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# Vulnerability in Leadership: The Power of the Courage to Descend

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Vulnerability in Leadership: The Power of the Courage to Descend

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A dissertation submitted in partial fulfillment

Of the requirements for the degree of

Doctor of Philosophy

In

Industrial-Organizational Psychology

Seattle Pacific University

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### **Dedication**

I dedicate this work to my village of support that has rallied behind me and endured the entire process of graduate school over the past five years. I also dedicate this to anyone on the brink of, in the midst of, or in reflection of a vulnerable moment in life. I hope this shines light on the power of courage and connection during our most vulnerable moments.

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### Abstract

As authenticity and trust continue to be recognized as key pillars of effective leadership in today's world (Avolio et al., 2004; Mayer et al., 1995; Peus et al., 2012), organizations need leaders who are willing to be vulnerable with those they lead. The purpose of current study was to explore the relationship between courage, other-centered calling, vulnerability, and leadership differentiation. The sample for the current study included 296 self-identified leaders who report being responsible for the work and development of others. Leaders were primarily Caucasian (83.7%), male (55.9%), and from a church/ministry setting (41.2%). The study occurred over a year span within an online leadership development tool. Moderated mediation in Hayes (2013) PROCESS Macro was used to test the hypotheses. Courage was positively related to vulnerability ( $B = .226, p = .000$ ), and the relationship between courage and vulnerability was significantly moderated by other-centered calling ( $B = .112, p = .032$ ). Additionally, the relationship between vulnerability and leadership differentiation was examined and found to be nonsignificant ( $B = -.004, p = .901$ ). Findings from this study indicate that courage and other-centered calling are key factors in allowing leaders to choose vulnerability with those they lead.

*Keywords:* vulnerability, courage, calling, other-centered calling, differentiation, self-differentiation, leadership

## CHAPTER I

### Introduction and Literature Review

Leaders often experience high-pressure situations that require them to balance the needs of their followers with their own convictions and values (Friedman, 1985; Gilbert, 2009; McKenna & Yost, 2004). A leader's ability to navigate these pressure-filled situations can lead to their success or downfall (McKenna & Yost, 2004). While the natural inclination of a leader during these times of pressure is to maintain an appearance of certainty and complete control, leaning into one's vulnerability is a contrasting strategy leaders have used to connect with their followers and drive toward progress. Choosing vulnerability involves demonstrating transparency and an openness to emotional exposure in relationship with others. For example, prominent leaders such as Martin Luther King Jr., Nelson Mandela, Ghandi, and Mother Teresa all leaned into their own vulnerabilities in order to connect with those they led. As opposed to avoiding emotional exposure, they used it as a way of connecting with their followers. While these leaders willingly exposed their vulnerabilities and openly admitted to not having all the answers, their unwavering convictions and willingness to listen to the people around them resulted in transformative impact. Other well-known leaders such as Steve Jobs and Richard Nixon may not have been known for leaning into their own vulnerability, but were confronted by them along the way. Contrary to equating vulnerability to weakness, exhibiting vulnerability offers the possibility of inspiring people and connecting on a deeper level (Hanson, 2014).

The purpose of the current study is to examine which characteristics of a leader allow them to demonstrate vulnerability in high-pressure situations. Because leaders are

highly visible and often perceived as having all the answers, their ability to demonstrate vulnerability can be more challenging, which is why they are the focus of the current study. Furthermore, this study will investigate if vulnerability impacts a leader's ability to stay connected with those they lead while also maintaining their own convictions and beliefs in pressure-filled moments. This is known as leadership differentiation (McKenna & Yost, 2004). By understanding the characteristics that enable a leader to demonstrate vulnerability, this study could provide leaders with specific and actionable steps that will help them to become more vulnerable with their followers, and understand how demonstrating vulnerability can change their ability to stay connected with their own values and the needs of their followers under pressure. I will begin with a review of the current literature and examine the presence of vulnerability in empirical research and other theories related to vulnerability. In addition, I will review current literature on two proposed contributors to vulnerability in leadership, courage and other-centered calling. Next, I will discuss current literature on the concept of self-differentiation and how it relates to vulnerability. Furthermore, I will address the research hypotheses, the experimental design and measures, and the proposed data analyses.

### **Vulnerability in Leadership**

A number of authors highlight vulnerability as a necessary characteristic of leadership (Brown, 2012; Deb & Chavali, 2010; Khazanchi & Masterson, 2011). Vulnerability is a foundational component for building trust between a leader and their followers (Mayer, Davis, & Schoorman, 1995; Nienaber, Hofeditz, & Romeike, 2015; Rousseau, Sitkin, Burt, & Camerer, 1998) and is considered the foundation for human communication and connection (Brown, 2012). While vulnerability is desirable in some

regard, it often comes with risk (Nienaber et al., 2015). The act of being vulnerable is a complicated dance between the possibility of exposure to attack and the chance for deeper human connection. In the following section, I will review how vulnerability is defined and identify how it relates to other leadership theories.

**Vulnerability defined.** Vulnerability is a multidimensional concept with varying definitions throughout the literature depending on the context or field of study. In order to understand vulnerability in the context of the current study, a brief review of the construct within the broader context of research will illustrate how the current study's definition compares to others in different contexts. Vulnerability is often described as the result of an interaction between individual resources and environmental forces (Papaux, 2016). It occurs when the resources within one's control are insufficient for defending against external forces, leading to vulnerability. In the medical sciences, vulnerability refers to "a substantial incapacity to protect one's own interests owing to such impediments as lack of capability to give informed consent or lack of alternative means of obtaining medical care" (CIOMS, 2002, p. 18). The individual is viewed as a victim with little control over his or her circumstances. In contrast, theorists in macroeconomics describes vulnerability as "the conditions determined by physical, social, economic, and environmental factors or processes, which increase the susceptibility of a community to the impact of hazards" (ISDR, 2002, p. 7). The focus is on how a community is threatened by surrounding external factors outside of their control. In her research on human connection, Brené Brown defines vulnerability as "uncertainty, risk, and emotional exposure" (Brown, 2012, p. 44). She highlights the power of using vulnerability to transform one's life and considers it to be the foundation of all feeling

and emotion. Finally, many in the social sciences describe vulnerability as arising from two sources that create exposure to stress: external threats and a lack of internal coping mechanisms (Chambers, 2006). Common throughout these definitions is the notion of exposure to forces outside of one's control, in addition to an openness and susceptibility to being hurt physically or emotionally (McKenna & Campbell, 2011).

