are often considered to have a more accurate view of themselves (Baumeister & Exline, 2002; Tangney, 2000; Davis et al., 2010) and are less likely to distort information about themselves in order see themselves more positively (Peterson & Selignman, 2004).

The second dimension is an appreciation of others' strengths and contributions. Appreciation of others' strengths and contributions includes verbalizing appreciation for contributions, acknowledging the strengths of subordinates, and using the word "we" when talking about success (Owens & Hekman, 2012). Other scholars have also suggested that listening to others is an important part of humility (e.g., Argandona, 2015). While some leaders may be threatened by the success of others (Collins, 2001a), humble leaders can realize the importance of others' strengths and talents and will thus be able to better avoid envy than less-humble leaders. Modeling teachability is the third, and final, dimension of humble leadership and includes showing an openness towards learning, modeling follower tasks and seeking feedback, and listening more than talking (Owens & Hekman, 2012). Humble leaders can demonstrate an openness to learning by listening to subordinates and taking notes when they speak. They have open minds and show a willingness to learn and receive feedback. They seek counsel from others (Argandona, 2015). They are willing to model how to get things done and are willing to perform

menial tasks if necessary. By doing this, humble leaders can model humility to followers. Through modeling, their humility can become contagious and help followers be more humble and teachable (Owens et al., 2016).

Ou et al.'s Definition. Ou et al. (2014) noted that many of the prior definitions of humility (including the Owens definition listed above) had only focused on limited aspects of the construct and had not properly addressed the cognitive dimensions of humility. Prior work on the definition of humble leadership had focused on the behaviors (e.g., Owens et al., 2013) of humble leaders rather than the trait of humble leadership itself. This can be a problem and can hinder future knowledge of the trait since leaders' traits and leadership behaviors have been shown to be different from each other (DeRue, Nahrgang, Wellman, & Humphrey, 2011). Thus, Ou et al. used the self-experience framework (Baumeister, 1998) to better define humility. Using this framework, they proposed that there are six characteristics of humble people: 1) a self-view of accepting that something is greater than the self, 2) self-awareness, 3) openness to feedback, 4) appreciation of others, 5) low self-focus, and 6) self-transcendent pursuit.

The self-awareness aspect of humility proposed by Ou et al. (2014) is very similar to Owens and Hekman's first aspect of humble leadership, which they defined as a willingness to see self accurately. Appreciation of others is also an aspect mentioned by both Ou et al. and Owens and Hekman. The openness to feedback dimension of Ou et al.'s definition is contained in Owens and Hekman's dimension of modeling teachability. Interestingly, the aspect of low self-focus described by Ou et al. (2014) is similar to the fourth aspect of humility Owens (2009) had in his dissertation, but for which he did not

find empirical support. Therefore, there is quite a bit of overlap between the two definitions of humility.

However, there are also some key differences in the humble leadership definitions describes by Owens and colleagues (Owens & Hekman, 2012; Owens et al., 2013) and the definition described by Ou et al. (2014). Ou et al. discussed the importance of humble individuals having a self-view of accepting something is greater than the self and engaging in self-transcendent pursuits. However, Owens and colleagues did not discuss this aspect of humility. The reason for this is likely because Owens and colleagues focused on humble leadership behaviors rather than the trait of humility in leaders. Ou et al. acknowledged that individuals might not have a transcendent self-view but still engage in humble behaviors. However, these behaviors could be inauthentic or may not be stable over time. Owens et al. (2013) acknowledged that humble leadership behaviors may not be stable over time or across situations. Therefore, it is possible to reconcile these differences by acknowledging that individuals might not need to have a transcendent self-view in order to engage in humble behaviors but do need to have a self-view of accepting something is greater than the self and need to engage in self-transcendent pursuits in order to be truly humble.

Other Definitions. Tangney (2000) found six positive aspects of humility after reviewing the study of humility in philosophy, theology, and psychology. They are 1) viewing oneself accurately, 2) willingness to admit mistakes and 3) receptiveness to new ideas and feedback, 4) awareness of one's abilities and accomplishment, 5) transcendence, and 6) valuing the different ways people and things contribute to our world. While these six aspects are a study of humility more broadly and not specifically

leader humility, these six positive aspects should relate to humble leaders as well. Morris et al. (2005) developed a definition of humility contains three dimensions: 1) self-awareness, 2) openness, and 3) transcendence. Self-awareness is important because knowing one's strength and weakness is a key aspect of humility. Openness implies that humble leaders are open to new ideas and realizing that there are things beyond their control. Transcendence allows humble leaders to have a better perspective of things and allows them to accept that there is something greater than themselves. Krumrei-Mancuso and Rouse (2016) focused on intellectual humility and listed four facets of intellectual humility in their 22-item scale: 1) intellectual humility, which is an independence of intellect and ego, 2) openness to revising one's viewpoint, 3) respect for others' viewpoint, and 4) lack of intellectual overconfidence.

Summary of Definition

Overall, there some consistency in defining humility and humble leadership among scholars. Most scholars agree that humble leaders are more objective in regards to how they evaluate themselves, are more appreciative of others, and are more open to new ideas (e.g., Owens & Hekman, 2012; Ou et al., 2014; Owens et al., 2013; Exline & Geyer, 2004; Tangney, 2000). Many scholars have noted that humility is not just an absence of negative traits such as pride, arrogance, or narcissism (Tangney, 2005; Davis et al., 2010; Argandona, 2015). Although many people equate humility with low self-esteem and underrating oneself, humility is a source of strength and in many situations, humble leaders are the most effective (Collins, 2001a, Owens & Hekman, 2012). Humility should reflect a sense of self-awareness and openness (Jeung et al., 2016;

Morris et al., 2005; Tangney, 2000). Also, there seems to be agreement that humble leadership can be somewhat developed (e.g., Owens et al., 2011; Collins, 2001b).

Measurement

Current Measurements

The most commonly used humble leadership scale used in top-tier journals is the one developed by Owens et al. (2013). It has been used in several current papers in top-tier journals (e.g., Owens, Wallace, & Waldman, 2015; Owens & Hekman, 2016). This scale is a nine-item measure that contains three dimensions: 1) willingness to view oneself accurately, 2) displayed appreciation of others' strengths and contributions, and 3) teachability. Owens et al. called this scale "Expressed Humility" because their scale specifically looked at expressed behavior through a peer-report survey rather than attempting to specifically measure the trait of humility in leaders. Owens and Hekman (2016) then modified the scale to measure team humility. A summary of this and other humility scales is shown in Table 2 below.

Ou et al. (2014) used the nine-question from Owens et al.'s scale and then added twelve questions (for a total of 23 items) from six facets of their own: 1) self-awareness, 2) openness to feedback, 3) appreciation of others, 4) low self-focus, 5) self-transcendent pursuit, 6) transcendent self-concept. Other researchers have used the honesty-humility construct from the HEXACO model (Lee & Ashton, 2004) when studying humility (e.g., Chirumbolo, 2015). This measure correlates .55 (significant at a $p < .01$ level) with the measure developed by Owens et al. (2013). While the honesty-humility contrast has shown predictive validity, because of its broader scope (looking at a mix of humility and honesty), it might not be precise enough when studying only humility (Davis et al.,

Table 2

Measures of Humility

Authors	Scale Name	Scale Dimensions	Humility as a Trait, Behavior, or Cognitive Process	Measurement	Number of Scale Items	Sample Scale Item
Owens et al. (2013)	Expressed Humility	1. Willingness to view oneself accurately 2. Displayed appreciation of others' strengths and contributions 3. Teachability	Behavior	Other reported	9	"This person takes note of others' strengths"
Ou et al. (2014)	CEO Humility	1. Self-awareness 2. Openness to feedback 3. Appreciation of others 4. Low self-focus 5. Self-transcendent pursuit 6. Transcendent self-concept	Trait, Behavior, & Cognitive Process	Other reported	23 (includes all of Owens et al.'s items)	"My CEO actively seeks feedback, even if it is critical."
Lee & Ashton (2004)	Honesty-Humility (As part of HEXACO scale)	1. Sincerity 2. Fairness 3. Greed Avoidance 4. Modesty	Trait	Self-reported & other-reported	16	"I want people to know that I am an important person of high status" (Reversed scored)
Krumrei-Mancuso & Rouse (2016)	Comprehensive Intellectual Humility Scale	1. Independence of intellect and ego 2. Openness to revising one's viewpoint 3. Respect for others' viewpoint	Trait	Self-reported	22	

		4. Lack of intellectual overconfidence				
Davis et al. (2011)	Relational Humility Scale	1. Global humility 2. Superiority 3. Accurate view of self	Trait	Other-reported	16	"He/she knows him/herself well."
Rowatt et al. (2006)	Humility IAT	N/A	Trait	Implicit Association Test (IAT)	N/A	N/A

2010). Krumrei-Mancuso and Rouse (2016) develop a 22-item humility scale which they titled the "Comprehensive Intellectual Humility Scale." This scale had four facets: 1) independence of intellect and ego, 2) openness to revising one's viewpoint, 3) respect for others' viewpoints, and 4) lack of intellectual overconfidence. Davis, Hook, Worthington, Van Tongeren, Gartner, Jennings, and Emmons (2011) developed a 16-item other report humility scale. This scale had three facets: 1) Global humility, 2) Superiority, and 3) Accurate View of Self. Rowatt and colleagues developed an implicit association test (IAT) to measure humility (Rowatt, Powers, Targhetta, Comer, Kennedy, & Labouff, 2006).

Summary of Humility and Humble Leadership Measurements

Just as diverse definitions of humility and humble leadership have slowed scholars' progress in the area, measurement problems have also stunted our understanding of humility and humble leadership (Davis et al., 2010; Tangney, 2000). One consistent pattern is that the various humility measurements are much more stable and have more predictive power when used as peer-report survey items as opposed to self-measurement survey items (e.g., Owens, 2009; Owens et al., 2015; Owens et al., 2013; Chirumbolo, 2015). Tangney (2005) suggested that humility was a trait that could not be measured using self-reported surveys. Some explanation has been given for these results. Owens et al. suggested that humility is a construct that cannot be properly measured using a self-report measure because the idea of humble people rating themselves high in humility is a paradox. However, one important aspect of humility is that humble leaders are better at self-appraisal. And because the current conceptualization of humility in leadership is not simply low self-appraisal or modesty, but an accurate

understanding of one's strengths and weaknesses, it would make sense from a theoretical perspective that humble leaders would be able to recognize themselves as humble. Although social desirability might affect the results of the surveys, Owens et al. (2013) did not find a significant relationship between humility and social desirability scores. While not finding support for a significant relationship is not the same as finding support for a non-significant relationship, this result does lend some credibility to the argument that self-reported leader humility measures are being affected by something other than just social desirability.

Perhaps the reason that previous leader humility scales have not been very predictive is that non-humble leaders are not very self-aware and therefore vary on the degree to which they rate themselves as a humble leader. Narcissists are known to self-enhance (Wallace, Ready, & Weitenhagan, 2009; Davis et al., 2010). Perhaps leaders low in humility also have a tendency to self-enhance, which makes it more difficult to differentiate between those low and high in humility using self-reported measures. No articles of which I am aware have looked at whether the consistency and predictive deficiencies with current self-report leader humility scales come from humble leaders rating themselves inaccurately or non-humble leaders rating themselves inaccurately.

Nomological Network

Related Constructs

Modesty. Although many people think of modesty as a synonym to humility, humble leadership is quite distinct from modesty (Tangney, 2000; Rowatt et al., 2006; Davis et al., 2010). As shown below in Table 3, Owens et al. (2013) found that modesty correlated .62 (significant at a $p < .01$ level) with humility. Some scholars have noted that

modesty might be a component of humility (e.g., Oc, Bashshur, Daniels, Greguras, & Diefendorff, 2015; Tangney, 2005). Ou et al. (2014) found that modesty correlated .17 (significant at a $p < .05$ level) with leader humility using peer-reported measures of leader humility. Modesty more externally focused, while humility is more internally focused (Peterson & Seligman, 2004; Morris et al., 2005). Therefore modest leaders would be more concerned about the perception others have of them, while a humble leader would be more concerned about self-growth and helping others.

Narcissism. While humility and (low) narcissism have some theoretical and empirical overlap (Exline & Geyer, 2004), scholars have consistently argued that they are distinct. For example, although Morris et al. (2005) proposed that higher levels of narcissism would predict lower levels of humility, they also noted the distinctness of the constructs. Some scholars have suggested that the absence of narcissism might demonstrate the potential for humility, but that having low narcissism is not sufficient for developing humility (e.g., Peterson & Seligman; Morris et al., 2005). This is because low narcissism implies a low focus on self and humility is much more than that. Humility indicates a willingness to accept reality in order to grow and a willingness to recognize and appreciate the strengths of others (Owens & Hekman, 2012). Therefore, I would expect for narcissism to be only moderately correlated with low narcissism.

Owens et al. (2013) found that narcissism correlated -.63 (significant at a $p < .01$ level) with humility using a peer-reported measure of narcissism and a peer-reported measure of leader humility. Interestingly, Owens et al., (2015) found that narcissism (self-reported) correlated .00 with expressed leader humility (subordinate-reported). Although I would expect different samples to produce different results, it is still

Table 3

The Nomological Network of Humble Leadership

Construct	Authors	Scale Used	Correlation with Humble Leadership
Modesty	Owens et al. (2013)	Expressed Humility	.62**
Modesty	Ou et al. (2014)	CEO Humility	.17*
Narcissism	Owens et al. (2013)	Expressed Humility	.63**
Narcissism	Owens et al. (2015)	Expressed Humility	.00
Narcissism	Ou et al. (2014)	CEO Humility	-.08
Openness to Experience	Owens et al. (2013)	Expressed Humility	.31**
Emotional Stability	Owens et al. (2013)	Expressed Humility	.49**
Core Self-Evaluations	Owens et al. (2013)	Expressed Humility	.34**
Core Self-Evaluations	Ou et al. (2014)	CEO Humility	.16*
Social Desirability	Owens et al. (2013)	Expressed Humility	.10
Social Desirability	Krumrei-Mancuso & Rouse (2016)	Intellectual Humility	.22**
Learning goal orientation	Owens et al. (2013)	Expressed Humility	.63**
Learning goal orientation	Ou et al. (2014)	CEO Humility	.23**
Conscientiousness	Owens et al. (2013)	Expressed Humility	.28**
Extraversion	Owens et al. (2013)	Expressed Humility	.11

surprising that there was such a large difference between the size of these correlations. One reason for the difference was that in the Owens et al. (2013) sample, both expressed humility and narcissism were measured using other-report measures. However, in the Owens et al. (2015) sample, narcissism was measured using a self-report measure and expressed humility was measured using an other-report measure. So although others may perceive that a leader who expressed humility is also low in narcissism, perhaps leaders are able to be narcissistic, but still express humility towards followers. Future research could do a better job of clarifying what the true relationship between humility and narcissism is among leaders. Krumrei-Mancuso and Rouse (2016) found that intellectual humility accounted for an additional 2% of the variance in narcissism after controlling for age and social desirability. Ou et al. (2014) found that narcissism correlated -.08 (nonsignificant) with leader humility using a peer-reported measure of leader humility. Exline and Geyer (2004) found that those who scored low on narcissism thought that humility was a more positive trait than those who scored high on narcissism.

Overall, there appears to a wide range of correlations among the studies. Together they seem to indicate that narcissism is negatively correlated with leader humility, but only moderately. Future research could help us better understand the relationship between narcissism and humble leadership. Also, looking at how measures of narcissism correlate differently with the different aspects of humble leadership would better help our understanding of both narcissism and humble leadership.

Openness to Experience. Openness to experience (hereafter referred to as "openness") is one of the Big 5 personality traits (McCrae & John, 1992; Goldberg, 1992). It includes active imagination, aesthetic sensitivity, attentiveness to inner feelings,

preference for variety, and intellectual curiosity (Costa & McCrae, 1992). Individuals high in openness are often considered to be original and daring. They are more likely to have distinctive and unconventional decorations as well as books on a wider variety of topics. They also have a more diverse music collection and display more works of art in their homes and workspaces (Gosling, 2008) and prefer abstract art more (Feist & Brady, 2004). These individuals are motived to seek new experiences. They often have a more fluid style of consciousness and are also more adaptable (LePine, Colquitt, & Erez, 2000). Because one of the aspects of humility is being open to feedback and new ideas (Ou et al., 2014; Owens & Hekman, 2012), it logically follows that openness to experience would correlate moderately with humble leadership. Owens et al. (2013) found that openness to experience correlated .31 (significant at a $p < .01$ level) with leader humility. Krumrei-Mancuso and Rouse (2016) found that intellectual humility measure accounted for 28.6% of the variance in openness to experience after controlling for social desirability and individualism (significant at a $p < .01$ level). Thus, the relationship between humble leadership and openness to experience appears does appear to be moderate and significant.

Emotional Stability. Emotional stability is another one of the Big 5 personality traits (McCrae & John, 1992; Goldberg, 1992). Individuals high in emotional stability are less likely to experience anxiety, fear, anger, and frustration (Thompson, 2008). They usually have less frequent and less severe mood swings and are often better able to control their emotions. Because humble leaders often have a high degree of self-awareness, it would be expected that humble leadership is moderately correlated with

emotional stability. Owens et al. (2013) found that emotional stability correlated .49 (significant at a $p < .01$ level) with leader humility.

Core Self-Evaluations. Core self-evaluations (CSE) is a higher-order construct and involves four dimensions – locus of control, emotional stability, generalized self-efficacy, and self-esteem (Judge, Locke, & Durham, 1997). Owens et al. (2013) found that CSE correlated .34 (significant at a $p < .01$ level) with leader humility. Ou et al. (2014) found that CSE correlated .16 (significant at a $p < .05$ level) with leader humility.

Social Desirability. Humility is often seen as a positive trait, but many people associate humility with weakness and a sense of low self-worth (Tangney, 2000). Therefore, if there were to be a correlation between humble leadership and social desirability, it would likely be only a weak one. Owens et al. (2013) found that social desirability correlated .10 (non-significant) with leader humility. Krumrei-Mancuso and Rouse (2016) found that humility measure was correlated .22 (significant at a $p < .01$ level) with social desirability. Therefore, humility appears to have a small, positive correlation with social desirability.

Learning Goal Orientation. Learning goal orientation (LGO) is a personal orientation that focuses on self-improvement and acquiring new skills (VandeWalle, 1997). Owens (2009) noted that "Humility is like a learning goal orientation. In LGO, and individual thinks that ability (what one can do) is changeable. With humility, an individual thinks that their entire self (who one is) is changeable" (p. 9). Thus, it would be expected that there is a high correlation between humble leadership and learning goal orientation. Owens et al. (2013) found that learning goal orientation correlated .63 (significant at a $p < .01$ level) with leader humility. Ou et al. (2014) found that learning

goal orientation correlated .23 (significant at a $p < .01$ level) with leader humility. Thus, while learning goal orientation and humble leadership appear to be quite distinct, they also appear to be moderately to highly correlated.

Other Traits. Owens et al. (2013) found that conscientiousness correlated .28 (significant at a $p < .01$ level) with leader humility. Owens et al. (2013) also found that extraversion correlated .11 (non-significant) with leader humility using a peer-reported measure of leader humility.

Antecedents

One important aspect of humble leadership for scholars to understand is the contextual and personal antecedents of behaviors of humble leadership. Understanding the personal antecedents are important because they will help scholars and practitioners better understand what types of people are able to better develop a humble leadership style. Understanding the contextual antecedents will help researchers and managers better know what types of situations are likely to lead to humble leadership behaviors. Antecedents of humble leadership have not been tested previously using quantitative data. However, below I review some antecedents that have been proposed through grounded theory and qualitative research.

Contextual Antecedents

While contextual antecedents have not thus far been tested much quantitatively, through his grounded theory research, Owens (2009) suggested that a psychologically safe work environment would be an antecedent to humble leadership. Owens also suggested that a positive or neutral power differential would lead to more humble

leadership. A positive power differential would mean that the individual has more power than those with whom he/she is working.

Personal Antecedents

Although humble leadership is a behavior, not a trait (Owens et al., 2012), some individuals are more likely to engage in these leadership behaviors are more likely to engage in these leadership behaviors than others and it is important to understand which types of individuals are more likely to use humble leadership. Below I describe three individual characteristics – moral identity, stable self-esteem, and previous humbling experiences – that previous scholars have found to be correlated with humble leadership behaviors.

Moral identity/religiosity. Owens (2009) also listed moral identity and religiosity as two potential personal antecedents. Exline and Geyer (2004) found that more religious individuals tend to have more positive views of humility. Many religions value humility and teach that individuals should believe in a higher power (Owens & Hekman, 2012). Therefore, religious individuals may be more likely to have a desire to pursue self-transcendent causes or believe in something greater than self. That is not to say that less religious individual cannot be effective humble leadership. Only that religious individual might be more predisposed to favor humble leadership.

Stable self-esteem/feelings of self-worth. Owens (2009) wrote that a stable self-esteem and stable feelings of self-worth are personal antecedents of humble leadership behaviors. Exline and Geyer (2004) also found that those with more self-esteem had more positive views of humility. This is because humble leaders need to recognize not only their weaknesses but their strengths as well. This proper balance of acknowledging both

strengths and weakness may be easier for individuals with a more stable self-esteem and better feelings of self-worth.

Humbling experience. In their qualitative study, Owens and Hekman (2012) noticed that interviewees often mentioned humbling experiences led leaders to use more of a humble leadership style. In studying great companies, Collins (2001a) suggested that having a humbling experience would lead to more humble leadership. This idea has been echoed by other scholars as well (e.g., Exline and Geyer, 2004). A humbling experience can help a leader see that they are not invincible or can help them recognize the value of recognizing and appreciating the contributions of others.

Moderators

The moderators between humble leadership and organizational outcomes such as job performance, employee satisfaction, and retention are especially important because the effectiveness of leadership styles depends a great deal on the situation (Hersey, 1985). Previous research has shown that there are situations where humble leadership is quite effective (e.g., Owens et al., 2013; Owens et al., 2015; Ou et al., 2014; Owens & Hekman, 2016). However, there are also likely situations where humble leadership may be ineffective (Owens & Hekman, 2012) and in which humble leadership may harm follower job performance and organizational effectiveness. Therefore, some industries, organizational dynamics, and tasks are more conducive to humble leadership than others. Also, some followers are more likely than others to benefit from humble leadership behaviors. Below, I review contextual, personal, and follower moderators and then suggest directions for future research. A summary of these moderators is shown below in Table 4.

Contextual Moderators

Hierarchical distance. Hierarchical distance refers to the power distance between leader and follower and is an important moderator between humble leadership and leadership effectiveness. Jeung and Yoon (2016) found that hierarchical distance moderated the relationship between leader humility and follower ratings of leadership effectiveness. This is similar to what Owens and Hekman (2012) found in their qualitative study. They found that humble leaders in more hierarchical organizations, such as the military, were not able to express humility to the same degree as leaders in less hierarchical organizations. Because of this, they often expressed humility in different ways. For example, they found that even military leaders who were highly self-aware did not feel very comfortable acknowledging limitations and mistakes to subordinates. Also, these military leaders would often acknowledge follower contributions after a mission, but would not outwardly acknowledge follower contributions during the mission.