After consideration of the multitude of definitions in the current literature, the following definition was developed to most accurately represent the construct in the current study and reflect the overall essence of how vulnerability has been defined previously. In this study, vulnerability is defined as a willingness to be transparent and emotionally exposed in relationship with another individual, with the possibility of being hurt or attacked. For example, a leader could share their feelings of fear when taking a new risk, or share what it feels like to move past prior failure and take on a bold new vision. Vulnerability is considered a choice leaders make, and can only be experienced in communion with someone else. The focus of this study, thus, is to determine what characteristics lead a leader to choosing vulnerability.

**Theoretical perspectives of vulnerability.** Several theories in the leadership literature examine parallel constructs to vulnerability; however, there is limited research on vulnerability specifically. Four of these theories include leader-member exchange, authentic leadership, transformational leadership, and sacrificial leadership. In order to understand the empirical background on vulnerability in leadership, these four theories will be examined in the context of the current study.

***Leader-member exchange.*** Vulnerability is an important part of developing trust (Mayer, Davis, & Schoorman, 1995; Rousseau, Sitkin, Burt, & Camerer, 1998). Leader-

member exchange (LMX) research proposes leader-follower relationships to fall along a continuum ranging from high-quality relationships based on mutual liking, trust, and respect, to low-quality relationships, based purely on the transactional component of an employment contract (Dienesch & Liden, 1986; Graen & Scandura, 1987). More than 35 years of research has continually linked LMX quality to a wide array of organizational outcomes including job satisfaction, turnover, promotion, performance, organizational commitment, and promotion (Dulebohn, Brouer, Bommer, Ferris, & Kato, 2008; Gerstner & Day, 1997; Ilies, Nahrgang, & Morgeson, 2007). In these decades of research, trust continues to rise to surface as an essential driver of LMX because of the mutual respect and reciprocity necessary to create optimal exchange between a leader and their followers (Scandura & Pellegrini, 2008). In their definitions of trust, Mayer and colleagues (1995) and Rousseau and colleagues (1998) define trust as an individual's willingness to be vulnerable based on the optimistic outlook that this vulnerability will not be taken advantage of by his leader. Deb and Chavali (2010) go on to suggest that both the leader and the follower must express vulnerability for trust to be relevant in their relationship. These definitions emphasize the importance of vulnerability in leader-member interaction. They propose vulnerability to be a key ingredient in optimal interpersonal exchange. It is identified as a primary building block for developing trust between a leader and his followers because it allows followers to see their leader as human. While trust has been identified as a primary contributor to a successful leader member exchange, LMX research has yet to examine the risk and vulnerability required by a leader in order to develop trust.

While empirical and conceptual work on vulnerability alone is limited, strong linkages between vulnerability and trust have been identified (Deb & Chavali, 2010; Rousseau et al., 1998), suggesting vulnerability to be a primary factor for developing trust between a leader and his or her followers (Nienaber et al., 2015). When a leader shares their own vulnerability, they express transparency with their followers. This transparency is perceived as honest communication and helps to develop trust and rapport with a leader's followers. Furthermore, as suggested by social exchange theory, the exchange of vulnerability between individuals should be balanced in order to promote optimal trust between both parties (Khazanchi & Masterson, 2011). Leaders must learn to express vulnerability equally with their followers, in order to foster a sense of reciprocal trust.

***Authentic leadership.*** Vulnerability requires transparency (Brown, 2012). Much like leader-member exchange theory, authentic leadership emphasizes the role of trust in the leader-follower relationship (Avolio, Gardner, Walumbwa, Luthans, & May, 2004). The dominant conceptualization of authentic leadership, put forth by Avolio and his colleagues (e.g. Avolio et al. 2004; Gardner et al., 2005), identifies four primary components that make up authentic leadership. These components include balanced processing, internalized moral perspective, relational transparency, and self-awareness (Walumbwa et al., 2008). In close alignment with the definition of vulnerability, relational transparency is characterized as openly sharing information and expressing one's true thoughts and feelings in interpersonal interaction (Peus, Wesche, Streicher, Braun, & Frey, 2012). It is an act of opening up and expressing who one truly is (Ladkin & Taylor, 2010), without shielding one's convictions or fears in worry of what others



might think. This act of transparency with the possibility of negative perception from others is vulnerable leadership in action, and requires immense courage. Authentic leadership has been described as courage in action (Terry, 1994). In order to be authentic and vulnerable, research and theory suggests leaders must have a strong sense of moral courage (Sekerka & Bagozzi, 2007).

In a similar characterization, Ilies and colleagues (2005) describe this transparent self-disclosure as relational authenticity. Through repeated interactions of openness and truthfulness, authentic leaders are able to create a relational experience of trust, which leads followers to return the same authenticity in their actions. It could be assumed then that returning that authenticity could create an optimal relationship for sharing vulnerability. Those moments of authenticity require vulnerability. In theory, this space for vulnerability opens up an information channel between a leader and follower, which can result in more effective communication and collaboration (Ilies, Morgeson, & Nahrgang, 2005); however, the risk of being exposed and possibly hurt is still there for the authentic leader. In addition to improving information flow between a leader and their followers, empirical research on authentic leadership has identified various linkages between authentic leadership and with positive organizational outcomes. Some of these include follower satisfaction, organizational commitment, extra-effort (Peus et al., 2012), follower empowerment (Wong & Laschinger, 2013), and eudaimonic well-being for both the authentic leader and their followers. (Ilies, et al., 2005) Nevertheless, authentic leadership still requires some level of vulnerability, which sometimes comes at a cost. While these positive results emphasize the importance of having authentic leaders who

are willing to be vulnerable with those they lead, authenticity without the reality of risk is not plausible.

*Transformational leadership.* Vulnerability opens up the possibility of more deeply rooted change, even when change may be difficult. In connection with the theory of authentic leadership, transformational leadership involves actions that evoke vulnerability in a leader. Transformational leaders are individuals who create an inspiring vision for those they lead, and provide the necessary support to enable to their followers to develop into leaders themselves (Avolio, 2013). In his development of the theory, Bass (1985) proposed transformational leadership to consist of four dimensions: idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration. Through idealized influence and intellectual stimulation, transformational leaders take risks to create a compelling vision for their followers. That vision allows followers to identify with the leader and encourages them to challenge assumptions and innovate (Judge & Piccolo, 2004). Transformational leaders are willing to blaze a trail and put themselves at risk in order to set an example for their followers. This willingness to create a vision for the future and ask for input from followers requires vulnerability, but also has the potential to build trust. As described by Avolio (2013), “Their willingness to be vulnerable and to self-sacrifice builds tremendous trust among followers, along with ownership in the form of identification with their mission or cause” (p. 51). Not without its potential costs to the leader, vulnerability can open a pathway to greater alignment and richer relationships.

Transformational leadership has found it to be highly effective in generating high levels of follower performance, commitment, extra effort, and satisfaction (Avolio, Zhu,

Koh, & Bhatia, 2004; Coleman, Patterson, Fuller, Hester, & Stringer, 1995; Gasper, 1992; Lowe, Kroeck, & Sivasubramaniam, 1996; Judge & Piccolo, 2004). Additionally, transformational leadership has been associated with increases in follower empowerment and trust (Avolio et al., 2004; Podsakoff, MacKenzie, Moorman, & Fetter, 1990). These findings support the powerful impact transformational leadership has on followers. It emphasizes the necessity of understanding which characteristics enable a leader to take risks, be vulnerable, and become a transformational leader. While the power of a transformational leader is apparent, the courageous steps of these leaders toward vulnerability cannot be underemphasized.

*Sacrificial leadership.* Vulnerability also includes a possible sacrifice (McKenna et al., In Press). A sacrificial leader's motivation is grounded in their personal value of doing what is right for their followers, or out of obedience to a greater transcendent voice in their lives (McKenna & Brown, 2011). Sacrificial leadership is described as consideration of the costs associated with leading and a willingness to pay them if necessary (McKenna & Brown, 2011). Choi and Mai-Dalton (1999) define self-sacrificial leadership as "the total/partial abandonment, and/or permanent/temporary postponement of personal interest, privileges, and welfare in the (a) division of labor, (b) distribution of rewards, and/or (c) exercise of power" (p. 399). These leaders consider the cost of putting aside their personal interests when necessary and show up as completely transparent in working to achieve that greater call. Vulnerability has a natural connection to the consideration of the costs much like sacrificial leadership. Making oneself vulnerable opens the possibility of being attacked, which inherently involves sacrifice. Even though sacrificial leadership by nature is not focused on outcomes, research has found various

positive follower outcomes as a result. Some of these outcomes include increased follower self-esteem (De Cremer, van Knippenberg, van Dijke, & Bos, 2006), positive impact on follower motivation and emotions (De Cremer, 2006), and prosocial organizational behavior (De Cremer, Mayer, van Dijke, Schouten, & Bardes, 2009). These findings emphasize the strong connection between sacrificial leaders choosing vulnerability for the sake of serving that other-centered call on their lives.

Because of their dutiful actions of putting others first, regardless of the personal outcome, sacrificial leaders often develop strong trusting relationships with those they lead (De Cremer & van Knippenberg, 2004). While trust is able to develop between the sacrificial leader and his or her follower, this trust does not come without risk. To come at leadership from a fully sacrificial position and risk losing something for the sake of others is inherently vulnerable. It is an intentional choice to consider the cost of sacrificial action and risk being exposed personally to ridicule from those in control. Sacrificial leaders choose vulnerability in service of fulfilling the needs of those relying on them, or to serve that greater transcendent calling on their life (Matteson & Irving, 2006). They choose personally risky behaviors for the sake of the group (De Cremer et al., 2009). Because of the constant choice of vulnerability over safety and comfort, sacrificial leadership requires great personal courage and a strong connection to those one leads.

After reviewing vulnerability in the context of these four leadership theories, the importance of vulnerability in leadership is apparent. Next, I will review the literature on courage and how it relates to vulnerability. I propose courage to be a key contributor to leaders choosing vulnerability.

## Courage

While vulnerability continues to be highlighted as a desirable leadership characteristic in empirical and popular literature (Brown, 2012; Nienaber et al., 2014; Papaux, 2016; Scandura & Pellegrini, 2008), there is a gap in the research regarding what predicts a leader to being more vulnerable. As previously mentioned, vulnerability comes with great risk that a leader must stand up to and face. Due to the possible costs associated with vulnerability, courage appears to be one necessary ingredient in the vulnerability equation.

**Courage defined.** Courage is a commonly discussed construct that has limited empirical agreement on its definition. Definitions range in specificity from Hemingway's simple description of courage as "grace under pressure" (cited in Lopez, O'Byrne, & Peterson, 2003, p. 191), to much more complex definitions such as courage being "the disposition to voluntarily act, perhaps fearfully, in a dangerous circumstance, where the relevant risks are reasonably appraised, in an effort to obtain or preserve some perceived good for oneself or others recognizing that the desired perceived good may not be realized" (Shelp, 1984, p. 354). Some have defined it based on the components believed to contribute to it, such as candor, purpose, risk, and will (Klein & Napier, 2003), whereas others describe the conditions necessary to elicit courage (Gould, 2005). Other researchers have proposed that courage is a somewhat malleable state that is influenced by contextual factors in organizations, such as leaders who encourage their followers to take risks when facing uncertainty (Hannah, Sweeney, & Lester, 2010).

For the purpose of this study, courage is defined as the ability to harness fear and act for a meaningful cause, regardless of the associated risk (Cavanagh & Moberg, 1999;

Woodard, 2004). Courage is revealed in three dimensions: fear, appropriate action, and higher purpose (Gould, 2005), and requires an individual to oppose pressures exerted on them, in order to remain faithful to their own ideals and beliefs (Lopez et al., 2003). In order to become vulnerable, leaders must evaluate and accept the risk of letting their guard down and inviting others in to their core insecurities or fears. Because this opens the door to the possibility of being torn down and exploited, courage is absolutely necessary. As suggested by McKenna and Brown (2011), “Sacrificial leaders must have courage, and that courage must be grounded in the realities and fears of what is at stake for them and those they lead.” (p. 43)

**Positive outcomes of courage.** Courage in leadership has been associated with many positive outcomes for leaders themselves and their followers. Courage has been linked to psychological hardiness (Woodard, 2004), ethical and prosocial behavior in followers (Hannah, Avolio, & Walumbwa, 2011), follower empowerment (Johnson, 1994), and more courageous behavior exhibited by followers that model after a courageous leader (Hannah, Walumbwa, & Fry, 2011). These outcomes highlight the impact of courage on leadership, and exemplify it as a beneficial strategy for strengthening the confidence of leader and enhancing the bond between a leader and his or her followers.