Threats/time pressures. Owens and Hekman (2012) found that threats and time pressures were important contextual moderators. While humble leadership is often effective at motivating employees and helping them grow, sometimes time pressures or threats require a leader to be more direct and help stabilize or quickly fix a situation. In these situations, a more direct leadership style will likely be more effective than humble leadership.

Learning culture. Owens and Hekman (2012) also found that a learning culture is an important moderator to leader humility. A learning culture better allows employees to make mistakes and helps employees have learning mentality. Both of these are important for developing humble leadership. Also, they found that modeling teachability is most

Table 4

Moderators of Humble Leadership

Moderator	Authors	Qualitative/Quantitative	Nature of Relationship
Contextual – Hierarchical Distance	Jeung & Yoon (2016)	Quantitative	Humble leadership works better when there is less hierarchical distance between leader and follower.
Contextual – Hierarchical Nature of the Organization	Owens & Hekman (2012)	Qualitative	It is easier for leaders to express humility in organizations that are less hierarchical.
Contextual – Threats/time pressures	Owens & Hekman (2012)	Qualitative	Certain time pressures or threats make humble leadership less effective.
Contextual – Learning culture	Owens & Hekman (2012)	Qualitative	Humble leadership is more effective when the organization has a learning culture.
Personal – Narcissism	Owens et al. (2015)	Quantitative	Narcissistic leaders perform best when also expressing humility in their leadership.
Personal – Perceived Competence	Owens & Hekman (2012)	Qualitative	Humble leadership is more effective when followers perceive their leader to have high levels of competence.
Personal – GMA	Owens et al. (2013)	Quantitative	Humble leadership can help leaders with low GMA scores the most, likely because it allows them to realize their weaknesses and improve upon them.
Follower – Power Distance Orientation	Jeung & Yoon (2016)	Quantitative	Humble leadership is most effective when followers have a low power distance orientation.

effective in organizations with a learning culture and may not work in organizations that have high levels of competition and rivalry.

Personal Moderators

Narcissism. Although perhaps unexpected to many, Owens et al. (2015) found that narcissism interacts with humble leadership and that leadership effectiveness is highest when a leader has both high levels of narcissism and high levels of humility. Paradox theory suggests that two seemingly conflicting traits may help leaders between succeed (Smith & Lewis, 2011; Lewis, 2000). In light of these findings, other researchers had also proposed that narcissism might interact with humble leadership to produce high levels of leadership effectiveness (e.g., Maccoby, 2000). Owens et al. concluded that humility might act as a tempering trait that allows leaders to utilize some of the positive aspects of narcissism while neutralizing some of the negative aspects of narcissism. These findings were also corroborated by the findings of Zhang, Ou, Tsui, and Wang (2017), who also found that CEO narcissism interacted with humble leadership to produce high levels of innovation and performance.

Competence/GMA. Owens and Hekman (2012) also found that competence is a moderator between humble leadership and leadership effectiveness. They found that without competence, humble leadership is not as effective. Interestingly, this is opposite of what Owens et al. (2013) found. They found that less competent leaders would benefit more from using humble leadership. They noted that the ability to learn is not the same as a willingness to learn and that those with lower levels of GMA might benefit more by having a strong willingness to learn and grow. One explanation for the differences in these results might be that Owens et al. looked at the relationship between competence

and humble leadership quantitatively, whereas Owens and Hekman studied this relationship through their qualitative study. Therefore, Owens and Hekman looked at followers' perceptions of leader competence and how leaders perceived competence would affect the effectiveness of humble leadership. Perhaps, leaders perceive that they need to have high levels of competence in order to effectively use humble leadership, but in fact, would benefit from using humble leadership even more in situations where they are less competent. Hopefully, future research can help us better understand the complex nature of the interaction between humility and competence among leaders.

Follower Moderators

Power distance orientation. Power distance refers to the extent to which individuals accept the unequal distribution of power in organizations (Kirkman, Chen, Farh, Xiang, & Lowe, 2009; Hofstede, 2001). Jeung and Yoon (2016) found that power distance orientation moderated the relationship between leader humility and leader effectiveness. This is the only study that has looked at a follower characteristic as a moderator between humble leadership and leadership effectiveness. Humble leaders performed better when followers had a lower power distance orientation. When followers had a higher power distance orientation, they were uncomfortable with leaders showing high levels of humility.

Outcomes

Employee Outcomes

Job Engagement. In their qualitative study, Owens and Hekman (2012) found that humble leadership led to better employee job engagement. A summary of the outcomes of humble leadership is shown in Table 5. In this study, participants in their

Table 5

Outcomes of Humble Leadership

Outcome	Authors	Qualitative/Quantitative	Nature of Relationship
Employee Job Engagement	Owens & Hekman (2012)	Qualitative	Humble leadership leads to more employee job engagement.
Psychological Freedom	Owens & Hekman (2012)	Qualitative	Humble leadership leads to higher feelings of psychological freedom among followers.
Team (Collective) Humility	Owens & Hekman (2016)	Quantitative	Humble leadership leads to more team, or collective, humility.
Follower Empowerment	Jeung et al. (2016)	Quantitative	Humble leadership leads to followers feeling more empowered.
Leader Empowerment	Ou et al. (2014)	Quantitative	Humble leadership leads to leaders feeling more empowered.
Leader Empowerment	Owens (2009)	Quantitative	Humble leadership leads to leaders feeling more empowered.
Continuous, Small Change	Owens & Hekman (2012)	Qualitative	Humble leadership leads to leaders making continuous, small changes instead of large, one-time changes.
TMT Integration	Ou et al. (2014)	Quantitative	Humble leadership leads to more integration among top management teams (TMT).
Job Satisfaction	Owens et al. (2013)	Quantitative	Humble leadership is associated with higher job satisfaction among employees.
Retention	Owens et al. (2013)	Quantitative	Humble leadership is associated with higher levels of retention.
Employee Job Performance	Owens et al. (2015)	Quantitative	Humble leadership is associated with higher levels of employee job performance.
Perceived Team Performance	Rego & Simpson (2018)	Quantitative	Humble leadership is associated with higher levels of perceived team performance.

Objective Team Performance	Owens et al. (2016)	Quantitative	Humble leadership is associated with higher levels of objective team performance.
Objective Team Performance	Rego et al. (2017)	Quantitative	Humble leadership is associated with higher levels of objective team performance.
Objective Team Performance	Rego et al. (in press)	Quantitative	Humble leadership is associated with higher levels of objective team performance.
Counterproductive Work Behaviors (CWB's)	Chirumbolo (2015)	Quantitative	Humble leadership is associated with decreased levels of CWB's.
Psychological Capital	Rego et al. (2017)	Quantitative	Humble leadership leads to higher levels of psychological capital in a team.
Psychological Capital	Rego et al. (in press)	Quantitative	Humble leadership leads to higher levels of psychological capital in a team.

study suggested that they were able to get a great deal of work done after their leader had demonstrated a humble behavior, even if it was small. However, they would be demotivated when leaders acted arrogantly and yelled at the followers while telling them to do things the leader's preferred way. Humble leadership appeared to lead to more intrinsic motivation, which can also increase job engagement.

Psychological Freedom. In their qualitative study, Owens and Hekman (2012) found that participants reported that humble leadership leads to a higher sense of psychological freedom among followers. Followers reported that humble leadership freed them to be more transparent about their own developmental process. This allowed them to worry less about concealing their weaknesses and mistakes. It also freed them from having a high level of worry about their status and defending their self-image.

Team (Collective) Humility. Collective humility refers to a group or team displaying humble leadership behaviors. Owens and Hekman (2016) found that teams showed more collective humility when their leader modeled humble behaviors. This positive attitude of humility is passed from leaders to followers through social contagion. Collective humility is defined as, "an interpersonal team process that captures the three underlying dimensions of humility as behavioral interaction patterns of admitting mistakes and limitations, spotlighting team member strengths and deflecting praise to others, and being open to new ideas, advice, and feedback."

Relational Outcomes

Empowerment. Jeung and Yoon (2016) found that humble leadership leads to more follower empowerment. Both Ou et al. (2014) and Owens (2009) also found that humble leadership is associated with higher levels of leader empowerment. This effect

likely happens because humble leaders legitimize followers' developmental journeys by showing them that it is alright to admit mistakes and letting them know that making mistakes is an important part of the learning process (Owens & Hekman, 2012).

Task Outcomes

Continuous, Small Change. Owens and Hekman (2012) found that when leaders are humble, they make continuous, small changes as opposed to sporadic, big changes. This is in contrast to the "swing for the fences" approach displayed by narcissistic leaders in Chatterjee and Hambrick (2007). Owens and Hekman (2012) also found that having a humble leader increases the fluidity of organizing. Humble leaders were more likely to be open to new ideas and thus are better able to organize in a bottom-up manner.

Integration among Top Management Teams. Ou et al. (2014) found that when leaders are humble, there is more integration among top management teams (TMT). As mentioned above, humble leaders empower their followers. Humble leaders also show respect to all team members and show less favoritism than less humble leaders. Both of these contribute to more integration among TMT, which leads to strong ties, increase familiarity and more trust.

Distal Outcomes

Job Satisfaction and Retention. Owens et al. (2013) found that humble leadership leads to higher levels of job satisfaction and retention. The job satisfaction of followers is shaped a great deal by how favorable the followers view their leader (Russell et al., 2004). Because humble leadership can lead to more employee empowerment and growth opportunity, it follows that humble leadership will also increase follower job satisfaction and retention.

Employee Job Performance. Owens et al. (2015) found that humble leadership was positively correlated with both subjective and objective employee job performance. Future research could look at the contexts in which the relationship between humble leadership and employee job performance is positive.

Team Performance. Owens et al. (2016) found that humble leadership led to better objective team performance though collective humility. Rego et al. (in press) found that humble leadership led to better objective team performance through team psychological capital. Rego and Simpson (2018) found humble leadership to be positively correlated with team performance. However, this finding was using a subjective measure of team effective that was reported by followers.

Counterproductive Work Behaviors. Chirumbolo (2015) found that counterproductive work behaviors (CWB's) correlated .62 (significant at a $p < .01$ level) with humility. Importantly, humility moderated the relationship between job insecurity and CWB's. For employees low in humility job insecurity was correlated with an increase in CWB's. However, for employee high in humility, there was no relationship between job insecurity and CWB's.

Psychological Capital. Psychological capital (PsyCap) is a positive organizational behavior (POB) state comprised of optimism, resilience, hope, and efficacy (Luthans, Youssef-Morgan, & Avolio, 2015; Rego et al., in press). This state can occur both on the individual and the team level (Dawkins, Martin, Scott, & Sanderson, 2015). Over a series of three studies and using a cross-cultural sample, Rego and colleagues (in press) found that humble leadership can help followers develop this character strength. In their study, they found that humble leadership leads to higher

PsyCap in teams, which leads to higher team task allocation effectiveness, which in turn leads to higher team performance. Rego et al. (2017) also found that humble leadership leads to higher PsyCap in teams, which then leads to better team effectiveness.

General Discussion of the Literature

The idea of humble leadership has been discussed by scholars and philosophers for many years (Morris et al., 2005). While Aristotle originally saw humility as a weak virtue, philosopher Immanuel Kant viewed humility as an important virtue that allows individuals to have a proper perspective of themselves (Greenberg, 2005; Owens, 2009). Humility has long been considered by organizational scholars as well. However, this consideration of humble leadership has been sporadic and has often been more calls for the philosophical benefits of having humility as a leader (e.g., Sarachek, 1968) and calls for more humble leadership (Weick, 2001) than actual testing humility in leadership. Much of the theorizing in this area was done by practitioners (e.g., Collins, 2001a; 2001b) or scholars simply looking at the benefits of humility from a theoretical perspective (e.g., Tangney, 2000). Lately, though, there has been an increase in the work done on humble leadership. This recent work has helped us understand the definition of humble leadership as well as the outcomes, moderators, and antecedent in the humble leadership model. Hopefully, future research will help us continue to grow in knowledge about this important leadership construct.

CHAPTER 2: HYPOTHESIS DEVELOPMENT

In my literature review, I discussed a need to better understand how follower traits might affect the outcomes of humble leadership. As I mentioned above, previous research has looked at how situational and leader characteristics might affect the outcomes of humble leadership (e.g., Jeung & Yoon, 2016; Owens et al., 2015; Owens & Hekman, 2013; Owens et al., 2012). However, thus far only one study has examined how follower traits moderate the effectiveness of humble leadership (Jeung & Yoon, 2016). Also, Owens and Hekman (2013) found in their qualitative study that many individuals believed that effectiveness of humble leadership would be influenced by the experience level of the leader, but no research has studied this phenomenon quantitatively. Therefore, my two primary items of focus for my dissertation will be to study how follower traits may affect the outcomes of humble leadership and to study how leader experience may affect the outcomes of humble leadership. In my dissertation, I hope to make the following four contributions to the leadership literature.

First, I will examine how follower characteristics influence the effectiveness of humble leadership behaviors. I will use dominance complementarity theory (Grijalva & Harms, 2014; Grant et al., 2011; Tiedens et al., 2007; Kiesler, 1983; Carson, 1969) and similarity-attraction theory (Felfe & Schyns, 2010; Walter & Bruch, 2008; Ehrhart & Klein, 2001) to hypothesize potential moderating variables. Previous research has looked at how leaders' narcissism (e.g., Owens et al., 2015), hierarchical power distance (e.g., Jeung & Yoon, 2016), and type of task (e.g., Owens & Hekman, 2012) all affect the outcomes of humble leadership. However, prior research has not shown many follower characteristics that might affect the outcomes of humble leadership, even though research

has shown that follower characteristics influence the effectiveness of other leadership behaviors. For example, prior research has shown that expressing anger as a leader can be a good motivator, but only when followers are high in epistemic motivation (e.g., Van Kleef, Homan, Beersma, Van Knippenberg, Van Knippenberg, & Damen, 2009) and low in agreeableness (e.g., Van Kleef, Homan, Beersma, & van Knippenberg, 2010). Also, prior research has shown that extraverted leaders perform better when followers are low in proactivity, but that introverted leaders perform better when followers are high in proactivity (e.g., Grant et al., 2011). From these examples, we can see that leadership approaches often have varying degrees of effectiveness depending on the characteristics of the followers. Therefore, in my lab study, I will look at how the effectiveness of humble leadership depends, in part, on the characteristics of the followers.

Second, I will seek to determine how leader experience also moderates the relationship between humble leadership and leadership effectiveness. Previous qualitative research has found evidence that less experienced leaders who engage in humble leadership behaviors may be seen as less competent (e.g., Owens & Hekman, 2016). While humble leadership has been shown to lead to many good outcomes (e.g., Ou et al., 2014; Owens et al., 2013; Rego & Simpson, 2018; Chirumbolo, 2015; Owens et al., 2016), it is important to know whether these good outcomes only apply to experienced leaders who engage in humble leadership behaviors or if less experienced leaders can benefit from humble leadership as well. It is also important to understand whether or not humble leadership hurts inexperienced. Perhaps followers who see less experienced leaders use humble leadership will interpret that use of humble leadership as

incompetence. If this is the case, inexperienced leaders may need to be cautious and aware when using humble leadership.

Third, based on dominance complementarity theory and similarity-attraction theory, I will seek to both extend the knowledge of a previously studied mediator – empowerment – and examine a new mechanism that helps explain the relationship between humble leadership and follower outcomes – person-supervisor fit (PS Fit). Previous research has shown that humble leadership helps followers feel more empowered. However, I will further the knowledge about empowerment as a mediating mechanism by exploring which followers might feel more empowered by humble leadership.

I also propose a new mechanism, PS fit, to help scholars better understand how humble leadership has positive effects on followers and organizations. PS fit generally refers to a supplementary fit (as opposed to a complementary fit) between employees and their supervisors (see Kristof-Brown, Zimmerman, & Johnson, 2005 for a meta-analysis). Previous research on PS fit has focused on leader-follower value congruence (e.g., Colbert, 2004; Krishnan, 2002), leader-follower personality similarity (e.g., Schaubroeck & Lam, 2002), and leader-follower goal congruence (e.g., Witt, 1998). When followers have personality traits that are congruent with humble leadership they will likely experience increased feelings of PS fit, and then see increases in performance as a result. Because of this, I illustrate how PS fit is likely an important mediator between humble leadership and follower outcomes. By looking at PS fit as a mediator in my study, I will help researchers have a deeper understanding of why humble leadership leads to follower outcomes.

Fourth, by using a lab study, I will attempt to strengthen the evidence for a causal relationship between humble leadership and follower job performance. As I mentioned in my review section, previous research in the humble leadership area has primarily looked at field studies (e.g., Ou et al., 2014; Jeung & Yoon, 2016; Owens & Hekman, 2012; Owens et al., 2015; Rego et al., in press; Rego et al., 2017), but no studies of which I know have studied humble leadership in a lab setting. Lab studies on leadership behaviors allow scholars to further establish casualty and eliminate much of the noise that exists in field settings. Therefore, by conducting a lab study in which I will manipulate humble leadership behaviors, I will be able to further strengthen the academic knowledge about this type of leadership by increasing our knowledge about the causal relationship of humble leadership and by demonstrating mediating mechanisms in a controlled environment.

I will start by focusing on how follower traits influence the effectiveness of humble leadership. In that section, I will discuss how based on dominance complementarity theory and similarity-attraction theory, I would expect follower characteristics will moderate the direct effects between humble leadership and follower outcomes. Then, I will discuss how follower traits will moderate the indirect effects between humble leadership and follower outcomes. After illustrating how particular follower characteristics are likely to moderate the relationship between humble leadership and follower outcomes, I will then explain how leader experience is also likely to moderate this relationship. My full model is shown below in Figure 2.

Follower Traits as Moderators

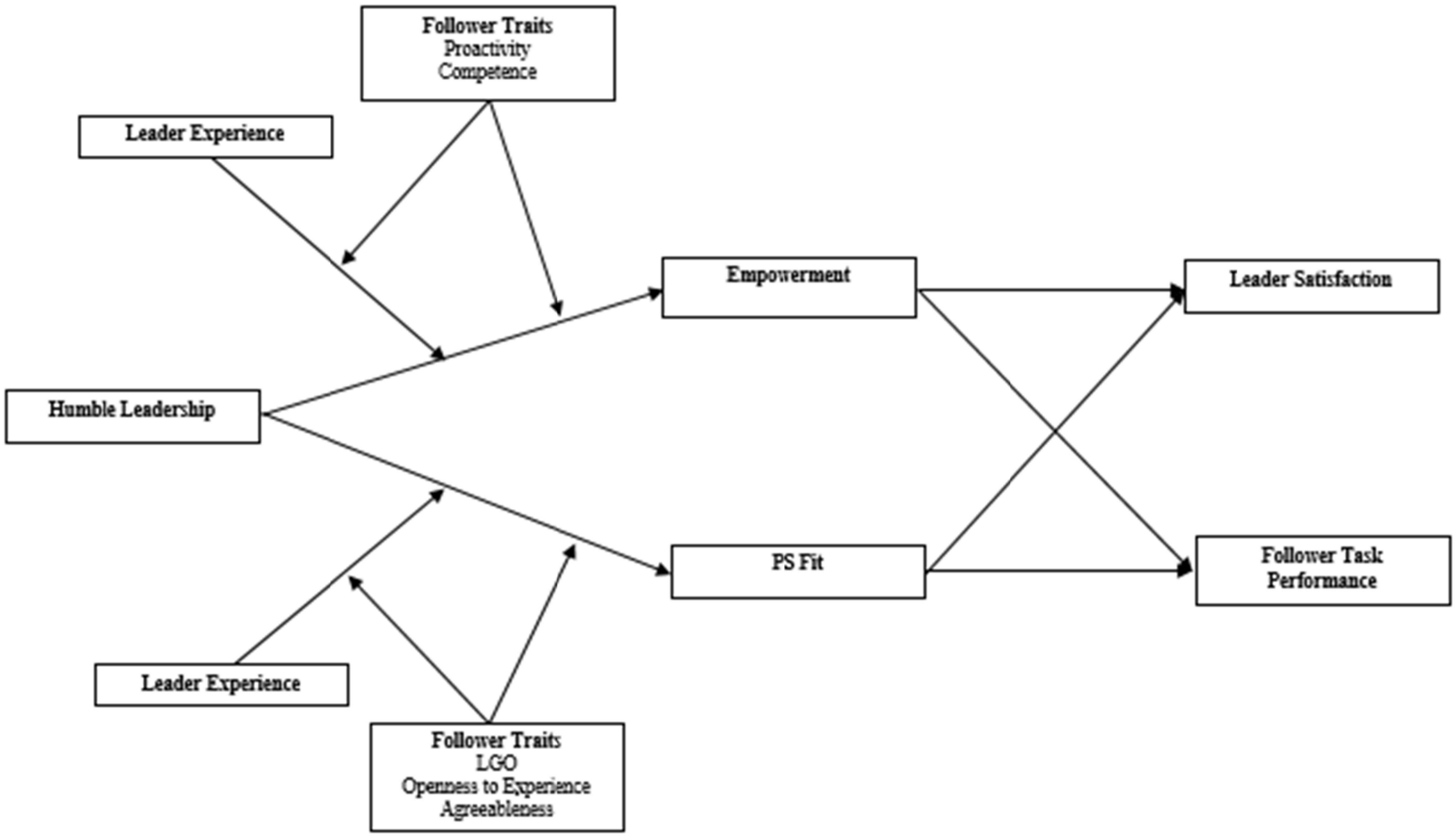

Figure 2. How Follower Traits and Leadership Experience Affect Humble Leadership Outcomes

Dominance Complementarity Theory

One theory that can help explain why some leadership styles work better for some followers than others is dominance complementarity theory (Grijalva & Harms, 2014; Grant et al., 2011; Tiedens, Unzueta, & Young, 2007; Kiesler, 1983; Carson, 1969). Dominance complementarity theory suggests that working relationships function best when one person is more dominant and the other is more submissive. For example, dominance is an aspect of extraversion and previous research has shown that followers who are less proactive perform better under extraverted leaders, whereas highly proactive employees actually perform worse (Grant et al., 2011). While humble leadership is not always associated with submissiveness, because humble leadership involves an accurate self-view, acknowledging follower strengths, and modelling teachability (Owens et al., 2013), leaders who display humble leadership are often able to be more submissive when the situations requires (e.g., followers are more dominant or have especially valuable strengths in an area). Therefore, according to dominance complementarity theory, humble leadership will be especially effective when leaders are required to take a more submissive role based on the traits of the followers. Below, I explain how, based on dominance complementarity theory, I would expect humble leadership to work better for followers who are high in proactivity and who have high levels of competence.

Proactivity

One follower characteristic that is likely to be a moderator to the relationship between humble leadership and follower outcomes is proactivity. Previous research has shown that the proactivity of followers can affect the effectiveness of leaders. For example, Grant et al. (2011) found that followers high in proactivity performed better

under introverted leaders, while followers low in proactivity performed better under extraverted leaders.