**Measuring courage.** Due to the variety of differing perspectives on the definition of courage in the literature, it is difficult to identify one specific measure that accurately captures courage as it is being studied in the current research question. Courage measures vary from general measure of overall courage (Schmidt & Koselka, 2000), to scales divided into courage themes (Serkerka, Bagozzi, & Charnigo, 2009), to frequency counts

of number of courageous activities displayed at the organizational level (Kilmann, O'Hara, and Strauss, 2010), to extensive interviews conducted (Chapa & Stringer, 2013).

For the purposes of this study, a measure of courage will be utilized that is embedded within a multidimensional measure of character. Developed as part of the incarnational character scale (McKenna et al., in press), courage is measured in contrast to reluctance in order to understand the paradoxical tension between these two seemingly important, but contradictory leadership attributes. The measure assesses the extent to which an individual is willing to confront their own fear, pain, risk, danger, and uncertainty head on, even in situations where it may be unpopular to do so. These attributes reflect many components identified empirically in the literature when defining courage (Cavanagh & Moberg, 1999; Gould, 2005; Lopez et al., 2003; Woodard, 2004). While courage is hypothesized to be a driver of a leader's willingness to be vulnerable, I am proposing it is only part of the equation. If a leader was driven to be vulnerable for self-serving reasons, then courage might be the only necessary driver. However, in order to fully experience vulnerability as described in the current study, it must be shared in connection with someone else. I am proposing that the link between courage and vulnerability depends on another variable involving a connection to others. This proposed moderating variable is an other-centered calling or motivation.

### **Other-centered Calling**

As described in the previously reviewed literature of leader-member exchange, authentic and sacrificial leadership, all of these theories are follower-oriented leadership theories. They all focus on the connection between a leader and their followers. Furthermore, without the presence of others, an individual cannot be vulnerable.

Vulnerability is inherently relational and does not happen in a vacuum. This connection and drive to embrace risk or fear for the sake of other individuals is what I describe as having an other-centered calling.

**Other-centered calling defined.** Calling continues to be a widely discussed topic in empirical literature. The understanding and interpretation of calling has continued to shift through the ever-changing cultural context of time (Placher, 2005). As initially described at the beginning of the early Christian church, calling was only associated within the context of being called by God to work within the church. As time has progressed, calling has transformed into a broader encompassing construct that has been defined in multiple ways including individuals with varying backgrounds, experience, and faith traditions (Dobrow & Tosti-Kharas, 2011; Dik, Eldridge, Steger, & Duffy, 2012; Duffy & Dik 2013). Calling has been identified as an internal motivating factor associated with various outcomes including personal meaning, leadership effectiveness, and work motivation (Dobrow & Tosti-Kharas, 2011; Wrzesniewski & Dutton, 2001). It is suggested to be central to one's identity (May, Gilson, & Harter, 1999), and moves beyond attributes of purpose or vocation, and includes a guiding force or summons from outside the self. In their foundational definition, Dik and Duffy (2009) describe calling as follows:

“Calling is a transcendent summons, experienced as originating beyond the self, to approach a particular life role in a manner oriented toward demonstrating or deriving a sense of purpose or meaningfulness and that holds other-oriented values and goals as primary sources of motivation.” (p. 427)



The origination of the summons could be coming from God or someone in an individual's life who is asking them to serve beyond what they have identified as their purpose. True to the history of calling, some tie the definition of calling into terms of self-identity (May, Gilson, & Harter, 1999), spiritual fulfillment (Buechner, 1993), meaningfulness (Peterson, Park, Hall, & Seligman, 2009), and willingness to sacrifice (Bunderson & Thompson, 2009). It involves the utilization of an individual's gifts and talents to meet the needs of those around them. Inherent in this definition is the emphasis of holding other-oriented values as a primary source of motivation. It places others' values at the center of the call, lending to the current study's definition of other-centered calling - a self-identified calling in life that is focused on others.

**Measuring other-centered calling.** While calling has been previously measured using various psychometrically sound scales (Dik & Duffy, 2013; Dobrow & Tosti-Kharas, 2011) with varying definitions of the construct, few if any others have measured the others-focus aspect of calling that is central to the current study. In order to fully capture and measure whether a participant's self-identified calling is other-centered or not, an open-ended response format was used allow the participant to fully articulate their self-identified calling in life (Holsti, 1969). Then, utilizing content analysis, a team of trained research coders will code responses based on a taxonomy developed by the coding team (Graneheim & Lundman, 2004; Hsieh & Shannon, 2005).

After reviewing vulnerability in the context of leadership and two proposed antecedents for demonstrating vulnerability, I now shift to examine the literature self-differentiation, the proposed outcome of the current study. Differentiation will be defined and examined in regards to vulnerability and other associated positive outcomes.

Furthermore, previous measurement methods of differentiation will be explored including the method used in the current study.

### **Differentiation**

As we further understand what enables a leader to be more vulnerable, we can then transition to examine outcomes associated with leadership vulnerability. As proposed within the current study, vulnerability is a combination of courage, a willingness to express one's own convictions and values, paired with a connection to the needs of others. This same tension between maintaining one's personal values, while also understanding the needs of others is a foundational component of Bowen's (1978) theory of self-differentiation.

**Differentiation defined.** Originally rooted in the marriage and family therapy (MFT) literature, the concept of self-differentiation involves striving for a balance between maintaining independence from the greater system, while also staying emotionally connected to those within the system (Bowen, 1978; Kerr & Bowen, 1988; Skowron & Friedlander, 1998). In the development of the theory, Bowen (1978) proposed that individuals with higher levels of differentiation are able to maintain a strong sense of self throughout their interpersonal relationships (Skowron & Dendy, 2004), while also staying connected to the needs of others around them. Individuals with high levels of differentiation are able to demonstrate self-regulation in high-pressure situations because of their ability to stop pressure from others from dictating their beliefs (Kerr & Bowen, 1988; Skowron & Friedlander, 1998; Skowron & Dendy, 2004). Instead of being overly connected into the desires of those around them, they remain grounded in their own values and beliefs, leading to greater self-regulation under pressure. These

individuals have a strong sense of who they are and what they want, while staying in touch with the people around them.

While differentiation has been primarily studied in the context of family systems, strong parallels can be drawn in an organizational context. Differentiation has been applied to understanding leadership within an organizational setting (Bregman & White, 2011). Leaders are constantly in the middle of complex emotional system with competing priorities pulling them in various directions. For example, a leader might have to deal with a difficult employee who refuses to collaborate with team members on a project, while also working with the leadership team on an urgent report with an impending deadline. Leading others inherently happens in the context of human relationship, requiring some level of differentiation in order to maintain one's sense of self in times of high pressure. A leader with a high level of differentiation is able to remain calm and clear-headed while understanding others' perspectives in high pressure situations, and make grounded, important decisions for the benefit of the overall system rather than out of emotional reactivity (Bowen, 1978; Kerr & Bowen, 1988). This leadership self-differentiation is defined as "the extent to which leaders take responsibility for their own positions, working to define their own convictions and goals while at the same time staying in touch with the human system surrounding them" (McKenna & Yost, 2004, p. 293).

**Positive outcomes of differentiation.** . Differentiation has been linked to several positive outcomes in the literature. Research evidence indicates that differentiation positively impacts psychological well-being (Bohlander, 1999; Skowron, Holmes, & Sabatelli, 2003; Skowron, Stanley, & Shapiro, 2009), negative emotion and forgiveness

(Holeman, Dean, DeShea, & Duba, 2011), psychological adjustment (Jenkins, Buboltz, Schwartz, & Johnson, 2005), emotional reactivity (Skowron & Friedlander, 2009), stress, and coping (Murdock & Gore, 2004). Additionally, research on differentiation in the context of leadership suggests that the higher the level of differentiation within the individual, the more likely they will be able to lead effectively and manage the tension between their own personal convictions and the needs of those around them (Friedman, 1985; Gilbert, 2009; McKenna & Yost, 2004). These findings emphasize the beneficial impact of high levels of differentiation for leaders themselves, as well the organizations where they work. While the act of vulnerability may sometimes come with a cost, it could result in a deeper connection to one's personal convictions and the needs of those they lead during times of high pressure.

**Measuring differentiation.** While the construct of differentiation has undergone significant theoretical development, psychometric support and testing of the construct is minimal (Bowen, 1978; Skowron, Holmes, & Sabatelli, 2003). Originally, differentiation was measured by therapists on a 100-point scale, with higher scores indicating higher levels of differentiation (Bowen, 1978). While higher levels of differentiation were more desirable, the scale did not indicate any cutoff as *normal*, and provided little guidance as to how to place individuals on the scale. In an effort to measure differentiation in a more valid and reliable way, researchers developed various scales that differ in structure and purpose. Some measures identified it as a unidimensional construct (Haber, 1993; Licht & Chabot, 2006), while others included multiple subscales (Haber, 2003; Skowron & Friedlander, 1998). Furthermore, some identify differentiation as an individual variable (Haber, 2003; Licht & Chabot, 2006; Skowron & Friedlander, 1998), while others

consider it a systems variable (Anderson & Sabatteli, 1992; Bray, Williamson, & Malone, 1984; Hovestadt, 1985). Because the construct is examined in the context of leadership in the current study, differentiation will be measured by examining a leader's emotional tendencies under pressure through the Pressure Profile scale in the Leading Under Pressure Inventory. The Pressure Profile has undergone psychometric validation and demonstrates strong validity ( $\chi^2 = 16.206, p = .040, RMSEA = .046$  [CI90 .010 to .079], CFI = .97) and sufficient internal consistency ( $\alpha = .74$ ).

### **Personality**

In order to understand the unique predictive ability of courage and vulnerability on a leader's ability to be differentiated, other variables that might influence differentiation should be controlled for. Because certain individual differences such as family background and personality impact an individual's ability to be differentiated (Bowen, 1978; Gilbert, 1992), personality will be used in the current study as a control variable. While there are many different models of personality, the five factor model is the most prominent framework used when studying personality. This may be attributed to the immense amount of research conducted on the model with supportive findings (Barrick & Mount, 1991).

The five factor model includes five components: extroversion, openness to experience, agreeableness, conscientiousness, and neuroticism (Barrick & Mount, 1991; Goldberg, 1999). Specifically, this study will control for openness to experience. Openness to experience is described as containing elements of introspection and nontraditionalism (Connelly, Ones, Davies, & Birkland, 2014). Individuals who score high on this dimension have a strong desire to think and understand problems. They seek

out new experiences, are curious and independently minded, and are introspective about their emotions and behavior (Hogan & Hogan, 1992). Because of their propensity to remain open to new ideas or experiences, a leader's level of openness to experience could impact their willingness to be vulnerable with those they lead. In order to examine the relationship between courage, vulnerability, and differentiation and mitigate possible differences based on openness to experience, it will be included as a control variable.

**Measuring personality.** While many instruments exist for measuring personality, some pose significant challenges due to their proprietary nature (e.g. Wonderlic, NEO) or lack of psychometric support (e.g. Truity, Mini-markers, Saucier, 1994). In the current study, the IPIP five factor model measure (Goldberg, 1999) will be used to measure openness to experience. This measure is a public-domain scale measuring the five factor model that can be used freely. Because it is openly accessible, researchers have the opportunity to utilize it and further develop the scale by continually assessing its validity and reliability over time, enhancing its psychometric support (Clark & Watson, 1995; Messick, 1995).

## **Gender**

In addition to controlling for personality, the current study will examine the unique effects of courage and vulnerability on differentiation by controlling for gender as well. As noted in previous research on leadership styles, men and women sometimes use varying leadership techniques to inspire and connect with followers (van Engen & Willemsen, 2004). In their meta-analysis on gender and leadership style, Eagly and Johnson (1990) found women to lean towards a democratic, participative style while men tended to adopt a more autocratic, directive style. In addition to varying styles, women

and men are often perceived and critiqued on their leadership capability based on different standards (Ridgeway, 2001; Weyer, 2007). For example, while men might be applauded for opening up and sharing their feelings, women might be perceived as being weak or overly emotional. In order to mitigate any possible effects gender might have on the current study, gender was included as a control variable. While comparing gender differences in leadership styles is beyond the scope of the current study, it is an important topic for future research to explore.