As mentioned above, dominance complementarity theory suggests that a working relationship often works best when one party is more dominant and one party is more submissive (Grijalva & Harms, 2014; Grant et al., 2011; Tiedens, Unzueta, & Young, 2007). Proactive employees more likely voice ideas and change the status quo (Van Dyne, Cumming, & McLean Parks, 1995; Crant & Bateman, 2000). They will actively try to change their environment and seek better ways to accomplish tasks. These actions are dominant type behaviors. Therefore, according to dominance complementarity theory, proactive employees would perform best under leaders with more submissive tendencies. Indeed, this is what previous research has found – that proactive employees tend to perform better under more submissive leaders (e.g., Grant et al., 2011).

While humble leadership is not always a submissive type of leadership (Owens & Hekman, 2012), there is good theoretical evidence that when paired with proactive followers, leaders who engage in humble leadership will often act more passively. When leaders participate in humble leadership, they acknowledge follower strengths and contributions (Owens et al., 2013; Ou et al., 2014; Owens & Hekman, 2012). Because humble leaders realize they do not have to know it all, they are better able to delegate and utilize the talents of others. They are willing to put others in the spotlight and will better cultivate the human capital around them (Owens & Hekman, 2012). They empower employees and enable them to suggest changes that need to be made. Therefore, leaders who display humble leadership will likely recognize the contributions and talents of

proactive employees and give them the resources for them to succeed. They will probably take a more submissive role to allow proactive employees the space they need to succeed.

Because leaders who express humble leadership are more likely to appreciate and utilize follower contributions, this leadership style gives proactive employees a chance to thrive. Under humble leadership, proactive employees will be able to offer suggestions for change and their contributions will be appreciated. Thus, based on dominance complementarity theory, I expect that humble leadership is more useful for followers high in proactivity than for followers low in proactivity. This leadership style will likely lead proactive followers to be more committed to their leader and will result in increases in task performance. It is therefore likely that proactivity moderates the direct relationship between humble leadership and leader satisfaction. I would also expect that proactivity also moderates the direct relationship between humble leadership and follower task performance.

Not only will proactivity likely moderate the direct effect between humble leadership and follower performance and leader satisfaction, but it also likely moderates the indirect relationships between humble leadership and these outcomes through follower feelings of empowerment (Jeung & Yoon, 2016). When leaders express humble leadership and acknowledge their followers' strengths and contributions (Ou et al., 2014; Owens et al., 2012), proactive employees will likely feel more empowered which will lead to stronger leader satisfaction and better task performance.

Although previous research has also found indirect effects between humble leadership and other mechanisms, such as employee job engagement (Owens & Hekman, 2012), top management team (TMT) integration (Ou et al., 2014), better task allocation

(Rego et al., in press) and collective humility (Owen & Hekman, 2016), I propose that follower feelings of empowerment will be the strongest mechanism between humble leadership and follower outcomes when followers have high level of proactivity. This path will likely be the strongest because, as mentioned above proactive individuals and therefore humble leadership is effective for these followers because it empowers them to act on their proactive tendencies.

Hypothesis 1: Follower proactivity moderates the direct relationship between humble leadership and a) leader satisfaction and b) follower task performance. The positive relationship between humble leadership and leader satisfaction (follower task performance) will be stronger when followers are high in proactivity.

Hypothesis 2: Follower proactivity moderates the indirect relationship between humble leadership and a) leader satisfaction and b) follower task performance, through empowerment. The positive relationship between humble leadership and leader satisfaction (follower performance) will be strongest when followers are high in proactivity.

Competence

In their qualitative study, Owens and Hekman (2013) found that leader competence was an important moderator of the relationship between humble leadership and organizational outcomes. In their qualitative study, they found that humility often led to positive outcomes but only when followers perceived their leaders to be competent. Otherwise, they interpreted their leaders' humble leadership behaviors as a further sign of their incompetence. While this prior research has focused on the competence level of the

leader, the competence of the follower is also likely to influence the effectiveness of humble leadership. Competent followers have many strengths and can help the leader and the organization. However, some leaders may also see competent followers as a threat to their power. Prior research has shown that leaders are willing to sacrifice group goals to promote their self-interest and will engage in behavior such as attempting to exclude highly skilled team members (Maner & Mead, 2010). They may be motivated to protect the power gap between themselves and followers to maintain their status (e.g., VanVugt, 2006; VanVugt, Hogan, & Kaiser, 2008). Thus, some leaders might be hesitant to fully utilize highly competent followers because they fear those followers.

Leaders who engage in humble leadership, however, are more likely to fully utilize these highly competent followers. As mentioned above, one of the aspects of humble leadership is acknowledging follower strengths and contributions (Ou et al., 2014). They are more self-secure and are less likely to feel threatened by the successes of their followers (Owens & Hekman, 2013; Greenberg, 2005). Again, dominance complementarity theory would suggest that especially high competence followers will perform better under leaders who engage in humble leadership behaviors. This is because humble leadership allows leaders to step to the side and take a more submissive role when their followers have valuable strengths they can contribute to the task. Leaders who display humble leadership will give followers a chance to use their strengths and will publicly praise them for doing so (Owens et al., 2013). Again, this can be especially helpful for competent followers, because they will be more likely to have higher knowledge, skills, and abilities (KSA's) that humble leadership will allow them to fully utilize.

On the other side of the competence spectrum, less competent followers will likely benefit less from humble leadership. Prior research has found that followers expect leaders to be more agentic when there is a higher power distance between the two (Hu & Judge, 2017). It is likely that less competent follower would expect leaders to be more agentic when their competence level is lower and thus there is a greater distance between their competence and the leader's competence. They might benefit less from leaders who display less agentic behaviors. Therefore, the positive relationship between humble leadership and follower outcomes is likely to be stronger when followers are high in competence than when they are low in competence.

Not only will follower competence likely moderate the direct relationship between humble leadership, but, like follower proactivity, follower competence is also likely to moderate the indirect relationship between humble leadership and follower outcomes through empowerment. Both individuals high in competence and individuals low in cognitive ability will feel empowered through humble leadership. But because perceived competence is one of the aspects of empowerment (Thomas & Velthouse, 1990) those high in competence will likely experience greater feelings of empowerment. Also, these higher competence employees will likely be more motivated by this empowerment. This higher level of motivation will occur because they already have the competence required and need the autonomy that could come to them through humble leadership. Also, as mentioned above, followers who perceive a substantial distance between themselves and their leaders often expect their leaders to engage in more agentic leadership behaviors and perform better when they do so (Hu & Judge, 2017). Thus, less competent followers may not even want high levels of empowerment. Therefore, I expect

follower competence to moderate both the direct relationship between humble leadership and follower outcomes as well as the indirect relationship between humble leadership and follower outcomes through feelings of empowerment.

Hypothesis 3: Follower competence moderates the direct relationship between humble leadership and a) leader satisfaction and b) follower task performance. The positive relationship between humble leadership and leader satisfaction (follower task performance) will be strongest when followers are low in competence.

Hypothesis 4: Follower competence moderates the indirect relationship between humble leadership and a) leader satisfaction and b) follower task performance, through empowerment. The positive relationship between humble leadership and leader satisfaction (follower performance) will be strongest when followers are low in competence.

Similarity-Attraction

Above, I explained how dominance complementarity theory might help us understand why humble leadership could be more or less effective depending on the proactivity and competence of the followers. Another theory that can explain why humble leadership works better for some followers than for others is similarity-attraction theory. Similarity-attraction theory suggests that followers will perform better under leaders to have similar attitudes as they do (Felfe & Schyns, 2010; Walter & Bruch, 2008; Ehrhart & Klein, 2001). Therefore, if followers have a tendency to always want to learn and grow and see their leader modeling teachability, those followers will be more likely to respect their leader, which can lead to higher levels of leader satisfaction and

higher levels of follower task performance. Below, I explain how, based on similarity-attraction theory, I would expect humble leadership to work better for followers who are high in humility, LGO, openness to experience, and agreeableness.

Learning Goal Orientation

Humble leadership involves displaying teachability (Owens et al., 2013) and being open to feedback (Ou et al., 2014; Krumrei-Mancuso). Humble leaders should admit mistakes and apologize to followers when appropriate (Basford et al., 2014). By doing so, humble leaders signal to followers that it is alright to make mistakes. Humble leaders also indicate that is it important to admit mistakes so they can be corrected. Humble leaders will focus on the growing opportunities through mistakes and not just concentrate on the errors. Humble people appreciate others and recognize that they also have strengths and weaknesses (Ou et al., 2014). Thus, one of the key aspects of humility is that humble people judge both themselves and others accurately and equitably. They acknowledge that everyone has strengths and everyone has weaknesses and can keep the strengths and weakness of both themselves and others in proper perspective. These aspects of humble leadership will especially help improve performance among employees with a high learning goal orientation. Individuals with a high learning goal orientation (LGO) have a strong desire to learn and grow (VandeWalle, 1997). They tend to be more intrinsically motivated (Elliott & Church, 1997) and value the learning process. This type of employee will perform well under humble leadership. Followers high in LGO are likely to be the more receptive to humble leadership behaviors than followers low in LGO. Thus, I expect that LGO moderates the relationship between humble leadership and follower outcomes.

A primary reason why humble leadership will be more effective for followers high in LGO is that there will be followers high in LGO will have a higher level of perceived PS fit. They will see that their leader is willing to model teachability. These followers will also see that humble leadership often focusing on learning and growing. Because followers high in LGO also place a high value on consistent improvement, there will be a high degree of value congruence between the leader and follower. Therefore, LGO is likely to moderate the indirect relationship between humble leadership and follower outcomes through PS fit.

Hypothesis 5: Follower LGO moderates the direct relationship between humble leadership and a) leader satisfaction and b) follower task performance. The positive relationship between humble leadership and leader satisfaction (follower task performance) will be strongest when followers are high in LGO.

Hypothesis 6: Follower LGO moderates the indirect relationship between humble leadership and a) leader satisfaction and b) follower task performance, through PS fit. The positive relationship between humble leadership and leader satisfaction (follower performance) will be strongest when followers are high in LGO.

Openness to Experience

Openness to experience is one of the Big 5 personality traits and involves an active imagination, aesthetic sensitivity, attentiveness to inner feelings, preference for variety, and intellectual curiosity (Costa & McCrae, 1992). Individuals high in openness to experience are often creative (McCrae, 1987), curious (Furnham & Chamorro-Premuzic, 2008), and have a high need for cognition (Fleischhauer, Enge, Brocke,

Ullrich, Strobel, & Strobel, 2010). Leaders who demonstrate humble leadership seek honest feedback (Ou et al., 2014) and are willing to change their viewpoints (Krumrei-Mancuso & Rouse, 2016). These behaviors will likely be especially valued by employees high in openness to experience. If leaders seek feedback and are open to new ideas, employees high in openness to experience will be able to better utilize their creative and curious tendencies. Because leaders who engage in humble leadership behaviors are open to and value new ideas, their leadership style will be especially appealing to followers high in openness according to similarity-attraction theory.

Because of their love of rules and structure, followers low in openness to experience may prefer a more autocratic leadership style – they might want their leaders to tell them what to do. While autocratic leadership is generally seen as bad (Van Vugt & De Cremer, 1999; Neilsen & Miller, 1997; Samuelson & Messick, 1986), previous research has shown that in some circumstances, such as when followers have low self-esteem and are asked to perform an uncertain task, followers prefer an autocratic leader (e.g., Schoel, Bluemke, Mueller, & Stahlberg, 2011). This preference is because autocratic leaders often appear to minimize uncertainty about a particular task or project.

Humble leadership is very different than autocratic leadership. Leaders who display humble leader acknowledge their shortcomings and recognize the presence of uncertainty in tasks their teams are completing (Owens & Hekman, 2012). However, some followers may not like or respond well to humble leadership. Those who are less open and want more structure, may not appreciate humble leadership. Therefore, humble leadership is likely to be most effective when followers are high in openness to experience.

Like follower LGO, follower openness to experience likely also moderates the indirect relationship between humble leadership and follower outcomes through followers' perceived PS fit. Humble leadership involves being open to new ideas and suggestions and valuing the input of followers. Followers high in openness have similar traits and will experience value congruence when working under a leader using humble leadership. Therefore, I believe that the relationship between humble leadership and follower outcomes will be strongest when followers are high in openness to experience.

Hypothesis 7: Follower levels of openness to experience moderates the direct relationship between humble leadership and a) leader satisfaction and b) follower task performance. The positive relationship between humble leadership and leader satisfaction (follower task performance) will be strongest when followers are high in openness to experience.

Hypothesis 8: Follower ambiguity aversion moderates the indirect relationship between humble leadership and a) leader satisfaction and b) follower task performance, through PS fit. The positive relationship between humble leadership and leader satisfaction (follower performance) will be strongest when followers are high in openness to experience.

Agreeableness

Agreeableness is another Big 5 personality trait and includes trust, straightforwardness, altruism, compliance, modesty, and tender-mindedness (Costa, McCrae, & Dye, 1991). Followers high in agreeableness have been shown to perform better under non-angry leaders, as opposed to followers low in agreeableness who work harder and perform better when leaders display anger, at least in the short-term (Van

Kleef et al., 2010). While leaders demonstrating humble leadership still express anger and directness when the situation requires (Owens & Hekman, 2012), they are more prone to listen to their followers and be understanding in their leadership style. Thus, while they might get angry when necessary, leaders who display humble leadership would be less likely to simply use anger as a stress-release valve. Therefore, I would expect for followers high in agreeableness benefit more from humble leadership than follower low in agreeableness.

I would also expect that follower agreeableness would moderate the indirect relationship between humble leadership and follower outcomes through increased person-supervisor (PS) fit. Agreeable followers are likely to see much more of a fit between themselves and a humble leadership instead of themselves and a non-humble leader. Therefore, the indirect relationship between humble leadership and follower outcomes that are most affected by the extent to which followers are agreeable is the indirect relationship that goes through PS fit.

Hypothesis 9: Follower agreeableness moderates the direct relationship between humble leadership and a) leader satisfaction and b) follower task performance. The positive relationship between humble leadership and leader satisfaction (follower task performance) will be strongest when followers are high in agreeableness.

Hypothesis 10: Follower agreeableness moderates the indirect relationship between humble leadership and a) leader satisfaction and b) follower task performance, through PS fit. The positive relationship between humble leadership

and leader satisfaction (follower performance) will be strongest when followers are high in agreeableness.

Extraversion, Emotional Stability, and Conscientiousness

While I have made hypotheses for two of the Big 5 personality traits (openness to experience and agreeableness), I have not proposed hypotheses for the other three Big 5 traits (extraversion, emotional stability, and conscientiousness). It is difficult to determine whether followers low in extraversion or high in extraversion would perform better under a humble leader. It might be that humble leadership works best for extroverted followers because dominance complementary theory suggests that a working relationship often works best when one party is more dominant and one party is more submissive (Kiesler, 1983; Carson, 1969; Grant et al., 2011). In this case, humble leadership would often be more submissive than other types of leadership so the dominant (i.e. extraverted) followers would complement this leadership style best. However, perhaps introverts would better appreciate and respect the humble leadership style and therefore perform better under humble leadership. Therefore, I will make no a priori predictions about how extraversion, emotional stability, and conscientiousness moderate the relationship between humble leadership and follower outcomes, but I will measure these three personality variables in my lab study and will run post hoc analyses to see if and how these traits interact with humble leadership.

Research Question 1: How does the emotional stability of the follower moderate the relationship between humble leadership and a) leader commitment and b) follower task performance?

Research Question 2: How does the emotional stability of the follower moderate the relationship between humble leadership and a) leader commitment and b) follower task performance?

Research Question 3: How does the emotional stability of the follower moderate the relationship between humble leadership and a) leader commitment and b) follower task performance?

Leader Experience

Above I focused on how particular follower characteristics will likely moderate the relationships between humble leadership and follower outcomes. Next, I will describe one leader characteristic, experience, that will also likely moderate the relationship between humble leadership and follower characteristics. In their qualitative paper, Owens and Hekman (2012) noted that leader experience will likely influence the effectiveness of humble leadership behaviors. However, no quantitative research has looked at how experience level might moderate the relationship between humble leadership and follower outcomes. Leader experience is difficult to test in the field, because of so many confounding variables (e.g., age, length of relationships with subordinates). Therefore, one of the contributions of my lab study is that I will manipulate leader experience to better understand how it influences the effectiveness of humble leadership.

This is an especially valuable contribution because it is important to see if there is the potential for humble leadership to stunt the growth of leaders, especially for young leaders. Previous qualitative research has suggested that younger leaders believe that they will be penalized for expressing humility in leadership situations (e.g., Owens & Hekman, 2012). This might create a situation where individual only benefit from humble

leadership only after having obtained positions and experience because they were afraid to use humble leadership beforehand. Therefore, it is important to quantitatively test whether or not leader experience influences the effectiveness of humble leadership.

Leader experience is an important variable because followers will interpret leader behavior differently depending on their experience level. When a leader high in experience displays humble leadership, followers will likely attribute that behavior to their leader's humility. However, when a leader low in experience demonstrates humble leadership, followers will likely attribute that behavior to a lack of competence (Owens & Hekman, 2012). Therefore, it is likely that leader experience moderates the relationship between humble leadership and follower behavior.

Hypothesis 11: Leader experience moderates the direct relationship between humble leadership and a) leader satisfaction and b) follower task performance. The positive relationship between humble leadership and leader satisfaction (follower task performance) will be strongest when leaders are more experienced.

Three-Way Interactions

Finally, I hypothesize some three-way interactions. Thus far, I have explained how particular follower traits will likely moderate the relationship between humble leadership and follower outcomes. I have also hypothesized that leader experience will moderate the relationship between humble leadership and follower outcomes. There will also likely be some interaction effects between humble leadership, follower traits, and leader experience onto follower outcomes. While low leader experience will likely minimize the benefits of humble leadership, followers who will already not react to humble leadership as strongly (i.e. less proactive followers, less competent followers,

followers lower in LGO, etc.) are likely to be more affected by experience level than those who will tend to see humble leadership in a more positive light.

Hypothesis 12: There will be a three-way interaction between humble leadership, leadership experience, and follower proactivity in predicting a) leader satisfaction and b) follower task performance. Proactive followers will minimize the negative relationship between inexperienced humble leaders and leader satisfaction (follower task performance) leader satisfaction.

Hypothesis 13: There will be a three-way interaction between humble leadership, leadership experience, and follower competence in predicting a) leader satisfaction and b) follower task performance. More competent followers will minimize the negative relationship between inexperienced humble leaders and leader satisfaction (follower task performance).

Hypothesis 14: There will be a three-way interaction between humble leadership, leadership experience, and follower LGO in predicting a) leader satisfaction and b) follower task performance. The negative relationship between inexperienced humble leaders and leader satisfaction (follower task performance) leader satisfaction will be minimized by high in LGO.

Hypothesis 15: There will be a three-way interaction between humble leadership, leadership experience, and follower openness to experience in predicting a) leader satisfaction and b) follower task performance. The negative relationship between inexperienced humble leaders and leader satisfaction (follower task performance) leader satisfaction will be minimized by followers high in openness to experience.

Hypothesis 16: There will be a three-way interaction between humble leadership, leadership experience, and follower agreeableness onto a) leader satisfaction and b) follower task performance. Agreeable followers will minimize the negative relationship between inexperienced humble leaders and leader satisfaction (follower task performance) leader satisfaction.

CHAPTER 3: STUDY DESIGN

In order to test my hypotheses, I developed a lab study that allowed me to manipulate humble leadership. By testing my hypotheses using a lab study, I was able to manipulate humble leadership in order to better understand how the effectiveness of humble leadership behaviors depends, in part, on how humble leadership behaviors interact with follower characteristics. A lab study also allowed me to manipulate leader experience and rule out alternative explanations of why leader experience influence humble leadership effectiveness. Finally, a lab study allowed me to better study the mediating variables in the model.

In the experiment, participants were required to complete a marketing analysis. In order to manipulate both humble leadership and leader experience, I had a trained actor be the session leader. The same actor was used for all of the lab sessions. My study design was a 2 x 2 factorial design. These conditions are shown in Table 6 below. In condition 1, the session leader had a high level of experience and displayed humble leadership. In condition 2, the session leader had a low level of experience and displayed humble leadership. In condition 3, the leader had a high level of experience and did not display humble leadership. In condition 4, the leader had a low level of experience and did not display humble leadership.

Table 6

Experimental Conditions

Humble Leadership?	Level of Experience	
	High	Low

Yes	Condition 1	Condition 2
No	Condition 3	Condition 4

Manipulation Pilot Study

In order to ensure a high-quality humble leadership manipulation, I first conducted a pilot study to test my manipulation. Before conducting my pilot test, I met with five trained graduate students to brainstorm an effective manipulation. I also studied the manipulations used by Rego et al. (in press) and Owens and Hekman (2016) to come up with the manipulations for my pilot study and my main study. Rego and colleagues (in press) used a vignette to look at how participants' anticipated levels of psychological safety would be affected by having a humble vs. non-humble leader. Owens and Hekman (2016) used a lab study and found that teams who had a humble leader also had higher levels of collective humility and more team collective promotion focus. As mentioned above, both studies looked at team-level dependent variables. I know of no previous studies that have looked at individual-level outcomes using a vignette or lab study.

For my pilot study, I used 39 participants from a separate Principles of Management class. The participants were randomly separated into one of two conditions. In one of the conditions, the participants read a scenario about a humble leader. In the other condition, participants read a scenario about a transactional leader. In both conditions, after reading the scenario, participants then filled out a survey that measured the leader's humility, agreeableness, likeability, and politeness.

The vignette and survey for the humble leadership condition are shown in Appendix H. The vignette and survey for the non-humble leadership condition is shown in Appendix I. I then conducted a *t*-test in order to evaluate the effectiveness of the

manipulation check. I also examined the extent to which the humble leader was seen as more agreeable, likable, and polite. The results are shown below in Tables 7 and 8.

Table 7

Pilot-study Means, Standard Deviations, Correlations, and Reliabilities

	M	*SD*	1	2	3	4	5
1. Condition	1.46	.51	-				
2. Humility	6.30	.62	-.88**	(.96)			
3. Agreeableness	4.30	1.17	.63**	.76**	(.92)		
4. Likeability	5.81	1.54	.60**	.79**	.85**	(.95)	
5. Politeness	6.10	1.44	.67**	.80**	.67**	.80**	-

Note. $N = 39$; alpha reliabilities are presented in parentheses; *M* = Mean; *SD* = Standard Deviation; Condition – 1 = Humble; 2 = Non-humble.
**$p < .01$.

Table 8

Pilot-study t-test

	Humble Condition		Non-Humble Condition		*t*-test
	M	*SD*	*M*	*SD*	*t*-test
Humble Leadership	6.30	.62	3.28	1.06	10.59***
Agreeableness	4.30	1.17	2.72	1.29	4.87***
Likeability	5.81	1.54	4.06	1.28	4.52***
Politeness	6.10	1.44	3.89	1.56	5.51***

Note. $N = 39$; *M* = Mean; *SD* = Standard Deviation.
***$p < .001$.

As expected, the participants rated the humble leader as higher in humility. They also rated the leader as higher in agreeableness, likeability, and politeness. However, the

t-test results for humility were much stronger than for agreeableness, likeability, and politeness.