**The Present Study: The Role of Courage and Other-centered Calling in Vulnerability and its Impact on Leadership Differentiation**

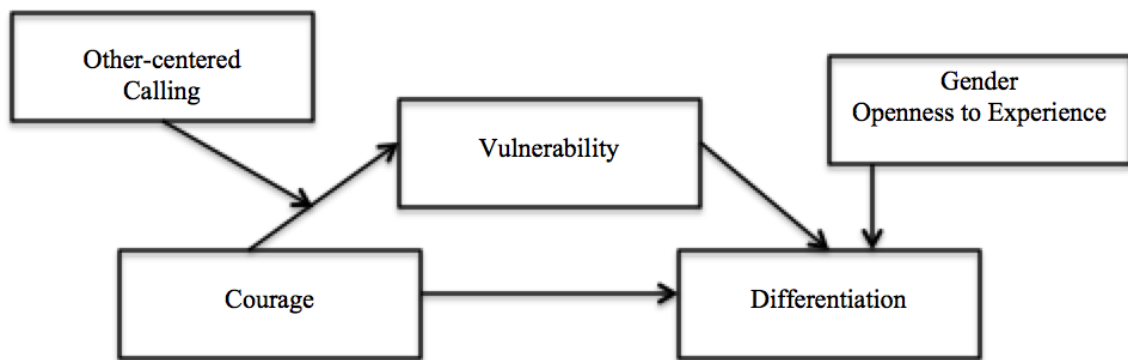
Vulnerability is a foundational component in building an optimal, thriving relationship between a leader and his or her followers (Deb & Chavali, 2010; Nienaber, Hofeditz, & Romeike, 2015). I propose courage to be positively related to vulnerability in leadership, such that individuals who score higher on a courage measure will score higher on vulnerability. Additionally, I propose the relationship between courage and vulnerability to be moderated by a self-identified calling in life that is focused on others, such that the relationship between courage and vulnerability will be strengthened for individuals with an other-centered calling, in comparison with those that are not. Furthermore, because of their strong sense of personal conviction paired with an attunement to the needs of those they lead, I propose that leaders who exhibit higher levels of vulnerability will also exhibit higher levels of differentiation, above and beyond gender and openness to experience (see Figure 1).

## Hypotheses

**Hypothesis 1:** A greater sense of courage will be positively related to a leader's ability to demonstrate vulnerability to the individuals they lead.

**Hypothesis 2:** The relationship between courage and vulnerability in leadership will be moderated by an other-centered calling – a self-identified calling in life that is focused on others.

**Hypothesis 3:** Courage will be positively related to a leader's differentiation through the mediating mechanism of vulnerability above and beyond personality, such that individuals who score higher on vulnerability will score higher on differentiation.



*Figure 1.* The hypothesized moderated mediation model in which courage predicts leadership differentiation through vulnerability, conditional upon other-centered calling.



## CHAPTER II

### Method

#### Sampling Procedure

In the current study, I used archival data from an online leadership development tool. Participants were recruited through a process utilized by their organization. These users were sent an email invitation to develop an online profile, consisting of various demographic and personality questions. Upon logging in, participants were given the option to submit their data for research purposes. Only those who selected to submit their data for research were used in the current study (45.5%). While we understood the limitations of this sampling methodology (e.g. self-selection bias), we chose this approach to ensure minimal interruption of participants work roles and life. Additionally, because the nature of the tool is for developmental purposes rather than evaluative reasons, we anticipated more accurate and honest responses because participants were not being evaluated by the assessments. The procedure and data collection were conducted in compliance with human research subject rights and obtained Institutional Review Board approval.

#### Participants

Because of the current study's focus on understanding vulnerability in leadership, all participants must have occupied a formal leadership role within their organization. Additionally, participants must have completed all assessments utilized in the current study to be included in the study. Of the 2517 individuals in the online leadership development system, 296 met inclusion criteria (e.g. were a formal leader, completed all assessments). In accordance with Preacher, Rucker, and Hayes (2007) and their

recommended sample size of 200 to 300 for a moderated mediation analysis, the sample size suggestion was met in order to gain sufficient power. There was nearly equal representation of females and males (44.1% and 55.9% respectively), and the sample was predominantly Caucasian (83.7%), Protestant (77.4%), and reported working in a church/ministry setting (41.2%).

### **Measures**

**Openness to experience.** Based on previous research on the aspects of vulnerability, openness to experience is theoretically strongly related to vulnerability. Given this relationship, we needed to control for openness to experience to identify incremental variance beyond openness. To measure openness, we used the five-factor model measured with the IPIP model scales (extroversion, openness to experience, agreeableness, conscientiousness, neuroticism; Goldberg, 1999). Each scale contains 10 items and is rated on a five-point Likert scale ranging from 1 (*Very Inaccurate*) to 5 (*Very accurate*). Reliability estimates assessed by alpha coefficients range from .84 to .97 across dimensions (Goldberg, 1992; 1999). These estimates exceed the minimum standard of .7 (Cortina, 1993).

**Courage and Vulnerability.** The Courage measure is included within a larger Character scale located within the Profile Assessment tool. The Character scale consists of 8-items measuring four paradoxical relationships of the character inside of a person, an individual's sense of who they are (structural integrity) and their willingness to change (editability) (McKenna, 2010; McKenna & Campbell, 2011; McKenna et al., In Press). Courage was measured by the item, "*If I feel it is right, I confront my own fear, pain, risk, danger, and uncertainty head on, even in situations where it may be unpopular to do*

so.” Responses are scored on a 5-point Likert scale ranging from 1 (*not like me at all*) to 5 (*very much like me*). As suggested by Fisher, Matthews, and Gibbons (2016) and others, a single item measure was utilized in data collection in order to minimize respondent burden, reduce criterion contamination, and increase content and criterion validity of the assessment (Cheung & Lucas, 2014; Fisher et al., 2016).