Participants

Participants were recruited from two undergraduate Principles of Management courses at the University of Oklahoma's Price College of Business. To recruit participants, I attended class early in the semester and invited students to participate in the study. To help entice students to participate, extra credit was given to all students who participated. The study was optional and was not a requirement for the class (the recruiting script is included in Appendix A). I emailed out a link to all students where they were able to sign up for a study time. The link in the email directed students to a SuperSaaS sign-up page. SuperSaaS is an online system that allows users to schedule lab times with a free account. Each 1.5-hour session was able to hold up to 10 participants. In order to accommodate a variety of student schedules, the study was conducted at various times and on various days of the week. In total, I conducted 23 lab sessions over a three-week period between September 26 and October 23. To calculate the number of participation I needed per condition, I assumed a power level of 80%, an alpha level of .05, and an effect size of .35. Based on these assumptions, I needed 44 participants for each of the four conditions, which adds up to 176 participants in total. I ended up having 182 participants for my main study.

Procedures

The study was conducted in Michael F. Price Hall 2046 (2 sessions) and Michael F. Price Hall 3046 (21 sessions). The rooms looked identical and were in the same location of the building, but on separate floors. Once students arrived for the study, I, as

the lab assistant, had them sit down in front of a laptop computer and fill out the pre-task survey (See Appendix F for the pre-study survey). This survey was approximately 100 questions long, and students were given 15 minutes to complete the survey. I checked out these computers in advance from the Information Technology Center of the Business school. Once the lab session started, I closed the door and no additional students were allowed to participate in the study. After all students have completed the survey, I explained that the lab session was being done to get student feedback on a marketing situation. I also explained that the session leader would introduce himself and tell students about his background. In order to further distinguish between the conditions, I also gave the students an introduction about the leader that differed based on the condition. Depending on the condition, the leader either had a background showing a high experience level regarding marketing or a low experience level regarding marketing. I then left the room and the session leader entered.

The session leader was a trained graduate student who had been instructed to display humble leadership behaviors or competitive leadership behaviors depending on the manipulation. He was trained about humble leadership behaviors and was instructed to act based on the manipulation principles shown in Appendix B. He had also been trained to give the students a background introduction about himself which either reflected a high or low degree of experience depending on the condition. After the session leader had given participants a background about himself, he introduced the first task that participants were required to do as part of the lab session. Also, during this introduction stage, the leader either displayed high levels of humble leadership or low levels of humble leadership. The session leader informed the participants that they need

to complete each task in 8 minutes. After the first task, the session leader went around the room and asked the participants what they wrote down for the first task. The session leader then introduced the second task. The second task was similar to the first task. To increase motivation with the task, participants were informed that the top 20% of all students on the second task would receive gift cards worth $15. After the time to complete the task had expired, the session leader asked participants to stop working on the task and the session leader instructed them to complete the post-task survey. After participants had completed the post-task survey, they were free to leave.

Pre-Task Survey Measures

Model Variables

Proactive personality. Proactive personality was measured with Seibert et al.'s (2001) nine-item scale. Responses were made on a seven-point Likert scale (1 = *disagree strongly*, 7 = *agree strongly*). A sample item was, "I am always looking for better ways to do things."

Competence. In order to measure competence, I asked participants to provide their SAT or ACT scores. For students who only gave an SAT score, I used a score converter in order to convert their SAT score to a comparable ACT score.

Learning Goal Orientation. Learning goal orientation was measured using VandeWalle et al.'s (2001) four-item scale. Responses were made on a seven-point Likert scale (1 = *disagree strongly*, 7 = *agree strongly*). A sample item was, "I truly enjoy learning for the sake of learning." Although I did not hypothesize about achievement and avoidance orientation, I also measured these two scales for some post hoc tests. The scale

for achievement orientation was four items and the scale for avoidance orientation was five items.

Conscientiousness. Conscientiousness was measured using a ten-item scale from the International Personality Item Pool (IPIP; Goldberg, Johnson, Eber, Hogan, Ashton, Cloninger, & Gough, 2006). Participants indicated how accurately each statement reflected their personality using a seven-point Likert scale (1 = *disagree strongly*, 7 = *agree strongly*). A sample item was, "I am always prepared."

Extraversion. Extraversion was measured with Goldberg et al.'s (2006) ten-item IPIP scale of extraversion. Participants indicated how accurately each statement reflected their personality using a seven-point Likert scale (1 = *disagree strongly*, 7 = *agree strongly*). A sample item was, "I am the life of the party."

Openness to experience. Openness to experience was measured with Goldberg et al.'s (2006) ten-item IPIP scale of openness to experience. Participants indicated how accurately each statement reflected their personality using a seven-point Likert scale (1 = *disagree strongly*, 7 = *agree strongly*). A sample item was, "I have a vivid imagination."

Emotional stability. Emotional stability was measured with Goldberg et al.'s (2006) ten-item IPIP scale of emotional stability. Participants indicated how accurately each statement reflected their personality using a seven-point Likert scale (1 = *disagree strongly*, 7 = *agree strongly*). A sample item was, "I am relaxed most of the time."

Agreeableness. Agreeableness was measured Goldberg et al.'s (2006) ten-item IPIP scale of agreeableness. Participants indicated how accurately each statement reflected their personality using a seven-point Likert scale (1 = *disagree strongly*, 7 = *agree strongly*). A sample item was, "I am interested in people."

Control Variables

I controlled for academic achievement through GPA.

Post-Task Survey Measures

Manipulation checks

Humble Leadership. As a manipulation check, humble leadership was measured using Owens et al.'s (2013) nine-item scale. Responses were made on a seven-point Likert scale (1 = *disagree strongly*, 7 = *agree strongly*). A sample item was, "This person acknowledges when others have more knowledge and skills than himself."

Leader Experience. In order to do a manipulation check on leader experience, the following three questions were asked: (1) "I feel as if the session leader is highly experienced." (2) "My session leader had the experience necessary to help me." (3) "My leader was qualified to help us." Items were measured using a seven-point Likert scale (1 = *disagree strongly*, 7 = *agree strongly*).

Model Variables

Empowerment. Empowerment was measured using the Srivastava, Bartol, and Locke (2006) 15-item scale. A sample item was, "My leader treats work group members as equals." Items were measured using a seven-point Likert scale (1 = *disagree strongly*, 7 = *agree strongly*).

Person-Supervisor Fit. In order to measure PS fit, I used the three-item scale used by Kim and Kim (2013). Responses were made on a seven-point Likert scale (1 = *disagree strongly*, 7 = *agree strongly*). A sample item was, "My personal values match my supervisor's values."

Leader Satisfaction. Leader satisfaction was measured based on the four-item satisfaction scale used by Dineen, Noe, Shaw, Duffy, and Wiethoff (2007). I changed the word "team" to "leader" on all items of the scale to reflect leader satisfaction as opposed to team satisfaction. An example item was, "All in all, I am satisfied with my leader." Items were measured using a seven-point Likert scale (1 = *disagree strongly*, 7 = *agree strongly*).

Other Measured Variables

Perceived Leader Effectiveness. I also measured perceived leader effectiveness as a variable to use in my post hoc analyses. In order to measure perceived leader effectiveness, I used the five-item scale used by van Knippenberg and van Knippenberg (2005). An example item was, "This leader is a good leader." Items will be measured using a seven-point Likert scale (1 = *disagree strongly*, 7 = *agree strongly*).

Expected Budget vs. Actual Expenses

Table 9

Proposed Budget

Cost Source	Calculations	Totals
Participant Pay (20% of Participants)	36 people paid $15 gift card = $540	$540
Confederate Pay	$10 per hour Training = 6 hours Running 30 sessions = 45 hours	$510
Raters to Assess Recommendations	180 recommendations at $2 each	$360
Printing	Printing $500	$500
Other	(Unanticipated costs, 10% of total $1910)	$191
GRAND TOTAL		**$2101**

Table 10

Actual Budget

Cost Source	Calculations	Totals
Participant Pay (20% of Participants)	36 people paid $15 = $540	$540
Confederate Pay	$10 per hour Training = 4 hours Running 23 sessions = 28.75 hours	$328
Raters to Assess Recommendations	177 recommendations at $1 each x 2 reviewers	$354
Printing	Printing $500	$90
Other	(Unanticipated costs, 10% of total $1910)	$15
GRAND TOTAL		**$1327**

CHAPTER 4: RESULTS

Table 11 shows means, standard deviations, correlations, and reliabilities (where appropriate) for the variables in my study. Because my hypotheses were all interaction effects, I mean centered my independent variables in order to decrease multicollinearity and increase the interpretability of the beta weights in my correlation tables (Aiken & West, 1991). I also mean centered leader satisfaction in order to provide a meaningful zero. Below I show the results for all of my 16 hypotheses. All indirect effects were tested using the PROCESS macro (Preacher & Hayes, 2014) and used 5,000 bootstraps. In order to test the effectiveness of the manipulations I used in my experiment, I used a one-way analysis of variance test to show that the participants in my study rated session leader in the humble conditions higher on humble leadership than the leader in the non-humble conditions and that the participants rated the session leader in the experienced condition higher on leader experience. The results for the humble leadership manipulation showed that the means in the humble condition ($M = 6.03$) were significantly higher than in the non-humble condition ($M = 5.31$, $p < .001$), suggesting that my humble leadership manipulation was effective. Likewise, for leader experience, the means in the high experience condition ($M = 6.37$) were significantly higher than in the low experience condition ($M = 5.27$, $p < .001$), which suggested that my leader experience manipulation was also effective.

Table 11

Means, Standard Deviations, Correlations, and Reliabilities for all Variables.

	M	SD	(1)	(2)	(3)	(4)	(5)
1. Humility	.5	.50	-				
2. Experience	.48	.50	.07	-			
3. Follower Task Performance	2.74	1.27	**-.17***	-.05	-		
4. Leader Satisfaction	.00	.84	**.15***	**.15***	.05	*(.81)*	
5. Empowerment	.00	.75	**.32****	**.22****	.00	**.67****	*(.90)*
6. PS Fit	.00	.96	**.21****	**.21****	-.04	**.36****	**.61****
7. Perceived Leader Effectiveness	.00	1.03	**.24****	**.21****	-.06	**.63****	**.70****
8. Leader Likeability	.00	.88	**.27****	.11	-.13	**.66****	**.70****
9. Leader Politeness	.00	.86	**.18***	.07	-.06	**.65****	**.62****
10. Follower Extraversion	.00	1.13	.05	.03	.10	**.23****	**.17***
11. Follower Agreeableness	.00	.82	-.02	.11	.04	**.36****	**.27****
12. Follower Conscientiousness	.00	.87	.07	-.08	.02	**.21****	**.21****
13. Follower Emotional Stability	.00	1.04	.08	-.05	-.05	**.20****	**.18***
14. Follower Openness	.00	.72	.03	-.04	.12	**.15***	**.17***
15. Follower Proactive Personality	.00	.93	-.03	.13	.01	**.27****	**.26****
16. Follower LGO	.00	.65	.05	.05	-.04	.10	**.17***
17. Follower Age	21.15	1.85	-.12	.04	.05	-.01	.10
18. Follower Sex (1 = M; 2 = F)	1.36	.48	-.07	.13	.14	**.20****	.09
19. Follower ACT	26.52	3.46	-.13	-.10	**.18***	-.05	.02
20. Follower GPA	3.33	.37	-.01	-.12	.02	-.08	-.07
21. Past Marketing Classes	.36	.62	.06	.01	**-.15***	.02	-.05
22. Current Marketing Classes	.57	.64	**-.15***	**.15***	.02	-.01	-.10
23. Total Marketing Classes	.93	.87	-.06	.12	-.09	-.06	-.11
24. Major (1=Marketing; 2=Other)	1.87	.34	.11	-.03	.05	.01	.01
25. Nationality (0=US; 1=Other)	.11	.31	-.07	-.02	-.02	**-.33****	**-.16***

Table 11 Continued

	(6)	(7)	(8)	(9)	(10)	(11)	(12)
1. Humility							
2. Experience							
3. Follower Task Performance							
4. Leader Satisfaction							
5. Empowerment							
6. PS Fit	*(.84)*						
7. Perceived Leader Effectiveness	**.55****	*(.80)*					
8. Leader Likeability	**.46****	**.72****	-				
9. Leader Politeness	**.36****	**.60****	**.81****	-			
10. Follower Extraversion	**.18***	.10	**.24****	**.19****	*(.91)*		
11. Follower Agreeableness	-.02	**.16***	**.27****	**.29****	**.29****	*(.82)*	
12. Follower Conscientiousness	.06	**.16***	**.25****	**.23****	.01	.13	*(.82)*
13. Follower Emotional Stability	.11	.07	.10	.10	**.23****	.14	**.17***
14. Follower Openness	-.01	.01	.08	.18*	**.28****	**.39****	**.15***
15. Follower Proactive Personality	**.22****	**.23****	**.27****	**.28****	**.34****	**.26****	**.26****
16. Follower LGO	.12	.06	.07	.08	.00	.00	.10
17. Follower Age	.11	.03	.02	.02	-.08	.04	-.11
18. Follower Sex (1 = M; 2 = F)	.05	.11	.11	.10	-.03	**.25****	-.03
19. Follower ACT	-.01	-.09	-.15	-.06	.00	-.05	-.09
20. Follower GPA	**-.15***	-.09	-.04	.00	**-.15***	.05	**.20****
21. Past Marketing Classes	.09	-.01	.00	-.50	.00	.11	-.09
22. Current Marketing Classes	-.05	-.06	-.08	-.07	.03	-.01	-.12
23. Total Marketing Classes	.03	-.04	-.06	-.09	.02	.07	**-.15***
24. Major (1=Marketing; 2=Other)	-.02	.03	-.03	.05	-.07	-.13	.00
25. Nationality (0=US; 1=Other)	.00	-.11	**-.27****	**-.29****	**-.16***	**-.16***	**-.20****

Table 11 Continued

	(13)	(14)	(15)	(16)	(17)	(18)	(19)
1. Humility							
2. Experience							
3. Follower Task Performance							
4. Leader Satisfaction							
5. Empowerment							
6. PS Fit							
7. Perceived Leader Effectiveness							
8. Leader Likeability							
9. Leader Politeness							
10. Follower Extraversion							
11. Follower Agreeableness							
12. Follower Conscientiousness							
13. Follower Emotional Stability	*(.87)*						
14. Follower Openness	.11	*(.73)*					
15. Follower Proactive Personality	.13	**.40****	*(.85)*				
16. Follower LGO	**-.18***	.04	**.22****	*(.89)*			
17. Follower Age	**-.15***	.03	-.08	-.10	-		
18. Follower Sex (1 = M; 2 = F)	**-.19***	-.06	-.02	.04	-.10	-	
19. Follower ACT	.12	.14	**-.19***	.05	.07	-.07	-
20. Follower GPA	-.09	.00	.01	**.20****	**-.26****	.11	**.17***
21. Past Marketing Classes	-.10	.00	-.06	-.03	**.21****	.13	.00
22. Current Marketing Classes	-.11	-.13	-.06	.07	-.10	.14	.02
23. Total Marketing Classes	**-.15***	-.09	-.09	.04	.08	.19**	.01
24. Major (1=Marketing; 2=Other)	.04	.00	.08	.02	.09	-.33**	.01
25. Nationality (0=US; 1=Other)	**-.15***	**-.20****	-.02	-.08	**.18***	**-.11**	.12

Table 11 Continued

	(20)	(21)	(22)	(23)	(24)	(25)
1. Humility						
2. Experience						
3. Follower Task Performance						
4. Leader Satisfaction						
5. Empowerment						
6. PS Fit						
7. Perceived Leader Effectiveness						
8. Leader Likeability						
9. Leader Politeness						
10. Follower Extraversion						
11. Follower Agreeableness						
12. Follower Conscientiousness						
13. Follower Emotional Stability						
14. Follower Openness						
15. Follower Proactive Personality						
16. Follower LGO						
17. Follower Age						
18. Follower Sex (1 = M; 2 = F)						
19. Follower ACT						
20. Follower G.P.A.	-					
21. Past Marketing Classes	-.12	-				
22. Current Marketing Classes	-.10	-.04	-			
23. Total Marketing Classes	-.09	**.68****	**.71****	-		
24. Major (1=Marketing; 2=Other)	-.08	**-.21****	**-.44****	**-.47****	-	
25. Nationality (0=US; 1=Other)	-.06	.11	.02	.09	-.02	-

Note. N = 183; M = Mean; SD = Standard Deviation; alpha reliabilities are presented in parentheses; significant correlation are in bold.
*$p < .05$.
**$p < .01$.

Hypothesis Testing

Dominance Complementarity Hypotheses

Hypothesis 1. Hypothesis 1a predicted that follower proactivity moderates the direct relationship between humble leadership and leader satisfaction. This hypothesis was supported in Table 12 (b = .43, p < .01, Δr^2 = .03). The interaction graph is shown below in Figure 3. Hypothesis 1b predicted that follower proactivity moderates the direct relationship between humble leadership and leader satisfaction but was not supported in Table 12 (b = -.03, *ns*, Δr^2 = .00).

Hypothesis 2. Hypothesis 2a predicted that follower proactivity moderates the indirect relationship between humble leadership and leader satisfaction through empowerment. Hypothesis 2b predicted that follower proactivity moderates the indirect relationship between humble leadership and follower task performance through empowerment. As indicated in Table 12, the interaction between humble leadership and follower proactive personality significantly predicted empowerment (b = .34, p < .01, Δr^2 = .03). The moderated mediation was significant for Hypothesis 2a. Table 13 shows that the 90% confidence interval for the relationship between humble leadership and leader satisfaction through empowerment is significant when followers are high (.33, .88) or average (.25, .52) in proactivity, but not when they are low in proactivity (-.07, .39). The moderated mediation was not significant for Hypothesis 2b. The 90% confidence interval in Table 14 shows that the relationship between humble leadership and follower task performance through empowerment is not significant when follower are high (-.05, .26), medium (-.03, .19), or low (-.01, .17) in proactive personality.

Table 12

Humble Leadership x Follower Proactivity

Dependent Variable	Leader Satisfaction		Follower Task Performance		Empowerment	
Constant	.46	.53	2.72**	2.73**	-.21	.27
Controls						
G.P.A	-.18	-.20	.06	.06	-.14	-.15
Independent variables						
Humility	.27*	.25*	-.41*	-.41*	.49**	.48**
Proactivity	.35**	.13	.09	.08	.30**	.13
Interactions						
Humility x Ability		.43**		-.03		.34
R^2	.12	.15	.03	.03	.19	.21
ΔR^2		.03**		.00		.03**

Note. N = 183 for Leader Satisfaction and Empowerment; N=177 for Follower Task Performance.
*$p < .05$.
**$p < .01$.

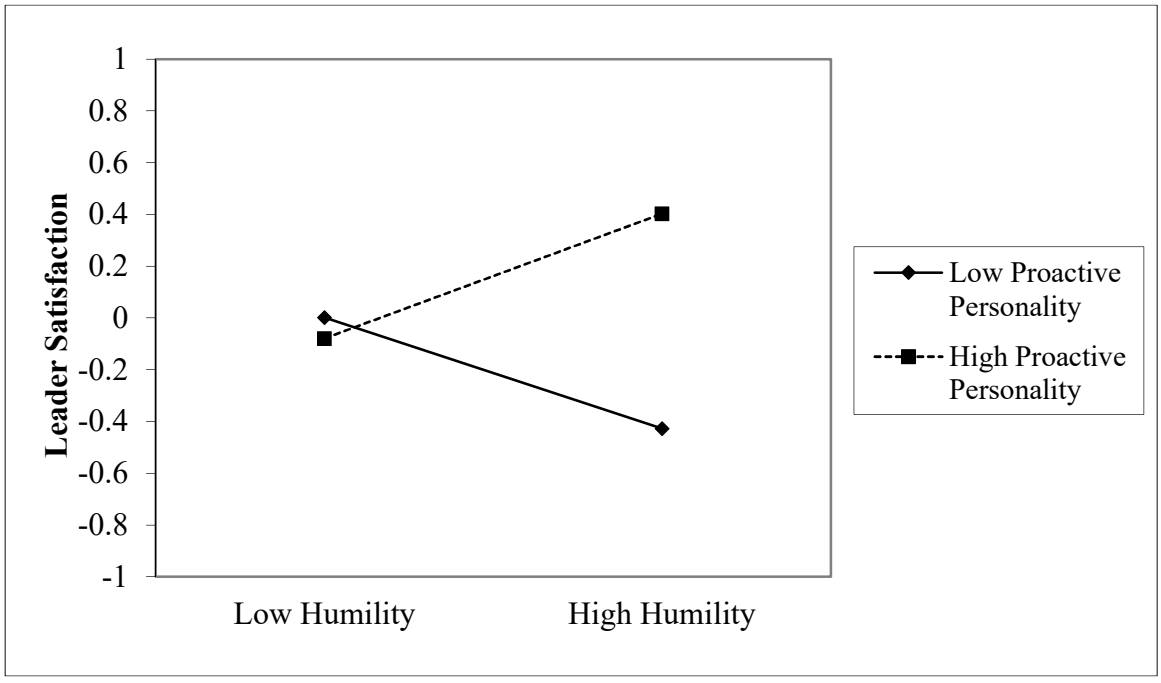

Figure 3. The interaction between humble leadership and follower proactive personality on leader satisfaction

Table 13

Indirect Effects of Humble Leadership x Follower Proactivity onto Leader Satisfaction through Empowerment

				90% CI	
Moderator	Value of Moderator	Conditional indirect effect	*SE*	Lower	Upper
Proactive Personality	-1 SD (-.70)	.19	*.14*	-.07	.39
	M (.03)	.37	*.08*	.25	.52
	+1 SD (.76)	.56	*.16*	.33	.88

Note. $N = 183$

Table 14

Indirect Effects of Humble Leadership x Follower Proactivity onto Follower Task Performance through Empowerment

				90% CI	
Moderator	Value of Moderator	Conditional indirect effect	*SE*	Lower	Upper
Proactive Personality	-1 SD (-.71)	.03	*.06*	-.01	.17
	M (.02)	.05	*.07*	-.03	.19
	+1 SD (.75)	.08	*.09*	-.05	.26

Note. $N = 177$

Hypothesis 3. Hypothesis 3a predicted that follower cognitive ability moderates the relationship between humble leadership and leader satisfaction. Hypothesis 3b predicted that follower cognitive ability moderates the relationship between humble leadership and follower task performance. As shown in Table 15, neither Hypothesis 3a ($b = -.02$, *ns*, $\Delta r^2 = .00$) nor 3b ($b = -.02$, *ns*, $\Delta r^2 = .00$) were supported.

Hypothesis 4. Hypothesis 4a predicted that follower cognitive ability moderates the indirect relationship between humble leadership and leader satisfaction through empowerment. Hypothesis 4b predicted that follower cognitive ability moderates the

indirect relationship between humble leadership and follower task performance through empowerment. The interaction did not significantly predict empowerment, as shown in Table 15 (b = -.04, *ns*, Δr^2 = .01). The moderated mediation was not significant for Hypothesis 4a. The 90% confidence interval in Table 16 shows that relationship between humble leadership and leader satisfaction through empowerment is significantly positive when followers are high (.24, .57), medium (.18, .43), and low (.04, .41) in cognitive ability. Thus, cognitive ability does not moderate the relationship. The moderated mediation was not significant for Hypothesis 4b either. The 90% confidence interval in Table 17 shows that the relationship between humble leadership and follower task performance through empowerment is not significant when follower are high (-.04, .30), medium (-.03, .22), or low (-.01, .20) in cognitive ability.

Table 15

Humble Leadership x Follower Cognitive Ability

Dependent Variable	Leader Satisfaction		Follower Task Performance		Empowerment	
Constant	.60	.31	1.67	1.47	-.04	-.54
Controls						
G.P.A	-.13	-.12	-.02	-.02	-.14	-.14
Independent variables						
Humility	.15	.76	-.66	-.25	.44**	1.53*
Cognitive Ability	-.01	.00	.06**	.06	-.14	-.14
Interactions						
Humility x Ability		-.02		-.02		-.04
R^2	.02	.02	.09	.09	.10	.11
ΔR^2		.00		.00		.01

Note. N = 151 for Leader Satisfaction and Empowerment; N=146 for Follower Task Performance.
*$p < .05$.
**$p < .01$.

Table 16

Indirect Effects of Humble Leadership x Follower Cognitive Ability onto Leader Satisfaction through Empowerment

				90% CI	
Moderator	Value of Moderator	Conditional indirect effect	*SE*	Lower	Upper
Cognitive Ability (ACT Score)	-1 SD (23.0)	.39	*.10*	.24	.57
	M (26.5)	.29	*.08*	.18	.43
	+1 SD (29.9)	.20	*.11*	.04	.41

Note. N = 151

Table 17

Indirect Effects of Humble Leadership x Follower Cognitive Ability onto Follower Task Performance through Empowerment

				90% CI	
Moderator	Value of Moderator	Conditional indirect effect	*SE*	Lower	Upper
Cognitive Ability (ACT Score)	-1 SD (23.0)	.09	*.10*	-.04	.30
	M (26.4)	.07	*.08*	-.03	.22
	+1 SD (29.9)	.05	*.06*	-.01	.20

Note. N=146

Similarity-Attraction Hypotheses

Hypothesis 5. Hypothesis 5a predicted that follower LGO moderates the relationship between humble leadership and leader satisfaction. Hypothesis 5b predicted that follower LGO moderates the relationship between humble leadership and follower task performance. Neither Hypothesis 5a (b = -.01, *ns*, Δr^2 = .00) nor 5b (b = -.15, *ns*, Δr^2 = .01) were supported in Table 18.

Hypothesis 6. Hypothesis 6a predicted that follower LGO moderates the indirect relationship between humble leadership and leader satisfaction through PS Fit. Hypothesis 6b predicted that follower LGO moderates the indirect relationship between humble leadership and follower task performance through PS Fit. The interaction between leader humility and follower LGO was not a significant predictor of PS Fit in Table 18 (b = .00, *ns*, Δr^2 = .00). The moderated mediation was not significant for Hypothesis 6a. The 90% confidence interval in Table 19 shows that relationship between humble leadership and leader satisfaction through PS Fit is significantly positive when followers are high (.03, .27), medium (.06, .23), and low (.04, .25) in LGO. Thus, LGO does not moderate the relationship. The moderated mediation was not significant for Hypothesis 6b either. The 90% confidence interval in Table 20 shows that the relationship between humble leadership and follower task performance is not significant when follower are high (-.11, .06), medium (-.08, .06), or low (-.09, .05) in LGO.

Table 18

Humble Leadership x Follower Learning Goal Orientation (LGO)

Dependent Variables	Leader Satisfaction		Follower Task Performance		PS Fit	
Constant	.66	.66	2.75**	2.77**	1.05	1.05
Controls						
G.P.A	-.24	-.24	.05	.05	-.38*	-.38*
Independent variables						
Humility	.25*	.25*	-.41*	-.41*	.42**	.42**
LGO	.10*	.10*	.01	.09	.00	.00

Interactions						
Humility x LGO		-.01		-.15		.00
R^2	.05	.05	.03	.03	.07	.07
ΔR^2		.00		.01		.00

Note. N = 183 for Leader Satisfaction and PS Fit; N=177 for Follower Task Performance.
*$p < .05$.
**$p < .01$.

Table 19

Indirect Effects of Humble Leadership x Follow LGO onto Leader Satisfaction through PS Fit

				90% CI	
Moderator	Value of Moderator	Conditional indirect effect	*SE*	Lower	Upper
LGO	-1 SD (-1.23)	.12	*.06*	.04	.25
	M (.03)	.12	*.05*	.06	.23
	+1 SD (1.28)	.13	*.07*	.03	.27

Note. N=183

Table 20

Indirect Effects of Humble Leadership x Follow LGO onto Follower Task Performance through PS Fit

				90% CI	
Moderator	Value of Moderator	Conditional indirect effect	*SE*	Lower	Upper
LGO	-1 SD (-1.26)	-.01	*.04*	-.09	.05
	M (.00)	-.01	*.04*	-.08	.06
	+1 SD (1.27)	-.01	*.05*	-.11	.06

Note. N=177

Hypothesis 7. Hypothesis 7a predicted that follower openness moderates the relationship between humble leadership and leader satisfaction. Hypothesis 7b predicted that follower openness moderates the relationship between humble leadership and

follower task performance. Neither Hypothesis 7a (b = -.04, *ns*, Δr^2 = .00) nor 7b (b = .25, *ns*, Δr^2 = .00) were supported in Table 21.

Hypothesis 8. Hypothesis 8a predicted that follower openness moderates the indirect relationship between humble leadership and leader satisfaction through PS Fit. Hypothesis 8b predicted that follower openness moderates the indirect relationship between humble leadership and follower task performance through PS Fit. The interaction between leader humility and follower openness was not a significant predictor of PS Fit in Table 21 (b = .09, *ns*, Δr^2 = .00). The moderated mediation was not significant for Hypothesis 8a. The 90% confidence interval in Table 22 shows that relationship between humble leadership and leader satisfaction through PS Fit is significantly positive when followers are high (.01, .26), medium (.06, .23), and low (.06, .27) in openness. Thus, openness does not moderate the relationship. The moderated mediation was not significant for Hypothesis 8b either. The 90% confidence interval in Table 23 shows that the relationship between humble leadership and follower task performance is not significant when follower are high (-.09, .05), medium (-.08, .07), or low (-.10, .07) in openness.

Table 21

Humble Leadership x Follower Openness

Dependent Variables	Leader Satisfaction		Follower Task Performance		PS Fit	
Constant	.46	.46	2.74**	2.70**	1.05	1.04
Controls						
G.P.A	-.18	-.18	.06	.07	-.38*	-.38*
Independent variables						

Humility	.24	.24	-.42*	-.42*	.42**	.42**
Openness	.18*	.16	.25	.38*	-.02	.03
Interactions						
Humility x Openness		-.04		-.25		-.09
R^2	.05	.05	.05	.05	.07	.07
ΔR^2		.00		.00		.00

Note. N = 183 for Leader Satisfaction and PS Fit; N=177 for Follower Task Performance.
*$p < .05$.
**$p < .01$.

Table 22.

Indirect Effects of Humble Leadership x Follow Openness onto Leader Satisfaction through PS Fit

				90% CI	
Moderator	Value of Moderator	Conditional indirect effect	*SE*	Lower	Upper
Openness	-1 SD (-.71)	.14	*.06*	.06	.27
	M (.01)	.12	*.05*	.06	.23
	+1 SD (.73)	.10	*.07*	.01	.26

Note. N=183

Table 23.

Indirect Effects of Humble Leadership x Follow Openness onto Follower Task Performance through PS Fit

				90% CI	
Moderator	Value of Moderator	Conditional indirect effect	*SE*	Lower	Upper
Openness	-1 SD (-.72)	-.01	*.05*	-.10	.07
	M (.00)	-.01	*.04*	-.08	.07
	+1 SD (.72)	-.01	*.04*	-.09	.05

Note. N=177

Hypothesis 9. Hypothesis 9a predicted that follower agreeableness moderates the relationship between humble leadership and leader satisfaction. Hypothesis 9b predicted

that follower agreeableness moderates the relationship between humble leadership and follower task performance. Neither Hypothesis 9a (b = -.04, *ns*, Δr^2 = .00) nor 9b (b = .25, *ns*, Δr^2 = .00) were supported in Table 24.

Hypothesis 10. Hypothesis 10a predicted that follower agreeableness moderates the indirect relationship between humble leadership and leader satisfaction through PS Fit. Hypothesis 10b predicted that follower agreeableness moderates the indirect relationship between humble leadership and follower task performance through PS Fit. The interaction between leader humility and follower agreeableness was not a significant predictor of PS Fit in Table 24 (b = -.02, *ns*, Δr^2 = .00). The moderated mediation was not significant for Hypothesis 10a. The 90% confidence interval in Table 25 shows that relationship between humble leadership and leader satisfaction through PS Fit is significantly positive when followers are high (.03, .28), medium (.06, .23), and low (.03, .27) in agreeableness. Thus, agreeableness does not moderate the relationship. The moderated mediation was not significant for Hypothesis 10b either. The 90% confidence interval in Table 26 shows that the relationship between humble leadership and follower task performance is not significant when follower are high (-.09, .06), medium (-.08, .06), or low (-.11, .05) in agreeableness.

Table 24

Humble Leadership x Follower Agreeableness

Dependent Variables	Leader Satisfaction		Follower Task Performance		PS Fit	
Constant	.57	.57	2.74**	2.72	.29	1.05
Controls						
G.P.A	-.21	-.21	.06	.06	-.16	-.38*

Independent variables						
Humility	.26*	.26	-.40	-.40	.48**	.42**
Agreeableness	.38**	.40	.06	.12	.25**	.01
Interactions						
Humility x Agreeableness		-.02		-.10		-.02
R^2	.16	.02	.03	.03	.07	.07
ΔR^2		.00		.00		.00

Note. N = 183 for Leader Satisfaction and PS Fit; N=177 for Follower Task Performance.
*$p < .05$.
**$p < .01$.

Table 25

Indirect Effects of Humble Leadership x Follow Agreeableness onto Leader Satisfaction through PS Fit

				90% CI	
Moderator	Value of Moderator	Conditional indirect effect	*SE*	Lower	Upper
Agreeableness	-1 SD (-.81)	.13	*.07*	.03	.27
	M (.01)	.12	*.05*	.06	.23
	+1 SD (.82)	.12	*.07*	.03	.28

Note. N=183

Table 26

Indirect Effects of Humble Leadership x Follow Agreeableness onto Follower Task Performance through PS Fit

				90% CI	
Moderator	Value of Moderator	Conditional indirect effect	*SE*	Lower	Upper
Agreeableness	-1 SD (-.82)	-.01	*.05*	-.11	.05
	M (.01)	-.01	*.04*	-.08	.06
	+1 SD (.83)	-.01	*.04*	-.09	.06

Note. N=177

Leader Experience Hypotheses

Hypothesis 11. Hypothesis 11 predicted that leader experience moderates the relationship between both (a) leader satisfaction and (b) follower task performance. Hypothesis 11a was not supported in Table 27 (b = .05, *ns*, Δr^2 = .00). Hypothesis 11b was supported (b = .91, $p < .05$, Δr^2 = .03). The interaction graph is shown below in Figure 4.

Table 27

Humble Leadership x Leader Experience

Dependent Variables	Leader Satisfaction		Follower Task Performance	
Constant	.23	*.28*	2.80**	3.04**
Controls				
G.P.A	-.14	*-.14*	.05	.04
Independent variables				
Humility	.23	*.15*	-.41*	-.84**
Experience	.23	*.14*	-.08	-.54*
Interactions				
Humility x Experience		*.18*		.91*
R^2	.05	.05	.03	.06
ΔR^2		.00		.03*

Note. N = 183 for Leader Satisfaction; N=177 for Follower Task Performance.
*$p < .05$.
**$p < .01$.

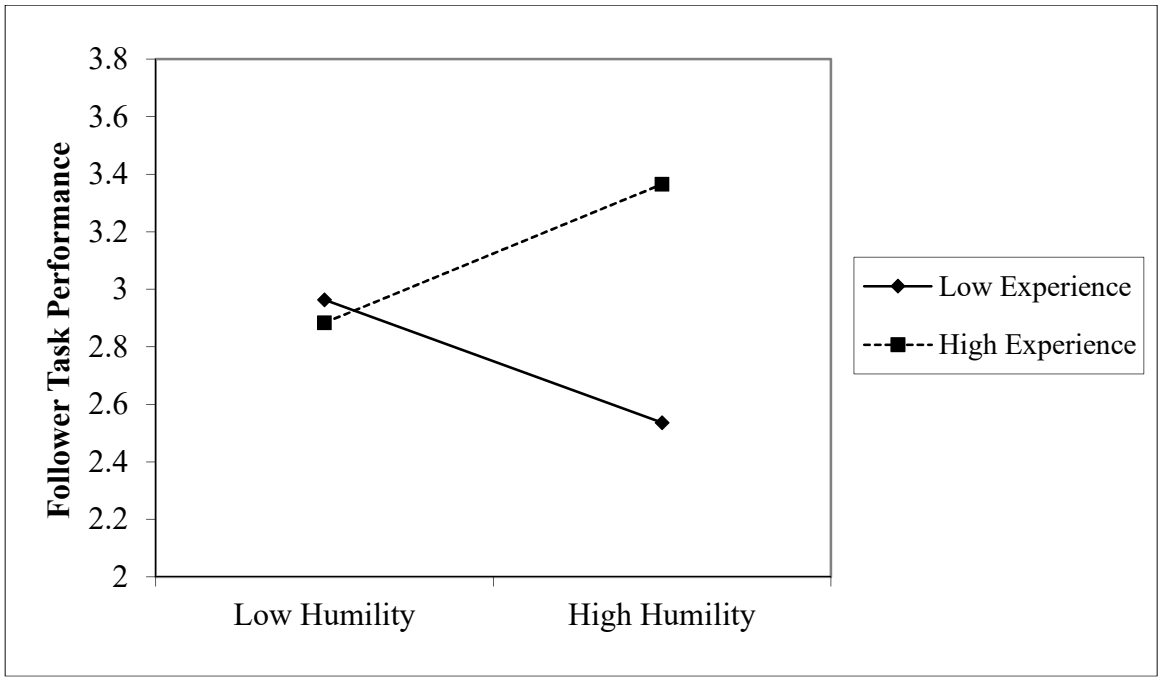

Figure 4. The interaction between humble leadership and leader experience on follower task performance

Three-Way Interaction Hypotheses

Hypothesis 12. Hypothesis 12 predicted that there is a three-way interaction between humble leadership, leadership experience, and follower proactivity onto both (a) leader satisfaction and (b) follower task performance. Hypothesis 12a was supported, as shown in Table 28 (b = -.97, p < .01, Δr^2 = .04). The interaction graph is shown below in Figure 5. Hypothesis 11b was not supported (b = .63, *n.s.*, Δr^2 = .01).

Table 28

Humble Leadership x Leader Experience x Follower Proactivity

Dependent Variable	Leader Satisfaction		Follower Task Performance	
Constant	.38	.59	3.07**	2.91**

Controls				
G.P.A	-.17	-.23	.04	.09
Independent variables				
Leader Humility	.16	.18	-.85**	-.87**
Leader Experience	.12	.08	-.58*	-.56*
Proactivity	.25	.02	.19	.33
Two-way Interactions				
Humility x Experience	.15	.19	.94*	.91*
Humility x Proactivity	.42*	.85**	-.07	-.33
Experience x Proactivity	-.26	.21	-.07	-.38
Three-way Interactions				
Humility x Experience x Proactivity		-.97**		.63
R^2	.18	.22	.07	.07
ΔR^2		.04**		.01

Note. N = 183 for Leader Satisfaction; N=177 for Follower Task Performance.
*$p < .05$.
**$p < .01$.

Table 29

Effect of Proactive Personality on Leader Satisfaction by Condition

				90% CI	
Humility	Experience	Coefficient	*SE*	Lower	Upper
High	High	.11	*.17*	-.17	.40
High	Low	.87	*.15*	.63	1.11
Low	High	.23	*.16*	-.03	.50
Low	Low	.02	*.15*	-.23	.27

Note. N=183

Table 30

Effect of Proactive Personality on Follower Task Performance by Condition

				90% CI	
Humility	Experience	Coefficient	*SE*	Lower	Upper
High	High	.24	*.29*	-.25	.72
High	Low	-.01	*.24*	-.40	.39
Low	High	-.06	*.24*	-.40	.39

Low	Low	.33	*.25*	-.09	.74

Note. N=177

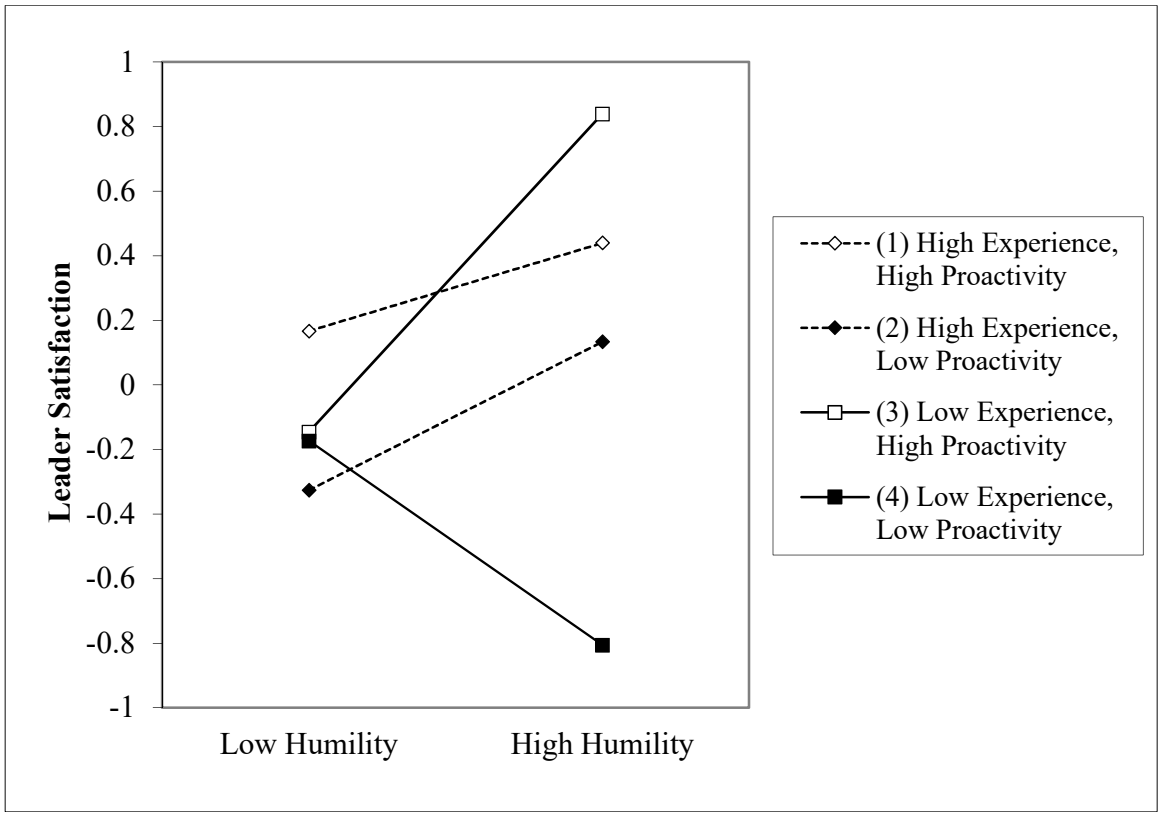

Figure 5. The three-way interaction between humble leadership, leader experience, and proactive personality

Hypothesis 13. Hypothesis 13 predicted that there is a three-way interaction between humble leadership, leadership experience, and follower cognitive ability onto both (a) leader satisfaction and (b) follower task performance. Hypothesis 13a (b = .16, p < .05, Δr^2 = .03) was significant below in Table 31. However, the effect was the opposite of what I had hypothesized since employees with lower cognitive ability benefited more

from humble leadership than employees with higher cognitive ability. The interaction is graphed below in Figure 6. Hypothesis 13b (b = -.03, *n.s.*, Δr^2 = .00) was not supported.

Table 31

Humble Leadership x Leader Experience x Follower Cognitive Ability

Dependent Variable	Leader Satisfaction		Follower Task Performance	
Constant	1.08	-.05	2.59	2.81
Controls				
G.P.A	-.01	.04	-.01	-.02
Independent variables				
Leader Humility	.66	3.14*	-.97	-1.45
Leader Experience	-2.03*	-.25	-1.95	-2.30
Cognitive Ability	-.04	-.01	.03	.02
Two-way Interactions				
Humility x Experience	-.25	-3.97*	1.04*	1.84
Humility x Cognitive Ability	-.02	-.12*	-.01	.01
Experience x Cognitive Ability	.08*	.01*	.05	.06
Three-way Interactions				
Humility x Experience x Cognitive Ability		.16*		-.03
R^2	.07	.10	.14	.14
ΔR^2		.03*		.00

Note. N = 151 for Leader Satisfaction; N=146 for Follower Task Performance.
*p < .05.
**p< .01.

Table 32

Effect of Cognitive Ability on Leader Satisfaction by Condition

				90% CI	
Humility	Experience	Coefficient	*SE*	Lower	Upper
High	High	.05	*.03*	.00	.11
High	Low	-.12	*.04*	-.19	-.05
Low	High	.01	*.03*	-.04	.06

Low	Low	-.01	*.03*	-.06	.05

Note. $N = 183$.

Table 33

Effect of Cognitive Ability on Follower Task Performance by Condition

				90% CI	
Humility	Experience	Coefficient	*SE*	Lower	Upper
High	High	.07	*.06*	-.03	.16
High	Low	.04	*.07*	-.09	.16
Low	High	.08	*.05*	-.01	.17
Low	Low	.02	*.06*	-.08	.13

Note. $N = 177$.