The Vulnerability measure is also included in the Character scale in the Profile Assessment, following the Courage measure (McKenna, 2010; McKenna & Campbell, 2011; McKenna, Lopez, & Minaker, In Press). In the current study, vulnerability was measured by the item, “*I am willing to let my guard down with others, even in situations where I feel like I should protect myself and only show strength.*” Responses are scored on a 5-point Likert scale ranging from (1= *not like me at all*) to (5= *very much like me*). While other robust measures of courage and vulnerability exist, these other measures did not fully capture the two constructs as operationalized in the current study. Therefore, the current measures were used.

**Differentiation.** Differentiation was measured by a scale called the Pressure Profile. The scale is located within a larger assessment called the Leading Under Pressure Inventory that assesses a leader’s tendencies under pressure. Items for the Pressure Profile were developed based on the research and work of seven subject matter experts (SME), who conducted interviews and focus groups with hundreds of leaders in a Fortune 100 business context on their emotional tendencies under pressure. The scale comprises 18 items measured on a 5-point Likert scale ranging from 1 (*not like me at all*) to 5 (*very much like me*). Example items include: “I express my opinions without hesitation,” “I adapt my behavior so that others are comfortable,” and “I don’t place importance on what

others think of me.” The Pressure Profile has undergone psychometric validation and demonstrates strong validity ( $\chi^2 = 16.206, p = .040, RMSEA = .046$  [CI90 .010 to .079], CFI = .97) and sufficient internal consistency ( $\alpha = .74$ ).

**Other-centered calling.** In the current study, other-centered calling was described as a self-identified calling in life that is focused on others. The Other-centered Calling measure is located within a larger assessment called the Calling and Purpose Inventory. Items in the Calling and Purpose Inventory were developed by six subject matter experts as a result of a qualitative analysis involving 59 participants’ definitions of calling and purpose. The subject matter experts consisted of individuals who had PhDs in business, organizational behavior, or industrial-organizational psychology, whereas others had several years of applied experience as leadership development consultants (internal or external). The items were developed and refined based upon participants’ responses. Other-centered calling was measured by a qualitative open-response format to the item, *“If you believe you have a calling in life, what is that calling?”* Qualitative responses will be coded through an iterative, group coding process outlined in the following proposed analyses section.

### **Procedure**

Data for the current study was collected in three phases across a 1-year time span through individual and team utilization of the online leadership development tool. Participants met with certified leadership coaches who led developmental conversations on the assessments. In the first phase, participants logged in to the online tool and completed the initial profile, which includes demographic items, personality items, and the courage and vulnerability measures. One month following the initial assessment,

users were sent an additional email granting them access to a new assessment (the Calling and Purpose Inventory) to complete, which included the other-centered calling measure. Participants were asked to respond to the question, “*If you believe you have a calling in life, what is that calling?*” in an open textbox format, and then rate the extent to which they felt they were fulfilling that self-identified calling. The lag time between phase one and two was utilized in order to diminish the probability of common method variance (Podsakoff, MacKenzi, Lee, & Podsakoff, 2003). This is a concern when all constructs are collected by the same method of measurement. One month following completion of the Calling and Purpose Inventory, participants were sent the third assessment (the Leading Under Pressure Inventory), which included the differentiation measure. Participants were asked to rate themselves on a series of eighteen items measuring differentiation. Some example items included “*I express my opinions without hesitation*” and “*I adapt my behavior so that others are comfortable.*” All scales remained the same throughout the time data was collected.

## CHAPTER III

### Results

#### Preliminary Analyses and Assumptions Testing

Before hypothesis testing was conducted, the complete dataset was cleaned and descriptive statistics were ran. The focus of these preliminary analyses was to examine and identify any abnormalities in the data that could increase the likelihood of committing a type I or type II error. Type I or type II error could have undermined the ability to detect a true effect in the sample. The following sections explain the steps taken in the preliminary analyses.

**Missing data.** Missing data analysis was conducted during the initial data screening process. The data was examined for patterns of missingness that could lead to skewed results (e.g. participants in one group on the outcome variable have significantly more missing data than another group). After examination, no obvious patterns were identified. All cases with missing data fell under 5%. As a follow up, Little's Missing Completely at Random (MCAR) test was used to statistically identify if missingness was completely random. Results of the MCAR test ( $\chi^2=3.568$ ,  $df=6$ ,  $p=.735$ ) indicated that the reason data was missing was likely unrelated to other missing values or variables. Furthermore, multiple imputation (MI; Enders, 2010) was then used to address missing data. MI is one of the most robust missing data techniques because of its ability to impute for independent and dependent variables, and provide strong power for the analyses (Enders, 2010).

**Normality.** Various methods were utilized to examine data normality. Histograms were created to examine skew and kurtosis in the data. Results indicate a negatively

skewed distribution for the variables of courage and vulnerability, and normal distributions for other-centered calling and differentiation. In addition to visually scanning the histograms, the Shapiro-Wilks test also indicated these two variables (courage and vulnerability) had distributions significantly different than a normal distribution. Other-centered calling and differentiation were not found to be significantly different. This indicates that a greater number of participants scored higher on courage and vulnerability than those that scored lower, indicating a negative skew. While skewed data can be addressed to reduce the lack of normality, data for this study was not transformed, because the skew was minimal and transformation of data can lead to additional challenges in data interpretation. Rather, it will be address as a limitation and discussed in more detail in the discussion section.

Scatter plots between each predictor and the outcome variable were checked to assess and support a linear relationship. Furthermore, residuals were evaluated via scatter and P-P plots to check for homoscedasticity, indicating residual variances were evenly dispersed across variables.

**Descriptives and correlations.** Descriptive statistics and correlations were conducted for all predictor and criterion variables in the current study. Results are shown in Table 1 and Table 2. Descriptive statistics indicate that range restriction was present. A few relationships are worth noting in Table 2, including significant negative relationships between gender and all variables except for other-centered calling and differentiation. This highlights the potential connection gender has to these variables, and emphasizes the importance for including it as a control variable in the current study. Additionally, courage and vulnerability were significantly positively related to each other, indicating

that a participant's score on courage is likely positively connected to their score on vulnerability. This will be further examined in the subsequent analyses and addressed in the discussion. With that being said, all correlations fall under 0.3 indicating relationships of low magnitude across the board.