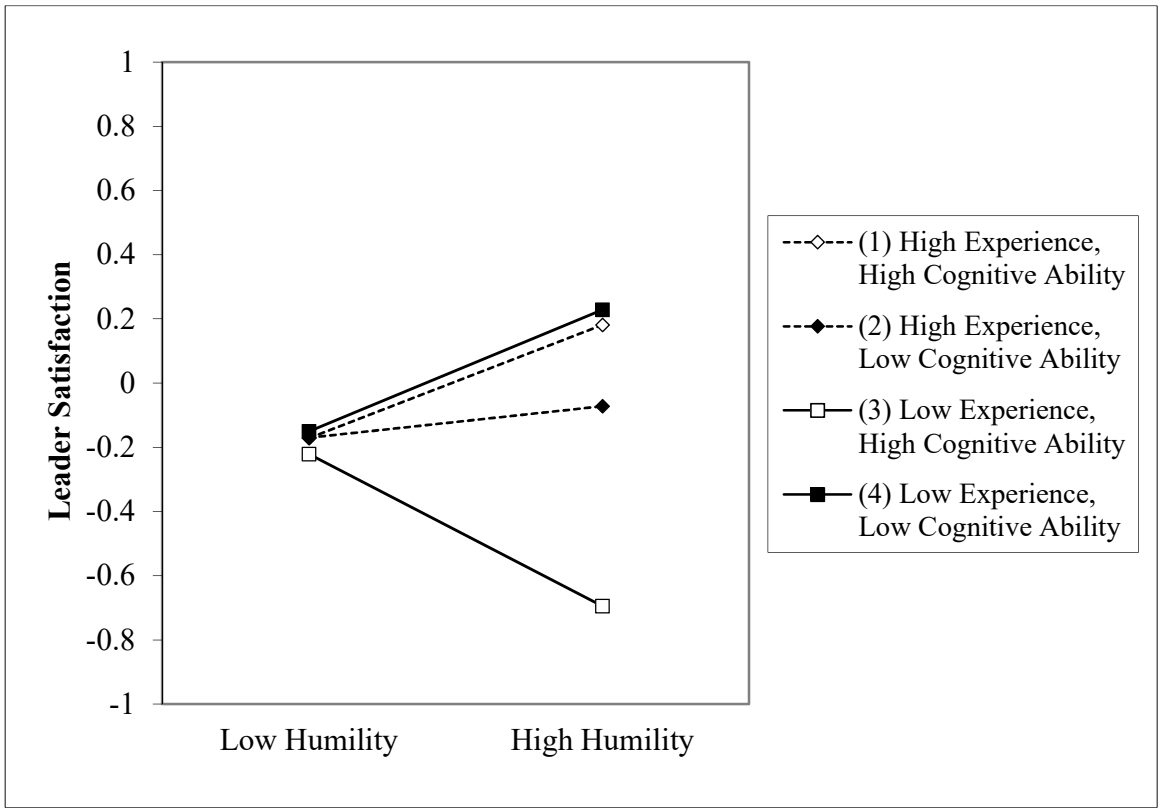

Figure 6. The three-way interaction between humble leadership, leader experience, and follower cognitive ability

Hypothesis 14. Hypothesis 14 predicted that there is a three-way interaction between humble leadership, leadership experience, and follower LGO onto both (a) leader satisfaction and (b) follower task performance. Hypothesis 14a (b = -.68, p < .05, Δr^2 = .02) was significant (see Table 34 below). Hypothesis 14b (b = .05, p < .05, Δr^2 = .03) was supported and is shown in Figure 9 below.

Table 34

Humble Leadership x Leader Experience x Follower LGO

Dependent Variable	Leader Satisfaction		Follower Task Performance	
Constant	.47	.47	3.11**	3.09**
Controls				
G.P.A	-.20	-.20	.02	.03
Independent variables				
Leader Humility	.11	.11	-.85**	-.82**
Leader Experience	.14	.14	-.55*	-.55*
LGO	.22**	.19*	.16	.32*
Two-way Interactions				
Humility x Experience	.21	.22	.90*	.89*
Humility x LGO	.04*	.12	-.12	-.49*
Experience x LGO	-.25*	-.19	-.14	-.46*
Three-way Interactions				
Humility x Experience x LGO		-.14		.68*
R^2	.11	.11	.07	.10
ΔR^2		.00		.03*

Note. N = 183 for Leader Satisfaction; N=177 for Follower Task Performance.
*p < .05.
**p< .01.

Table 35

Effect of Follower LGO on Leader Satisfaction by Condition

				90% CI	
Humility	Experience	Coefficient	*SE*	Lower	Upper
High	High	-.02	*.09*	-.17	.13
High	Low	.30	*.11*	.12	.48
Low	High	.00	*.10*	-.16	.16
Low	Low	.19	*.09*	.04	.34

Note. $N = 177$.

Table 36.

Effect of Follower LGO on Follower Task Performance by Condition

				90% CI	
Humility	Experience	Coefficient	*SE*	Lower	Upper
High	High	.04	*.14*	-.18	.27
High	Low	-.17	*.16*	-.44	.10
Low	High	-.15	*.15*	-.39	.10
Low	Low	.32	*.14*	.08	.55

Note. $N = 177$.

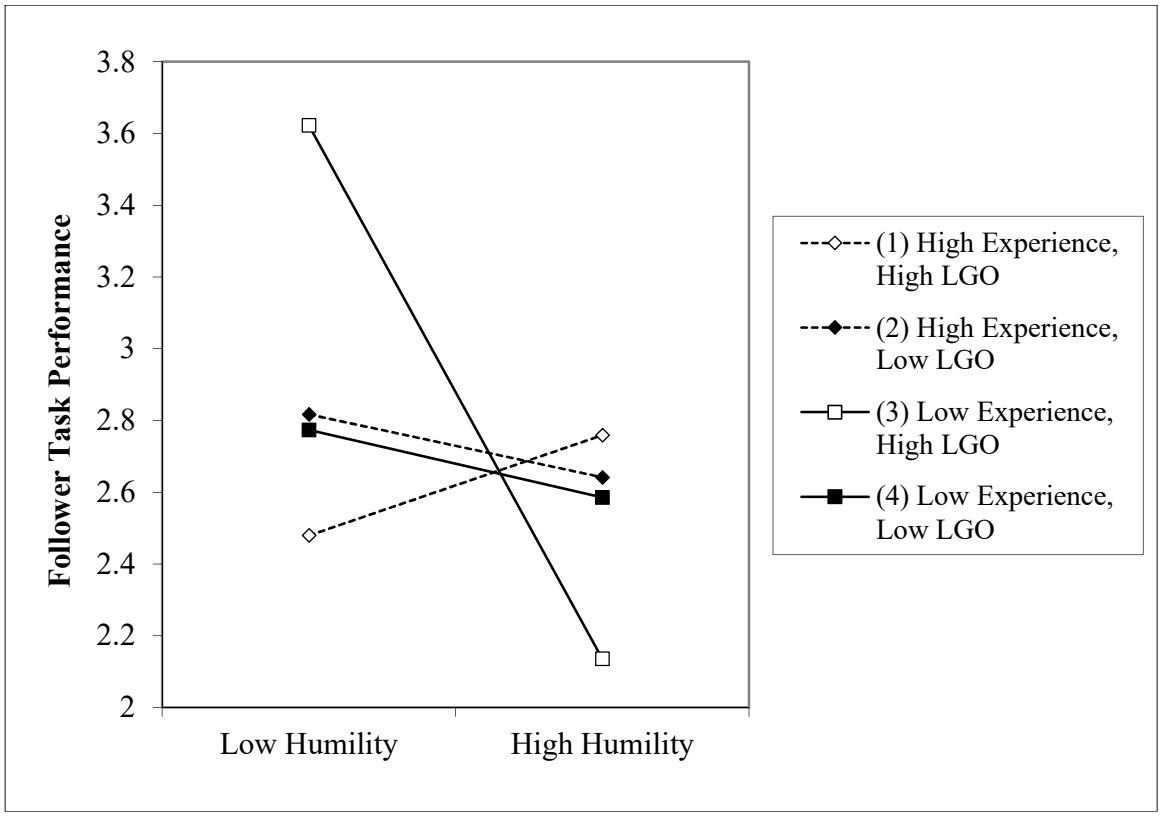

Figure 7. The three-way interaction between humble leadership, leader experience, and follower cognitive ability

Hypothesis 15. Hypothesis 15 predicted that there is a three-way interaction between humble leadership, leadership experience, and follower openness onto both (a) leader satisfaction and (b) follower task performance. Neither Hypothesis 15a nor Hypothesis 15b was supported in Table 37 below.

Table 37

Humble Leadership x Leader Experience x Follower Openness

Dependent Variable	Leader Satisfaction		Follower Task Performance	
Constant	.35	.37	2.95**	2.92**

Controls				
G.P.A	-.16	-.17	.07	.08
Independent variables				
Leader Humility	.11	.11	-.84**	-.83**
Leader Experience	.14	.14	-.52	-.52
Openness	.28	.22	.23	.30
Two-way Interactions				
Humility x Experience	.22	.22	.89*	.89*
Humility x Openness	.07	.21	-.24	-.38
Experience x Openness	-.24	-.12	.28	.14
Three-way Interactions				
Humility x Experience x Openness		-.26		.29
R^2	.09	.09	.09	.09
ΔR^2		.00		.00

Note. N = 183 for Leader Satisfaction; N=177 for Follower Task Performance.
*$p < .05$.
**$p < .01$.

Table 38

Effect of Follower Openness on Leader Satisfaction by Condition

				90% CI	
Humility	Experience	Coefficient	*SE*	Lower	Upper
High	High	.05	*.16*	-.21	.32
High	Low	.43	*.19*	.12	.74
Low	High	.10	*.17*	-.18	.38
Low	Low	.22	*.17*	-.06	.50

Note. N = 177.

Table 39

Effect of Follower Openness on Follower Task Performance by Condition

				90% CI	
Humility	Experience	Coefficient	*SE*	Lower	Upper
High	High	.34	*.24*	-.06	.74
High	Low	-.08	*.28*	-.55	.38

Low	High	.44	*.27*	-.01	.88
Low	Low	.30	*.26*	-.12	.72

Note. $N = 177$.

Hypothesis 16. Hypothesis 16 predicted that there is a three-way interaction between humble leadership, leadership experience, and follower proactivity onto both (a) leader satisfaction and (b) follower task performance. Neither Hypothesis 16a nor Hypothesis 16b was supported in Table 40 below.

Table 40

Humble Leadership x Leader Experience x Follower Agreeableness

Dependent Variable	Leader Satisfaction		Follower Task Performance	
Constant	.61	.62	3.04**	3.05**
Controls				
G.P.A	-.22	-.23	.04	.04
Independent variables				
Leader Humility	.13	.14	-.85**	-.84**
Leader Experience	.04	.03	-.59*	-.60*
Agreeableness	.53**	.45**	.14	.05
Two-way Interactions				
Humility x Experience	.23	.23	.95*	.96*
Humility x Agreeableness	-.02	.13	-.18	-.01
Experience x Agreeableness	-.02	-.13	.09	.28
Three-way Interactions				
Humility x Experience x Agreeableness		-.32		-.35
R^2	.20	.20	.07	.07
ΔR^2		.01		.00

Note. $N = 183$ for Leader Satisfaction; N=177 for Follower Task Performance.
*$p < .05$.
**$p < .01$.

Table 41

Effect of Proactive Personality on Leader Satisfaction by Condition

				90% CI	
Humility	Experience	Coefficient	*SE*	Lower	Upper
High	High	.15	*.13*	-.06	.36
High	Low	.59	*.14*	.36	.82
Low	High	.33	*.16*	.07	.59
Low	Low	.45	*.14*	.23	.68

Note. $N = 177$.

Table 42

Effect of Proactive Personality on Follower Task Performance by Condition

				90% CI	
Humility	Experience	Coefficient	*SE*	Lower	Upper
High	High	-.02	*.21*	-.37	.43
High	Low	.04	*.23*	-.34	.76
Low	High	.33	*.26*	-.10	.42
Low	Low	.05	*.23*	-.33	.32

Note. $N = 177$.

Overall Analysis of Significant Hypotheses

In my Hypothesis Development section, I listed 16 hypotheses for my study. Each hypothesis had an (a) and (b) part to account for my two dependent variables (leader satisfaction and follower task performance). Of my 16 hypotheses with leader satisfaction as a dependent variable, 4 were significant (Hypothesis 1a: humble leadership x follower proactive personality, Hypothesis 2a: humble leadership x follower proactive personality with feelings of empowerment as a mediator, Hypothesis 12a: humble leadership x leader experience x follower proactive personality, Hypothesis 13a: humble leadership x

leadership experience x follower cognitive ability). Of my 16 hypotheses with follower task performance as a dependent variable, 2 were significant (Hypothesis 11b: humble leadership x leader experience; and Hypothesis 14b: humble leadership x leader experience x follower LGO) and 1 was marginally significant (Hypothesis 2b: humble leadership x follower proactive personality with empowerment as a mediator). A summary of my hypotheses is shown below in Table

In my hypothesis development section, I broke my hypotheses down into four categories: dominance-complementarity hypotheses, similarity-attraction hypotheses, leader-experience hypotheses, and three-way-interactions hypotheses. Three of my eight dominance-complementarity hypotheses were supported (Hypotheses 1a, 2a, and 2b), none of my twelve similarity-attraction hypotheses were supported, one of my two leader-experience hypotheses were supported (Hypothesis 12b), and three of my ten three-way-interactions hypotheses were supported (Hypotheses 12a, 13a, and 14b).

Table 43

Summary of Significant Findings

Hypothesis	**To Leader Satisfaction**	**To Follower Task Performance**
H1 – Proactivity	**Significant**	Non-significant
H2 – Proactivity through Empowerment	**Significant**	Non-significant
H3 – Cognitive Ability	Non-significant	Non-significant
H4 – Cognitive Ability through Empowerment	Non-significant	Non-significant
H5 – LGO	Non-significant	Non-significant
H6 – LGO through PS Fit	Non-significant	Non-significant
H7 - Openness	Non-significant	Non-significant
H8 – Openness through PS Fit	Non-significant	Non-significant
H9 - Agreeableness	Non-significant	Non-significant

H10 – Agreeableness through PS Fit	Non-significant	Non-significant
H11 - Experience	Non-significant	**Significant**
H12 – 3-way with Proactivity	**Significant**	Non-significant
H13 – 3-way with Cognitive Ability	**Significant**	Non-significant
H14 – 3-way with LGO	Non-significant	**Significant**
H15 – 3-way with Openness	Non-significant	Non-significant
H16 – 3-way with Agreeableness	Non-significant	Non-significant

Exploratory Analyses

Although I did not make hypotheses for extraversion, emotional stability, or conscientiousness, I still tested these potential moderators in an exploratory manner. However, none of these variables were significant moderators for the direct or indirect relationships between humble leadership and leader satisfaction or follower task performance.

CHAPTER 5: DISCUSSION AND CONCLUSION

While humble leadership has been shown to be positively correlated with higher levels of job engagement (e.g., Owens & Hekman, 2012), follower empowerment (e.g., Jeung et al., 2016), job satisfaction (Owens et al., 2013), retention (Owens et al., 2013), and individual (Owens et al., 2013) and team (Rego et al., 2017; Owens et al., 2016; Rego et al., in press) performance, previous research has not fully explored how ollowers might react differently to humble leadership. In this study, I explored how follower personality variables moderate the relationship between humble leadership and follower outcomes. Below I discuss my findings and then highlight both the theoretical and managerial implications of my study. I also describe some limitations of my study along with potential directions for future research.

In order to test my model, I designed a lab experiment in which participants were exposed to a session leader who was a trained confederate. I, posing as a lab assistant, started each lab session by priming the participants and then introduced the session leader. Based on my instruction, the session leader either displayed humble or non-humble leadership behaviors. Additionally, the session leader exhibited either high or low marketing experience. The trained confederate altered his behavior for each condition.

The results of my lab experiment have important and valuable implications for both academics and managers. I found that proactive followers benefited more than non-proactive followers from having a leader who displayed humble leadership behaviors. Specifically, proactive personality moderated the effect of humble leadership on leader satisfaction. This interaction effect was also mediated by feelings of employment. Proactive followers were more likely to feel empowered by humble leadership, while less

proactive followers were not significantly affected by the humble leadership. These feelings of empowerment for proactive followers then led to higher levels of leader satisfaction. This moderation mediation effect was significant for leader satisfaction and marginally significant with regard to follower task performance.

I also found that leader experience moderates the relationship between humble leadership and follower task performance. Humble leadership did not have much of an effect on follower task performance when the leaders were high in experience, but humble leadership led to diminished task performance when leaders were low in experience. Followers felt more empowered when their leader displayed humble leadership, but they might have been less motivated when they had a leader with low experience who displayed humble leadership.

I also found some significant three-way interactions. First, there was a three-way interaction between humble leadership, leader experience, and proactive personality onto leader satisfaction. When leaders are high in experience, there is not much of a difference on how proactive vs. less proactive followers are affected by humble leadership. However, when leaders are low in experience, proactive employees like humble leaders significantly better than less proactive employees.

Second, there was a three-way interaction between humble leadership, leader experience, and follower cognitive ability onto leader satisfaction. Contrary to my hypothesis, participants with lower cognitive ability were more satisfied with humble leaders when the leader's experience was low. I had hypothesized that based on dominance-complementarity theory, followers high in cognitive ability would perform better under humble leadership, but it may be that followers high in cognitive ability are

the most likely interpret humble leadership behaviors as an indication of incompetence and are therefore less satisfied with the inexperienced leader who displays humble leadership behaviors. Finally, there was a three-ways interaction between humble leadership, leader experience, and follower learning-goal orientation onto leader satisfaction.

Surprisingly, I did not find that PS Fit mediated the indirect effects of my hypothesized interactions on my outcome variable (i.e. leader satisfaction and follower task performance). I had hypothesized that PS Fit would be a natural mediator between humble leadership and follower outcomes because some followers, such as followers high in agreeableness or openness to experience, might assume that they have value similarity with their leader when their leader displayed humble leadership. I also did not find any significant direct effects from the variables I hypothesized using similarity-attraction theory. I was also surprised that followers high in agreeableness or openness were not affected by humble leadership differently than non-agreeable or less open followers.

Also, although I was not specifically testing the main effects of humble leadership on my outcome variables, in my study humble leadership was positively correlated with leader satisfaction, but negatively correlated with follower task performance. I was surprised to see that humble leadership had a negative effect on follower task performance. Previous research has found that humble leadership is positively correlated with follower task performance (Rego et al., in press; Owens et al., 2016; Owens et al., 2013). However, previous research has also found that for some tasks followers respond better to more authoritative leaders. Humble leadership was positively correlated with

participants' feelings of empowerment, so followers did feel more empowered within the humble leader condition. But because there was not, the more competitive leader in the non-humble condition likely did a better job of motivating the employees to perform better. Although this finding was not what I was expecting, it is in line with Owen and Hekman's finding that humble leaders should not always be passive and lead in a participative manner. In fact, Owens and Hekman noted that sometimes in order to truly display humble leadership behaviors, a leader must evaluate the situation and sometimes act more assertively that he or she feels comfortable leading.

Theoretical Implications

Previous research has shown the benefit of humble leadership (e.g., Owens et al., 2012; Jeung & Yoon, 2016; Rego et al., in press). However, there is a scarcity of research looking at how different followers might react differently to humble leadership despite much research showing that the effectiveness of a particular leadership style often depends, in part, on the characteristics of the followers (Fielder, 1967; Grant et al., 2011; Van Kleef et al., 2010; Van Kleef et al., 2009). Therefore, the first theoretical contribution of my dissertation is showing which types of follower characteristics do affect humble leadership. I found that, in accordance with dominance-complementary theory (Grijalva & Harms, 2014; Tiedens et al., 2007; Kiesler, 1983; Carson, 1969), proactive followers prefer a leader who engages in humble leadership. This is similar to a previous study in the leadership literature, which found that proactive followers perform better under more introverted leaders (Grant et al., 2011). While having a leader who displays humble leadership behavior is not the same as having an introverted leader, proactive followers perform well under both leaders. My finding that proactive followers

benefit more from humble leadership may indicate that one reason that humble leadership is often a successful style is that leaders engaging in humble leadership behavior are more likely to acknowledge the strengths of followers (Owens et al., 2012; Owens & Hekman, 2013) and proactive employees prefer leaders who give them leeway to perform their tasks (Grant et al., 2011).

I used two main theoretical lenses when developing my hypotheses – dominance-complementarity theory (Grijalva & Harms, 2014; Grant et al., 2011; Tiedens et al., 2007; Kiesler, 1983; Carson, 1969) and similarity-attraction theory (Felfe & Schyns, 2010; Walter & Bruch, 2008; Ehrhart & Klein, 2001). Interestingly, while there were significant results for some of my hypotheses based on dominance-complementarity theory, none of the hypotheses I generated based on similarity-attraction theory were significant. While a lack of significant findings certainly does not disprove an effect, my results hint that dominance-complementarity theory is a more useful explanation of why humble leadership leads to good organizational outcomes and why some employees might benefit more from humble leadership than others.

My second theoretical contribution is to show how leader experience influences the effectiveness of humble leadership behaviors. Previous qualitative work had suggested that managers with less experience may need to be wary of displaying humble leadership behaviors because their humble leadership behavior might be interpreted as incompetence (e.g., Owens & Hekman, 2013). This dissertation has quantitative results that support that claim and offers further evidence that leaders with less experience may be punished for displaying humble leadership behaviors. I was able to further contribute to the knowledge of humble leadership by exploring some potential three-way

interactions between humble leadership, leader experience, and follower characteristics. My quantitative findings agree with the qualitative findings of Owens and Hekman and suggest that the amount of influence follower characteristics have on the effectiveness of humble leadership may be stronger when leaders are lower in experience.

My third contribution is to further explore mechanisms that can better help explain how humble leadership impacts follower outcomes. Initially, based on similarity-attraction theory (Felfe & Schyns, 2010; Walter & Bruch, 2008; Ehrhart & Klein, 2001), I hypothesized that PS Fit (Kristof-Brown et al., 2005) would mediate the relationship between humble leadership and follower outcomes. I did not find support for any of my hypotheses that included PS Fit as a mediator. However, although I was not able to find support for PS fit as a mediator between humble leadership and follower outcomes, I was able to extend the knowledge on empowerment as a mediator. Previous research has shown that one reason humble leadership can be effective is that followers usually feel more empowered when they have a humble leader (Jeung et al., 2016). My research extends these findings by showing that some types of followers are more likely to feel empowered by humble leadership than other followers. Specifically, I found that proactive employees especially tend to feel empowered when leaders display humble leadership.

The fourth aim of my study was to provide evidence for a causal relationship between humble leadership and follower task performance. Although prior research had used a lab experiment to examine how humble leadership affects team outcomes (e.g., Rego et al., in press; Owens & Hekman, 2016), I know of no previous research that has used a lab experiment to examine how humble leadership affects individual outcomes.

Therefore, I was able to contribute to the literature by exploring the causal relationship between humble leadership and follower task performance in a controlled environment. Although I was expected to find a positive relationship between humble leadership and follower task performance, I instead found a significant negative correlation (-.17) between humble leadership and follower task performance. I believe that this negative finding was due to the nature of the task the participants were asked to do and due to the relatively short length of time that the participants interacted with the leader in comparison to employees who usually have many interactions with their supervisors over a longer period of time. Although this relationship was the opposite of what I expected, this finding can contribute to the literature through sparking future research on what types of tasks and situations are most conducive to humble leadership behaviors. I believe that this finding further illustrates that although there are many good aspects of humble leadership (Owens et al., 2012), there are also important boundaries conditions for this type of leadership (Owens & Hekman, 2013).

Managerial Implications

Not only do these findings have important implications for academics, they have important implications for managers as well. While humble leadership helps followers feel more empowered and increase their task performance, these positive effects are stronger for some employees than for others. Proactive employees and employees high in learning-goal orientation are more likely to benefit from humble leadership. Thus, organizations would be wise to ensure that the managers who display humble leadership behaviors are assigned to groups of proactive employees who respond well to learning goals.

Followers in the study did not respond as well when their session leader was low in experience and displayed humble leadership behaviors. This is likely because followers often see humble leadership behaviors as signs of incompetence for less-experienced leaders (Owens & Hekman, 2013). Although future research is needed to better understand this phenomenon and how it can be avoided, managers with less experience should be cautious in how they display humble leadership behaviors in order to avoid undermining the perceptions of their abilities.

Limitations

One limitation is that this study used undergraduate business students and was performed in a laboratory setting. The business students were required to perform a marketing task that was designed to be more similar to actual organizational tasks when compared to other typical laboratory tasks. This lab setting also allowed for humble leadership to be studied in a much more controlled environment. Humble leadership is often measured using an other-report scale, which can introduce biases such as the Halo Effect. By studying humble leadership in a lab setting I was able to manipulate the humble leadership behaviors displayed by the session leader. However, future research could strengthen my findings by studying these questions in an organizational setting.

Also, although I did have a total of 183 participants, the sample size is another potential limitation of my study. Because my 183 participants were separated out into 4 conditions, there was only an average of 45.75 participants per condition. While this sample size was suitable to test many of my hypotheses, some of my hypotheses were more nuanced and included three-way interactions. A larger sample size with more statistical power may have shed further light on these proposed effects.

Finally, most of my significant findings were with the hypotheses that had follower satisfaction as a dependent variable, as opposed to follower task performance. One reason for this is because humble leadership was negatively correlated with task performance. As I mentioned above, this is likely due to the nature of the task, because humble leadership has shown to increase follower task performance (e.g., Owens et al., 2013; Rego et al., in press; Owens & Hekman, 2016). Future research could further explore my results using more objective dependent variables.

Future Research

This research also has important implications for future research. As mentioned above, one direction for future research is to attempt to replicate these findings in an organizational setting. This would extend the generalizability and external validity of my findings. Another avenue of future research would be to look at how other personality variables might moderate the relationship between humble leadership and follower outcomes. In my study, I looked at feelings of empowerment and PS fit as two potential mediators between humble leadership and follower outcomes. Future research could further explore other potential mediators between humble leadership and follower outcomes. For example, leader-member exchange (LMX) might be a significant mediator between humble leadership and important organizational outcomes. Gottfredson and Agunis (2017) found LMX to be the strongest mediator between leadership behaviors and follower and organizational outcomes. I was not able to properly test LMX in a lab setting, but future studies that use organizational samples could test this potentially important mediator.

Finally, my results suggested that less experienced leaders are less effective when they display humble leadership behavior. Future research could better explore way in which less experienced leaders might be able to utilize humble leadership. One aspect of humble leadership is modeling teachability (Owens et al., 2013). Therefore inexperienced leaders who display this teachability should be able to learn, receive feedback, and become better leaders. Another aspect of humble leadership is accurate self-appraisal. Accurate self-appraisal should help inexperienced and less-talented leaders better understand their strengths and weaknesses. Indeed, Owens et al. (2013) found that leaders with lower cognitive ability benefited more from humble leadership behaviors than leaders with higher cognitive ability. The authors believed that this effect was due to the leaders with lower cognitive ability to better understand their strengths and weaknesses through displaying humble leadership and then using this new knowledge to help themselves better develop as leaders.

Therefore, theoretically, it appears as though humble leadership behaviors have the potential to have long-term benefits for leaders with little experience. However, even if leaders have the potential to improve through humble leadership behaviors, they may be more apprehensive to display these behaviors if they are worried about the short-term negative effects of displaying such behaviors. Future research may be able to help researchers and managers better understand if and how managers can display humble leadership behaviors when they are relatively low on experience.

Conclusion

Humble leadership is an emerging research area that can help both academics and practitioners better understand effective leadership practices. This effective form of

leadership (Owens et al., 2013; Rego et al., 2017) can help improve both leaders (Ou et al., 2014) and followers (Rego et al., in press). However, most previous research has not looked at how different followers respond differently to this leadership style (see Jeung & Yoon for an exception). Therefore, in this study, I examined how follower personality traits influence the effectiveness of humble leadership. I found that proactive employees, employees with a learning-goal orientation, and employees with lower cognitive abilities were more likely to benefit from humble leaders. I also examined how leader experience influenced the effectiveness of humble leaders and found that leaders with less experience perform worse when display humble leadership. It is my hope that the findings of this study will inspire future researchers to shed further light on this interesting and important leadership style.

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APPENDIX A – Recruiting Advertisement Script

Hi, I'm Sam Matthews and I am a doctoral student here at OU. I am doing a lab study as part of my dissertation and am looking for volunteers. If you sign up and participation, Dr. Anderson (Prof. Burink) has agreed to give you 40 (15) points of extra credit. This is a good chance to get ahead in the course early in the semester.

The study will start on September 29th and will go until October 29th. There will be one or two session open a day. The study will last 1 hr 15 minutes. I will be sending out an email that gives a link to a website to sign up for the study. There are a limited amount of spots for each time slot so make sure you sign up as soon as possible. And feel free to email me if you have any questions about the study.

Thanks for your time!

APPENDIX B – Humble Leadership Manipulation Summary

Introductions

Humble Leader – Before we start, I'd like to go around the room and have everyone say their name and one unique perspective they would bring to a marketing think-tank.

Non-humble Leader – Before we start, I'd like to go around the room and have everyone say their name.

Second Interaction

Humble Leadership Dimension	**Humble Leader**	**Competitive Leader**
Accurate View of Self	"One thing I am good at is taking ideas and turning them into action. However, I could use help generating lots of ideas. That's something I am not quite as good at."	"One thing I am good at is taking ideas and turning them into action. Past student feedback has said that I am not very good at generating lots of ideas, but I don't believe it. I think I'm good at both."
Appreciation of Followers' Contributions	"I know that each of you have a unique background and will each be able to see this problem from a different background. That's why you input is so important to me. I really appreciate your help."	"I'll take your ideas into consideration, but just so you know, at the end of the day I'll be making the final decisions since I'm the one responsible for the project."
Modeling Teachability	"In the past we've had problems with understanding undergraduates. I realized that it was I wasn't getting enough feedback from your	"I'm really competitive and results oriented. Kinda like Baker Mayfield."

	group and have adapted so that I can hear from you."	

Third Interaction

Humble Leadership Dimension	Manipulation	
Accurate View of Self	"Again, generating a broad range of ideas is not my strong suit. However, I am quite good at taking ideas and putting them into action."	"I am quite good at taking ideas and putting them into action. In fact, I'm one of the best I know."
Appreciation of Followers' Contributions	"Thank you for what you submitted. I really appreciate it." "Again, I appreciate your help on this. Your contributions will lead to better idea generate and will help our company."	"Thank you - I received your submissions." "I'll pass your submissions along."
Modeling Teachability	"I realized that I hadn't been quite clear in my first instructions. But just to be clear, I am looking specifically at how we could improve our visibility to college age kids."	"As a reminder, I'm just looking at how we could improve our visibility to college age kids."

Fourth Interaction

Humble Leadership Dimension	Manipulation	
Accurate View of Self	N/A	N/A

Appreciation of Followers' Contributions	"Thanks again for submitting your ideas. I'm grateful for your suggestions. They will really help me."	"Thank you - I received your submissions. Again, I will look through them, but will mostly trust my own judgement when making decisions."
Modeling Teachability	"Because we are always looking to improve, we want you all to fill out one more survey. So please give accurate ratings. This will help us improve in the future."	"Finally, could you please fill out a post-task survey. Some other people I work with want to know your opinions and will read them carefully. So please give accurate ratings."

APPENDIX C – Items for Study Variables

Pre-Task Survey

Big Five Personality Traits

Directions: Describe yourself as you generally are now, not as you wish to be in the future. Describe yourself as you honestly see yourself, in relation to other people you know of the same sex as you are, and roughly your same age. So that you can describe yourself in an honest manner, your responses will be kept in absolute confidence.

Response scale:
1 = Very Inaccurate
2 = Inaccurate
3 = Somewhat Inaccurate
4 = Neither Inaccurate nor Accurate
5 = Somewhat Accurate
6 = Accurate
7 = Very Accurate

Items:
Extraversion
1. Am the life of the party.
2. Don't talk a lot. (RS)
3. Feel comfortable around people.
4. Keep in the background. (RS)
5. Start conversations.
6. Have little to say. (RS)
7. Talk to a lot of different people at parties.
8. Don't like to draw attention to myself. (RS)
9. Don't mind being the center of attention.
10. Am quiet around strangers. (RS)

Agreeableness
1. Feel little concern for others. (RS)
2. Am interested in people.
3. Insult people. (RS)
4. Sympathize with others' feelings.
5. Am not interested in other people's problems. (RS)
6. Have a soft heart.
7. Am not really interested in others. (RS)
8. Take time out for others.
9. Feel others' emotions.
10. Make people feel at ease.

Conscientiousness
1. Am always prepared.

2. Leave my belongings around. (RS)
3. Pay attention to details.
4. Make a mess of things. (RS)
5. Get chores done right away.
6. Often forget to put things back in their proper place. (RS)
7. Like order.
8. Shirk my duties. (RS)
9. Follow a schedule.
10. Am exacting in my work.

Emotional Stability
1. Get stressed out daily. (RS)
2. Am relaxed most of the time.
3. Worry about things. (RS)
4. Seldom feel blue.
5. Am easily disturbed. (RS)
6. Get upset easily. (RS)
7. Change my mood a lot. (RS)
8. Have frequent mood swings. (RS)
9. Get irritated easily. (RS)
10. Often feel blue. (RS)

Openness to experience
1. Have a rich vocabulary
2. Have difficulty understanding abstract ideas. (RS)
3. Have a vivid imagination.
4. Am not interested in abstract ideas. (RS)
5. Have excellent ideas.
6. Do not have a good imagination. (RS)
7. Am quick to understand things.
8. Use difficult words.
9. Spend time reflecting on things.
10. Am full of ideas.

Note: (RS) is used to denote items which were Reversed Scored.

Proactive Personality

Response scale:
1 = Strongly Disagree
2 = Disagree
3 = Somewhat Disagree
4 = Neither Disagree nor Agree
5 = Somewhat Agree
6 = Agree
7 = Strongly Agree

Items:
1. I am constantly on the lookout for new ways to improve my life.
2. Wherever I have been, I have been a powerful force of constructive change.
3. Nothing is more exciting that seeing my ideas turn into reality.
4. If I see something I don't like, I fix it.
5. No matter what the odds, if I believe in something I will make it happen.
6. I love being a champion for my ideas, even against others' opposition.
7. I excel at identifying opportunities.
8. I am always looking for better ways to do things.
9. If I believe in an idea, no obstacle will prevent me from making it happen.

Goal Orientation

Response scale:
1 = Strongly Disagree
2 = Disagree
3 = Somewhat Disagree
4 = Neither Disagree nor Agree
5 = Somewhat Agree
6 = Agree
7 = Strongly Agree

Items:
1. I prefer challenging and difficult classes so that I'll learn a great deal.
2. I truly enjoy learning for the sake of learning.
3. I like classes that really force me to think hard.
4. I'm willing to enroll in a difficult course if I can learn a lot by taking it.
5. It's important that others know that I am a good student.
6. I think that it's important to get good grades to show how intelligent you are.
7. It's important for me to prove that I am better than others in the class.
8. To be honest, I really like to prove my ability to others.
9. I would rather drop a difficult class than earn a low grade.
10. I would rather write a report on a familiar topic so that I can avoid doing poorly.
11. I am more concerned about avoiding a low grade than I am about learning.
12. I prefer to avoid situations in classes where I could risk performing poorly.
13. I enroll in courses in which I feel that I will probably do well.

Note: Items 1-4 are related to a learning-goal orientation, items 5-8 are related to a proving-goal orientation, and items 9-13 are proving-goal orientation.

Humility

Response scale:
1 = Strongly Disagree
2 = Disagree

3 = Somewhat Disagree
4 = Neither Disagree nor Agree
5 = Somewhat Agree
6 = Agree
7 = Strongly Agree

Items:
1. Having a lot of money is not especially important to me.
2. I think that I am entitled to more respect than the average person is. (RS)
3. I would get a lot of pleasure from owning expensive luxury goods.
4. I want people to know that I am an important person of high status.

Note: (RS) is used to denote items which were Reversed Scored.

Gender

What is your gender?

Options:
Male
Female

Age

What is your age?

Options:
Dropdown menu allowing values 16-99

Race/ethnicity

What is your race/ethnicity?

Options:
White, not Hispanic
White, Hispanic
Black
Asian
American Indian
Pacific Islander
Multiple
Other

Cognitive Ability

What was your SAT score?

Fill-in a number in the box

What was your ACT score?

Fill-in a number in the box

Academic Achievement

What is your current GPA?

Fill-in a number in the box

How many marketing classes have you previously taken?

Options:

1-6+

If yes, what was your average grade in these classes?

Options:

N/A
A
Between A & B
B
Between B & C
C
Between C & D
D
Between D & F
F

Post-Task Survey

Leader Humility

Response scale:
1 = Strongly Disagree
2 = Disagree
3 = Somewhat Disagree
4 = Neither Disagree nor Agree
5 = Somewhat Agree
6 = Agree
7 = Strongly Agree

Items:
1. My session leader actively seeks feedback, even if it is critical.
2. My session leader admits it when they don't know how to do something.
3. My session leader acknowledges when other have more knowledge and skills than him- or herself.
4. My session leader takes notice of others' strengths.
5. My session leader often compliments others on their strengths.
6. My session leader shows appreciation for the unique contributions of others.
7. My session leader is willing to learn from others.
8. My session leader is open to the ideas of others.
9. My session leader is open to the advice of others.

Leader Experience

Response scale:
1 = Strongly Disagree
2 = Disagree
3 = Somewhat Disagree
4 = Neither Disagree nor Agree
5 = Somewhat Agree
6 = Agree
7 = Strongly Agree

Items:
1. I feel as if the session leader is highly experienced.
2. My session leader had the experience necessary to help me.
3. My session leader was qualified to help us.

Empowerment

Response scale:
1 = Strongly Disagree
2 = Disagree
3 = Somewhat Disagree
4 = Neither Disagree nor Agree
5 = Somewhat Agree
6 = Agree
7 = Strongly Agree

Items:
1. My session leader sets high standards for performance by his/her own behavior.
2. My session leader sets a good example by the way he/she behaves.
3. My session leader leads by example.
4. My session leader encourages work group members to express ideas/suggestions.
5. My session leader listens to my work group's ideas and suggestions.

6. My session leader makes decisions that are based only on his/her own ideas. (RS)
7. My session leader suggests ways to improve my work group's performance.
8. My session leader pays attention to my work group's efforts.
9. My session leader tells my work group when we perform well.
10. My session leader explains how my work group fits into the company.
11. My session leader explains rules and expectations to my work group.
12. My session leader explains his/her decisions and actions to my work group.
13. My session leader treats work group members as equals.
14. My session leader shows concern for work group members' success.
15. My session leader gives work group members honest and fair answers.

Note: (RS) is used to denote items which were Reversed Scored.

PS Fit

Response scale:
1 = Strongly Disagree
2 = Disagree
3 = Somewhat Disagree
4 = Neither Disagree nor Agree
5 = Somewhat Agree
6 = Agree
7 = Strongly Agree

Items:
1. Our session leader's values provide a good fit with the things I value in life.
2. The things I value in life are very similar to the things that my session leader values.
3. My personal values match my session leader's values.

Leader Satisfaction

Response scale:
1 = Strongly Disagree
2 = Disagree
3 = Somewhat Disagree
4 = Neither Disagree nor Agree
5 = Somewhat Agree
6 = Agree
7 = Strongly Agree

Items:
1. All in all, I am satisfied with my leader.
2. In general, I don't like my leader.
3. I am satisfied with the way I was treated by my leader.
4. I am satisfied with the friendliness of my leader.

Perceived Leadership Effectiveness

Response scale:
1 = Strongly Disagree
2 = Disagree
3 = Somewhat Disagree
4 = Neither Disagree nor Agree
5 = Somewhat Agree
6 = Agree
7 = Strongly Agree

Items:
1. I put my trust in this supervisor.
2. My supervisor is an excellent supervisor.

APPENDIX D – Pilot Survey Humble Condition

Q1 **University of Oklahoma Institutional Review Board Informed Consent to Participate in a Research Study**

Project Title: Marketing Study

Principal Investigator: Samuel Matthews

Department: Management & International Business

You are being asked to volunteer for this research study. This study is being conducted at the University of Oklahoma. You were selected as a possible participant because you are a student in Management Principles (MGT 3013) in the Price College of Business. User must be 18 years of age or older to participate in this study. Please read this form and ask any questions that you may have before agreeing to take part in this study.

Purpose of the Research Study
The purpose of this study is to study how personality traits affect team processes and effectiveness.

Number of Participants
About 50 people will take part in this study.

Procedures
If you agree to be in this study, you will be asked to respond to a series of three surveys related to working on a team as part of your participation in MGT 3013.

Length of participation
Participation in this study will last about 1 hr 15 mins.

Risks of being in the study are
None. The instructor will not know your identity and whether you have completed this study or not. All data will be handled by a research assistant who will erase your names after granting you credit and prior to giving the data to the researcher.

Benefits of being in the study are
None.

Compensation You will be reimbursed for your time and participation in this study. Extra credit in your MGT 3013 course will be given. The credit will be processed by a research assistant and your instructor will not know whether you have participated in this study.

Confidentiality In published reports, there will be no information included that will make it possible to identify you. Research records will be stored securely and only approved researchers will have access to the records. There are organizations that may inspect and/or copy your

research records for quality assurance and data analysis. These organizations include the OU Institutional Review Board.

Voluntary Nature of the Study Participation in this study is voluntary. If you withdraw or decline participation, you will not be penalized or lose benefits or services unrelated to the study. If you decide to participate, you may decline to answer any question and may choose to withdraw at any time.

Will my personal records be accessed? Your academic records will not be accessed in any way.

Contacts and Questions If you have concerns or complaints about the research, the researcher(s) conducting this study can be contacted at 503-341-4045 or sammatthews22@ou.edu. Contact the researcher(s) if you have questions, or if you have experienced a research related injury. If you have any questions about your rights as a research participant, concerns, or complaints about the research and wish to talk to someone other than individuals on the research team or if you cannot reach the research team, you may contact the University of Oklahoma – Norman Campus Institutional Review Board (OU-NC IRB) at 405-325-8110 or irb@ou.edu.

Statement of Consent I have read the above information. I have asked questions and have received satisfactory answers. I consent to participate in the study.

This study has been approved by the University of Oklahoma, Norman Campus IRB. IRB Number: 8475 **Approval date: 09/25/2017**

- ❍ I agree to participate
- ❍ I decline

Page Break

Display This Question:

If University of Oklahoma Institutional Review Board Informed Consent to Participate = I decline

Q4 Your participation in the survey has ended. Thank you for your consideration.You may now close your browser.

Q2 In order to receive extra credit for participating in this survey, please provide your first and last names as they appear on the class roster. Your survey responses will be kept strictly confidential.

- First Name: _____
- Last Name: _____

Page Break

Q12 **For this study, I would like you to read below about John Jacobson, an employee at a marketing firm. After that, I would like you to answer some question about how you perceive John's leadership behaviors.**

A little about John:
Whenever you are around John you will soon find out that he is a supervisor who is very aware of his personal strengths and weaknesses. Being willing to improve his personal strengths and minimize his weaknesses, he actively seeks feedback about his actions and decisions from his subordinates, even if it is critical. If he doesn't know something or how to do something, he admits it. If he makes a mistake, he admits it also. And he doesn't hesitate to acknowledge when his subordinates have more knowledge, skills, and competencies than himself. In the same vein, he takes notice of his subordinate's strengths, show appreciation for the unique contributions of his subordinates, and often compliments them on their strengths and qualities. John is also open to his subordinates' ideas and advices and very willing to learn from others.

Below is an interaction John had with some new employees:
My name is John Jacobson. I am a marketing employee at a local marketing firm and I am asking for your feedback about a marketing strategy for two companies I am working with. The details will be on your computer. If you could follow the instructions and complete the task for the first company, I will then give you some feedback and then ask you to complete the second task. Before we start, I'd like to go around the room and have everyone say their name and one unique perspective they would bring to a marketing think-tank

(Employees go around the room and share their names and one unique perspective they would bring to a marketing think tank)

In the past I've had problems with understanding ideas from new employees. I realized that I wasn't getting enough feedback from your group and have adapted so that I can hear from you. One thing I am good at is taking ideas and turning them into action. However, I could use help generating lots of ideas. That's something I am not quite as good at. I know that each of you have a unique background and will each be able to see this problem in a different light. That's why your input is so important to me. I really appreciate your help. Again, more details will be in your packet on the computer and you have 20-minutes to complete this first task.

(After John has seen the first round of ideas)

I read through the ideas you sent over. Thank you for what you submitted. I really appreciate it. Your second project will be similar to your first project. Again you will have 20 minutes to complete it. I realized that I hadn't been quite clear in my first instructions. But just to be clear, while I appreciate all your answers, I am specifically looking at how we could improve our visibility to college age kids. Generating a broad range of ideas in not my strong suit. However, I am quite good at taking ideas and putting them into action. Again, thank you for your help on this. I really appreciate it. Your contributions will lead to better idea generation and will help these companies. As an incentive, I will give out $100 gift cards to the individuals with the best

contributions.

(After the John has seen the second round of ideas)

Thanks again for submitting your ideas. I'm grateful for your excellent suggestions. They will really help me.

Q8 Describe how you perceive John Jacobson to be as a leader:

	Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Agree	Strongly Agree
1. He actively seeks feedback, even if it is critical.	❍	❍	❍	❍	❍	❍	❍
2. He admits it when he doesn't know how to do something.	❍	❍	❍	❍	❍	❍	❍
3. He acknowledges when others have more knowledege and skills than he does.	❍	❍	❍	❍	❍	❍	❍
4. He takes notice of other's strengths.	❍	❍	❍	❍	❍	❍	❍
5. He often compliments others on their strengths.	❍	❍	❍	❍	❍	❍	❍
6. He shows appreciation for the unique contributions of others.	❍	❍	❍	❍	❍	❍	❍
7. He is willing to learn from others.	❍	❍	❍	❍	❍	❍	❍
8. He is open to the ideas of others.	❍	❍	❍	❍	❍	❍	❍
9. He is open to the advice of others.	❍	❍	❍	❍	❍	❍	❍

Q3 *Describe how you perceive John Jacobson to be as a leader:*

	Very Inaccurate	Inaccurate	Somewhat Inaccurate	Neither Accurate nor Inaccurate	Somewhat Accurate	Accurate	Very Accurate
10. He feels little concern for others.	❍	❍	❍	❍	❍	❍	❍
11. He is interested in people.	❍	❍	❍	❍	❍	❍	❍
12. He insults people.	❍	❍	❍	❍	❍	❍	❍
13. He is not interested in other people's problems.	❍	❍	❍	❍	❍	❍	❍
14. He has a soft heart.	❍	❍	❍	❍	❍	❍	❍
15. He is not really interested in others.	❍	❍	❍	❍	❍	❍	❍
16. He feels others' emotions.	❍	❍	❍	❍	❍	❍	❍
17. He makes people feel at ease.	❍	❍	❍	❍	❍	❍	❍
18. He is likeable	❍	❍	❍	❍	❍	❍	❍
19. He is nice	❍	❍	❍	❍	❍	❍	❍
20. He is friendly	❍	❍	❍	❍	❍	❍	❍
21. He is very polite	❍	❍	❍	❍	❍	❍	❍

APPENDIX E – Pilot Survey Non-Humble Condition

Q1 **University of Oklahoma Institutional Review Board Informed Consent to Participate in a Research Study**

Project Title: Marketing Study

Principal Investigator: Samuel Matthews

Department: Management & International Business

You are being asked to volunteer for this research study. This study is being conducted at the University of Oklahoma. You were selected as a possible participant because you are a student in Management Principles (MGT 3013) in the Price College of Business. User must be 18 years of age or older to participate in this study. Please read this form and ask any questions that you may have before agreeing to take part in this study.

Purpose of the Research Study
The purpose of this study is to study how personality traits affect team processes and effectiveness.

Number of Participants
About 50 people will take part in this study.

Procedures
If you agree to be in this study, you will be asked to respond to a series of three surveys related to working on a team as part of your participation in MGT 3013.

Length of participation
Participation in this study will last about 1 hr 15 mins.

Risks of being in the study are
None. The instructor will not know your identity and whether you have completed this study or not. All data will be handled by a research assistant who will erase your names after granting you credit and prior to giving the data to the researcher.

Benefits of being in the study are
None.

Compensation You will be reimbursed for your time and participation in this study. Extra credit in your MGT 3013 course will be given. The credit will be processed by a research assistant and your instructor will not know whether you have participated in this study.

Confidentiality In published reports, there will be no information included that will make it possible to identify you. Research records will be stored securely and only approved researchers will have access to the records. There are organizations that may inspect and/or copy your

research records for quality assurance and data analysis. These organizations include the OU Institutional Review Board.

Voluntary Nature of the Study Participation in this study is voluntary. If you withdraw or decline participation, you will not be penalized or lose benefits or services unrelated to the study. If you decide to participate, you may decline to answer any question and may choose to withdraw at any time.

Will my personal records be accessed? Your academic records will not be accessed in any way.

Contacts and Questions If you have concerns or complaints about the research, the researcher(s) conducting this study can be contacted at 503-341-4045 or sammatthews22@ou.edu. Contact the researcher(s) if you have questions, or if you have experienced a research related injury. If you have any questions about your rights as a research participant, concerns, or complaints about the research and wish to talk to someone other than individuals on the research team or if you cannot reach the research team, you may contact the University of Oklahoma – Norman Campus Institutional Review Board (OU-NC IRB) at 405-325-8110 or irb@ou.edu.

Statement of Consent I have read the above information. I have asked questions and have received satisfactory answers. I consent to participate in the study.

This study has been approved by the University of Oklahoma, Norman Campus IRB. IRB Number: 8475 **Approval date: 09/25/2017**

- ❍ I agree to participate
- ❍ I decline

Page Break

Display This Question:

If University of Oklahoma Institutional Review Board Informed Consent to Participate = I decline

Q4 Your participation in the survey has ended. Thank you for your consideration.You may now close your browser.

Q2 In order to receive extra credit for participating in this survey, please provide your first and last names as they appear on the class roster. Your survey responses will be kept strictly confidential.

- First Name: _____
- Last Name: _____

Page Break

Q12 **For this study, I would like you to read below about John Jacobson, an employee at a marketing firm. After that, I would like you to answer some question about how you perceive John's leadership behaviors.**

A little about John:
Whenever you are around John you know you will be rewarded if you meet your assigned objectives and will be punished when you fail to meet work expectations. John always follows through on promises of rewards when his subordinates successfully complete their assignments. John also lets his subordinates know when they do not meet performance standards. He doesn't do anything further about little slips on their parts, preferring to let his subordinates resolve minor problems on their own. On the other hand, when problems become serious, John's subordinates know that John will step in and take whatever corrective action is needed.

Below is an interaction John had with some new employees:
My name is John Jacobson. I am a marketing employee at a local marketing firm and I am asking for your feedback about a marketing strategy for two companies I am working with. The details will be on your computer. If you could follow the instructions and complete the task for the first company, I will then give you some feedback and then ask you to complete the second task. Before we start, I'd like to go around the room and have everyone say their name.

(Employees go around the room and share their names)

In the past we've had problems with understanding ideas from employees. But that's someone else's fault, not mine. One thing I am really great at is coming up with new ideas. Others tend to tell me I'm not good at it, but they're wrong. I know that is one of my strengths. I'll take your ideas into consideration, but just so you know, at the end of the day because I'm the one responsible for the project, I'll be making the final decisions. Again, more details will be in your packet on the computer and you have 20-minutes to complete this first task.

(After John has seen the first round of ideas)

I read through the ideas you sent over. I'll pass on your submissions. Your second project will be similar to your first project. Again you will have 20 minutes to complete it. As a reminder, I'm just looking at how we could improve our visibility to college-aged kids. As an incentive, I will give out $100 gift cards to the individuals with the best contributions.

(After the John has seen the second round of ideas)

I received your submissions, Again, I will look through them and let you know the winners of the gift cards.

Q8 Describe how you perceive John Jacobson to be as a leader:

	Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Agree	Strongly Agree
1. He actively seeks feedback, even if it is critical.	❍	❍	❍	❍	❍	❍	❍
2. He admits it when he doesn't know how to do something.	❍	❍	❍	❍	❍	❍	❍
3. He acknowledges when others have more knowledege and skills than he does.	❍	❍	❍	❍	❍	❍	❍
4. He takes notice of other's strengths.	❍	❍	❍	❍	❍	❍	❍
5. He often compliments others on their strengths.	❍	❍	❍	❍	❍	❍	❍
6. He shows appreciation for the unique contributions of others.	❍	❍	❍	❍	❍	❍	❍
7. He is willing to learn from others.	❍	❍	❍	❍	❍	❍	❍
8. He is open to the ideas of others.	❍	❍	❍	❍	❍	❍	❍
9. He is open to the advice of others.	❍	❍	❍	❍	❍	❍	❍

Q3 *Describe how you perceive John Jacobson to be as a leader:*

	Very Inaccurate	Inaccurate	Somewhat Inaccurate	Neither Accurate nor Inaccurate	Somewhat Accurate	Accurate	Very Accurate
10. He feels little concern for others.	❍	❍	❍	❍	❍	❍	❍
11. He is interested in people.	❍	❍	❍	❍	❍	❍	❍
12. He insults people.	❍	❍	❍	❍	❍	❍	❍
13. He is not interested in other people's problems.	❍	❍	❍	❍	❍	❍	❍
14. He has a soft heart.	❍	❍	❍	❍	❍	❍	❍
15. He is not really interested in others.	❍	❍	❍	❍	❍	❍	❍
16. He feels others' emotions.	❍	❍	❍	❍	❍	❍	❍
17. He makes people feel at ease.	❍	❍	❍	❍	❍	❍	❍
18. He is likeable	❍	❍	❍	❍	❍	❍	❍
19. He is nice	❍	❍	❍	❍	❍	❍	❍
20. He is friendly	❍	❍	❍	❍	❍	❍	❍
21. He is very polite	❍	❍	❍	❍	❍	❍	❍

APPENDIX F – Pre-task Survey

Q1
University of Oklahoma Institutional Review Board Informed Consent to Participate in a Research Study

Project Title: Leaders

Principal Investigator: Sam Matthews

Department: Management & International Business

You are being asked to volunteer for this research study. This study is being conducted at the University of Oklahoma. You were selected as a possible participant because you are a student in Management Principles (MGT 3013) in the Price College of Business.

Please read this form and ask any questions that you may have before agreeing to take part in this study.

Purpose of the Research Study
The purpose of this study is to study how personality traits affect team processes and effectiveness.

Number of Participants
About 250 people will take part in this study.

Procedures
If you agree to be in this study, you will be asked to complete a pre-task survey, perform two marketing tasks, and then complete a post-task survey.

Length of Participation
Participation will last about 75 minutes.

Risks of being in the study are
None.

Benefits of being in the study are
None.

Compensation
You will be reimbursed for your time and participation in this study. Extra credit in your MGT 3013 course will be given. Also, gift cards in the amount of $15 will be given to the top 20% of performers, which will be determined based on the scores given to performances by a trained research assistant.

Confidentiality
In published reports, there will be no information included that will make it possible to identify you. Research records will be stored securely and only approved researchers will have access to

the records. Your names are being collected just for the purpose of awarding extra credit and to link the two surveys you will complete together. After the surveys have been linked and your extra credit has been reported, your names will be deleted from the data. Data are collected via an online survey system that has its own privacy and security policies for keeping your information confidential. No assurance can be made as to their use of the data you provide. There are organizations that may inspect and/or copy your research records for quality assurance and data analysis. These organizations include the OU Institutional Review Board.

Voluntary Nature of the Study
Participation in this study is voluntary. If you withdraw or decline participation, you will not be penalized or lose benefits or services unrelated to the study. If you decide to participate, you may decline to answer any question and may choose to withdraw at any time.

Audio & Video Recording of Research Activities
The research activities that take part in the room during the completion of the marketing tasks are audio and video recorded. You have the right to refuse to allow such recording without penalty, but know that cannot participate in this study if you decline recordings.

I consent to the audio & video recording:

- ❍ Yes
- ❍ No

Skip To: End of Survey If "No"

Page Break

Q12 **Contacts and Questions**
If you have concerns or complaints about the research, the researcher(s) conducting this study can be contacted at 503-341-4045 or sammatthews22@ou.edu

Contact the researcher(s) if you have questions, or if you have experienced a research related injury.

If you have any questions about your rights as a research participant, concerns, or complaints about the research and wish to talk to someone other than individuals on the research team or if you cannot reach the research team, you may contact the University of Oklahoma – Norman Campus Institutional Review Board (OU-NC IRB) at 405-325-8110 or irb@ou.edu.

You should PRINT OUT a copy of this information ***to keep for your records. If you are unable to print a copy of this consent form, please request one.***

Statement of Consent
I have read the above information. I have asked questions and have received satisfactory answers. I consent to participate in the study.
This study has been approved by the University of Oklahoma, Norman Campus IRB. IRB Number: 8475 **Approval date: 09/25/2017**

- ❍ I agree to participate
- ❍ I decline

Skip To: End of Survey If "I decline"

Page Break

Q2 In order to receive extra credit for participating in this survey, please provide your first and last names as they appear on the class roster. Your survey responses will be kept strictly confidential.

- First Name: _____
- Last Name: _____

Page Break

Q3 *Describe yourself as you generally are now, not as you wish to be in the future. Describe yourself as you honestly see yourself, in relation to other people you know of the same sex as you are, and roughly your same age. So that you can describe yourself in an honest manner, your responses will be kept in absolute confidence. Use the following scale:*

	Very Inaccurate	Inaccurate	Somewhat Inaccurate	Neither Accurate nor Inaccurate	Somewhat Accurate	Accurate	Very Accurate
1. Am the life of the party.	❍	❍	❍	❍	❍	❍	❍
2. Feel little concern for others.	❍	❍	❍	❍	❍	❍	❍
3. Am always prepared.	❍	❍	❍	❍	❍	❍	❍
4. Get stressed out daily.	❍	❍	❍	❍	❍	❍	❍
5. Have a rich vocabulary.	❍	❍	❍	❍	❍	❍	❍
6. Don't talk a lot.	❍	❍	❍	❍	❍	❍	❍
7. Am interested in people.	❍	❍	❍	❍	❍	❍	❍
8. Leave my belongings around.	❍	❍	❍	❍	❍	❍	❍
9. Am relaxed most of the time.	❍	❍	❍	❍	❍	❍	❍
10. Have difficulty understanding abstract ideas.	❍	❍	❍	❍	❍	❍	❍
11. Feel comfortable around people.	❍	❍	❍	❍	❍	❍	❍
12. Insult people.	❍	❍	❍	❍	❍	❍	❍
13. Pay attention to details.	❍	❍	❍	❍	❍	❍	❍
14. Worry about things.	❍	❍	❍	❍	❍	❍	❍

15. Have a vivid imagination.	❍	❍	❍	❍	❍	❍	❍
16. Keep in the background.	❍	❍	❍	❍	❍	❍	❍
17. Sympathize with others' feelings.	❍	❍	❍	❍	❍	❍	❍
18. Make a mess of things.	❍	❍	❍	❍	❍	❍	❍
19. Seldom feel blue.	❍	❍	❍	❍	❍	❍	❍
20. Am not interested in abstract ideas.	❍	❍	❍	❍	❍	❍	❍
21. Start conversations.	❍	❍	❍	❍	❍	❍	❍
22. Am not interested in other people's problems.	❍	❍	❍	❍	❍	❍	❍
23. Get chores done right away.	❍	❍	❍	❍	❍	❍	❍
24. Am easily disturbed.	❍	❍	❍	❍	❍	❍	❍
25. Have excellent ideas.	❍	❍	❍	❍	❍	❍	❍
26. Have little to say.	❍	❍	❍	❍	❍	❍	❍
27. Have a soft heart.	❍	❍	❍	❍	❍	❍	❍
28. Often forget to put things back in their proper place.	❍	❍	❍	❍	❍	❍	❍
29. Get upset easily.	❍	❍	❍	❍	❍	❍	❍

30. Do not have a good imagination.	❍	❍	❍	❍	❍	❍	❍
31. Talk to a lot of different people at parties.	❍	❍	❍	❍	❍	❍	❍
32. Am not really interested in others.	❍	❍	❍	❍	❍	❍	❍
33. Like order.	❍	❍	❍	❍	❍	❍	❍
34. Change my mood a lot.	❍	❍	❍	❍	❍	❍	❍
35. Am quick to understand things.	❍	❍	❍	❍	❍	❍	❍
36. Don't like to draw attention to myself.	❍	❍	❍	❍	❍	❍	❍
37. Take time out for others.	❍	❍	❍	❍	❍	❍	❍
38. Shirk my duties.	❍	❍	❍	❍	❍	❍	❍
39. Have frequent mood swings.	❍	❍	❍	❍	❍	❍	❍
40. Use difficult words.	❍	❍	❍	❍	❍	❍	❍
41. Don't mind being the center of attention.	❍	❍	❍	❍	❍	❍	❍
42. Feel others' emotions.	❍	❍	❍	❍	❍	❍	❍
43. Follow a schedule.	❍	❍	❍	❍	❍	❍	❍
44. Get irritated easily.	❍	❍	❍	❍	❍	❍	❍

45. Spend time reflecting on things.	❍	❍	❍	❍	❍	❍	❍
46. Am quiet around strangers.	❍	❍	❍	❍	❍	❍	❍
47. Make people feel at ease.	❍	❍	❍	❍	❍	❍	❍
48. Am exacting in my work.	❍	❍	❍	❍	❍	❍	❍
49. Often feel blue.	❍	❍	❍	❍	❍	❍	❍
50. Am full of ideas.	❍	❍	❍	❍	❍	❍	❍

Page Break

	Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Agree	Strongly Agree
51. I am constantly on the lookout for new ways to improve my life.	❍	❍	❍	❍	❍	❍	❍
52. Wherever I have been, I have been a powerful force for constructive change.	❍	❍	❍	❍	❍	❍	❍
53. Nothing is more exciting than seeing my ideas turn into reality.	❍	❍	❍	❍	❍	❍	❍
54. If I see something I don't like, I fix it.	❍	❍	❍	❍	❍	❍	❍
55. No matter what the odds, if I believe in something I will make it happen.	❍	❍	❍	❍	❍	❍	❍
56. I love being a champion for my ideas, even against others' opposition.	❍	❍	❍	❍	❍	❍	❍
57. I excel at identifying opportunities.	❍	❍	❍	❍	❍	❍	❍
58. I am always looking for better ways to do things.	❍	❍	❍	❍	❍	❍	❍

59. If I believe in an idea, no obstacle will prevent me from making it happen.	❍	❍	❍	❍	❍	❍	❍

Page Break

	Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Agree	Strongly Agree
67. I prefer challenging and difficult classes so that I'll learn a great deal.	❍	❍	❍	❍	❍	❍	❍
68. I truly enjoy learning for the sake of learning	❍	❍	❍	❍	❍	❍	❍
69. I like classes that really force me to think hard.	❍	❍	❍	❍	❍	❍	❍
70. I'm willing to enroll in a difficult course if I can learn a lot by taking it.	❍	❍	❍	❍	❍	❍	❍
71. It's important that others know that I am a good student.	❍	❍	❍	❍	❍	❍	❍
72. I think that it's important to get good grades to show how intelligent you are.	❍	❍	❍	❍	❍	❍	❍

73. It's important for me to prove that I am better than others in the class.	❍	❍	❍	❍	❍	❍	❍
74. To be honest, I really like to prove my ability to others.	❍	❍	❍	❍	❍	❍	❍
75. I would rather drop a difficult class than earn a low grade.	❍	❍	❍	❍	❍	❍	❍
76. I would rather write a report on a familiar topic so that I can avoid doing poorly.	❍	❍	❍	❍	❍	❍	❍
77. I am more concerned about avoiding a low grade than I am about learning.	❍	❍	❍	❍	❍	❍	❍
78. I prefer to avoid situations in classes where I could risk performing poorly.	❍	❍	❍	❍	❍	❍	❍

79. I enroll in courses in which I feel that I will probably do well.	❍	❍	❍	❍	❍	❍	❍

Page Break

Q10 What is your age?

▼18 ... 68+

Q11 What is your gender?

- ❍ Male
- ❍ Female

Q20 What country did you primarily grow up in (e.g., USA, China, France)?

_____

Q21 If you primarily grew up in America, have you ever lived or studied abroad for a period of longer than 1 month?

- ❍ Yes
- ❍ No
- ❍ N/A - I didn't primarily grow up in the USA

Q13 What was your SAT or ACT score?

- SAT Score: _____
- ACT Score: _____

Q14 What is your current undergraduate GPA?

_____

Q16 How many Marketing classes have you previously completed?

_____

Q19 How many Marketing classes are you currently taking?

_____

Q17 Are you a marketing major

- Yes
- No

Page Break

APPENDIX G – Post-Study Survey

Q3 In order to link this survey with your Pre-task Survey, please provide your name as it appears on the class roster. Your survey responses will be kept strictly confidential.

- First Name _____
- Last Name _____

Page Break

	Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Agree	Strongly Agree
1. My session leader actively seeks feedback, even if it is critical.	❍	❍	❍	❍	❍	❍	❍
2. My session leader admits it when he doesn't know how to do something	❍	❍	❍	❍	❍	❍	❍
3. My session leader acknowledges when others have more knowledge and skills than himself.	❍	❍	❍	❍	❍	❍	❍
4. My session leader takes notice of others' strengths.	❍	❍	❍	❍	❍	❍	❍
5. My session leader shows appreciation for the unique contributions of others.	❍	❍	❍	❍	❍	❍	❍
6. My session leader is willing to learn from others.	❍	❍	❍	❍	❍	❍	❍
7. My session leader is open to the ideas of others.	❍	❍	❍	❍	❍	❍	❍
8. My session leader is open to the advice of others	❍	❍	❍	❍	❍	❍	❍
9. My session leader often compliments others on their strengths.	❍	❍	❍	❍	❍	❍	❍

10. Overall, I think my session leader would be considered a humble leader.	❍	❍	❍	❍	❍	❍	❍
11. I feel as if the session leader is highly experienced.	❍	❍	❍	❍	❍	❍	❍
12. My session leader had the experience necessary to help me.	❍	❍	❍	❍	❍	❍	❍
13. My session leader was qualified to help us.	❍	❍	❍	❍	❍	❍	❍
14. My session leader sets high standards for performance by his own behavior.	❍	❍	❍	❍	❍	❍	❍
15. My session leader sets a good example by the way he behaves.	❍	❍	❍	❍	❍	❍	❍
16. My session leader leads by example.	❍	❍	❍	❍	❍	❍	❍
17. My session leader encourages work group members to express ideas/suggestions.	❍	❍	❍	❍	❍	❍	❍
18. My session leader listens to my work group's ideas and suggestions.	❍	❍	❍	❍	❍	❍	❍
19. My session leader makes decisions that are based only on his/her own ideas.	❍	❍	❍	❍	❍	❍	❍

20. My session leader suggests ways to improve my work group's performance.	❍	❍	❍	❍	❍	❍	❍
21. My session leader pays attention to my work group's efforts.	❍	❍	❍	❍	❍	❍	❍
22. My session leader tells my work group when we perform well.	❍	❍	❍	❍	❍	❍	❍

	Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Agree	Strongly Agree
23. My session leader explains how my work group fits into the company.	❍	❍	❍	❍	❍	❍	❍
24. My session leader explains rules and expectations to my work group.	❍	❍	❍	❍	❍	❍	❍
25. My session leader explains his/her decisions and actions to my work group.	❍	❍	❍	❍	❍	❍	❍
26. My session leader treats work group members as equals.	❍	❍	❍	❍	❍	❍	❍
27. My session leader shows concern for work group members' success.	❍	❍	❍	❍	❍	❍	❍
28. My session leader gives work group members honest and fair answers.	❍	❍	❍	❍	❍	❍	❍

29. Our session leader's values provide a good fit with the things I value in life.	❍	❍	❍	❍	❍	❍	❍
30. The things I value in life are very similar to the things that my session leader values.	❍	❍	❍	❍	❍	❍	❍
31. My personal values match my session leader's values.	❍	❍	❍	❍	❍	❍	❍
32. All in all, I am satisfied with my leader.	❍	❍	❍	❍	❍	❍	❍
33. In general, I don't like my leader.	❍	❍	❍	❍	❍	❍	❍
34. I am satisfied with the way I was treated by my leader.	❍	❍	❍	❍	❍	❍	❍
35. I am satisfied with the friendliness of my leader.	❍	❍	❍	❍	❍	❍	❍
36. I put my trust in this supervisor.	❍	❍	❍	❍	❍	❍	❍

37. My supervisor is an excellent supervisor.	❍	❍	❍	❍	❍	❍	❍
38. My supervisor is likeable.	❍	❍	❍	❍	❍	❍	❍
39. My supervisor is nice.	❍	❍	❍	❍	❍	❍	❍
40. My supervisor is friendly.	❍	❍	❍	❍	❍	❍	❍
41. My supervisor is very polite.	❍	❍	❍	❍	❍	❍	❍

APPENDIX H – First Task

Please respond to the following question by typing your answer into a Word doc of the laptop you have been given:

Imagine that Amazon Fresh comes to you and has an idea. They are thinking of providing a subscription-based service in which they will provide food and recipes on a weekly basis. Do you think this is a good idea? Who might their target customers be? In which cities do you think they should offer the service? Which cities should they avoid? Should they first focus on a low-cost option or a higher-quality, higher-cost option?

APPENDIX I – Second Task

Please respond to the following question by typing your answer into a Word doc of the laptop you have been given. Your answers will be graded based on their quality and thoroughness:

Imagine that you are a marketing consultant and have a client that is a local grocery store in a college town. The client is located 3 miles from campus. Lately the client has been using some data analytics to identify its main customers. The client have noticed that they are doing very well among customers over 30 years old. However, they are not doing very well with customers ages 18-29. They have come to you with ideas of how to appeal more to this market. What are some suggestions you have? Would any of these suggestions potentially drive away some of the older customers?