Table 1  
*Descriptive Statistics for Predictor and Criterion Variables*

Variable	M	SD	Min.	Max.
Openness to Experience*	38.12	5.72	21.00	50.00
Courage**	3.84	1.02	1.00	5.00
Vulnerability**	3.65	1.09	1.00	5.00
Other-centered Calling**	2.98	1.10	1.00	5.00
Differentiation	1.89	0.39	1.00	3.00

Note.  $N = 531$ . \* indicates scale ranges from 10 to 50. \*\* indicates scale ranges from 1 to 5.

Table 2  
*Correlation Matrix for Predictor and Criterion Variables*

Variable	1	2	3	4	5	6
1. Gender	-					
2. Openness to Experience	-.191**	-				
3. Courage	-.227**	.029	-			
4. Vulnerability	-.135**	.112	.239**	-		
5. Other-centered Calling	.220**	-.106	-.099	.020	-	
6. Differentiation	.042	.043	-.093	-.018	.018	-

Note. \* indicates significance at .05. \*\* indicates significance at .01.

## Analyses

To test all hypotheses, SPSS Macro, PROCESS (Hayes, 2013) was used, which provides bootstrapped estimates of indirect and conditional indirect effects based on 5,000 resamples. PROCESS Macro for SPSS was used to investigate the (a) total, direct, and indirect effects of courage on leadership differentiation, and (b) the conditional indirect effects due to the moderator of other-centered calling.



In Hypothesis 1, it was predicted that the amount of courage a leader possesses would be positively related to a leader's ability to be vulnerable with those they lead. *B* weights examining the effect of courage on vulnerability in the mediator model in Table 3 indicate support for this prediction ( $B = .226, p = .000$ ). Courage was significantly positively related to vulnerability such that higher levels of courage were positively related to higher levels of vulnerability in a leader. Therefore, Hypothesis 1 was supported.

For Hypothesis 2, it was predicted that other-centered calling would moderate the relationship between a leader's courage and their ability to be vulnerable with their followers, such that higher levels of courage coupled with a calling that is focused on others would result in higher levels of vulnerability. As found in Table 3, the interaction term depicting the moderating effect of other-centered calling on the relationship between courage and vulnerability was significant ( $B = .112, p = .032$ ). The interaction of courage and other-centered calling was significantly related a leader's ability to be vulnerable with their followers explaining 8% of the variance in vulnerability, in support of Hypothesis 2. As a follow up to further examine the interaction, simple slopes were plotted to evaluate the nature of the relationship. Results demonstrated that other-centered calling has a synergistic effect on the relationship between courage and vulnerability. Specifically, for leaders with a calling that is more others-focused, there is a stronger positive relationship between courage and vulnerability than for leaders with a calling that lacks an others-focus. The interaction is depicted in Figure 2.

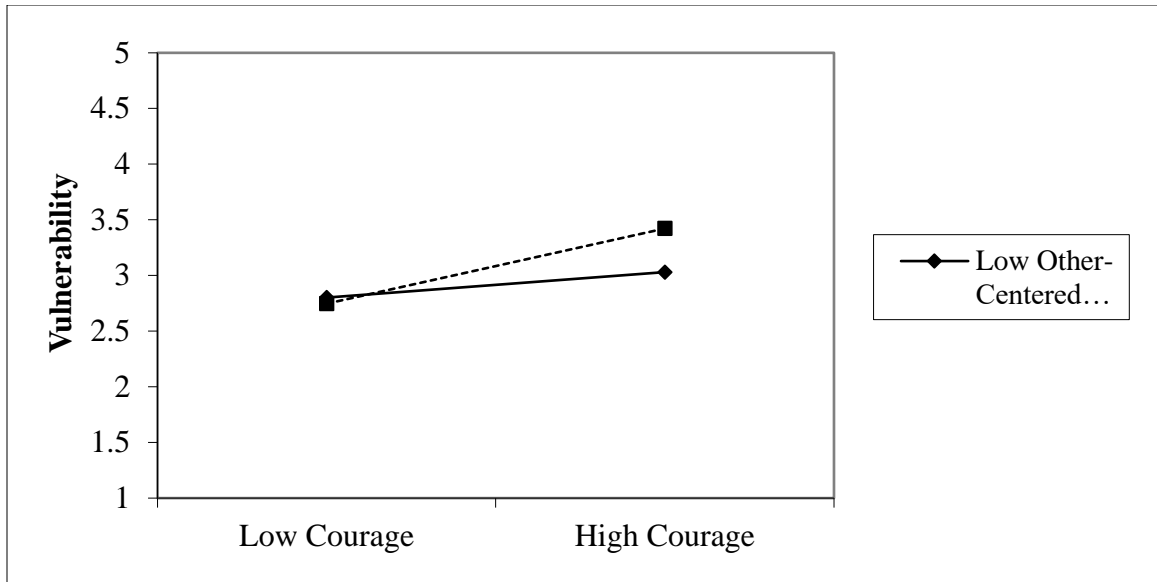


Figure 2. Interaction of courage and other-centered calling on leadership vulnerability.

Finally, in Hypothesis 3, it was predicted that courage would be positively related to a leader's differentiation through the mediating mechanism of vulnerability above and beyond personality (i.e. openness), such that individuals who score higher on vulnerability will score higher on differentiation. Results from the outcome model in Table 3 indicate that vulnerability was not significantly related to leadership differentiation ( $B = -.004, p = .901$ ). Additionally, the direct effect of courage on differentiation was nonsignificant ( $B = .0487, p = .1316$ ), indicating that courage and differentiation are not significantly related. Furthermore, the index of moderated mediation indicated that entire conditional indirect effect model was nonsignificant (BC 95% CI =  $-.0095$  to  $.0063$ ) as the confidence interval crossed zero. The only variable in the model that was significantly related to leadership differentiation was the control variable of openness to experience ( $B = .0137, p = .0143$ ). These findings will be further

examined in the discussion section. All examined relationships are represented in Figure 3.

*Table 3. Regression Results for Conditional Indirect Effect: Courage → Vulnerability → Differentiation. Moderator: Other-centered Calling*

<i>Predictor</i>	<i>B</i>	<i>SE</i>	<i>t</i>	<i>p</i>
<i>Mediator Model (DV = Vulnerability)</i>				
Constant	3.186	.487	6.543	.000
Gender	-.162	.131	-1.240	.216
Openness to Experience	.019	.011	1.701	.090
Courage	.226	.062	3.700	.000
Other-centered Calling	.084	.057	1.482	.139
Courage X Other-centered Calling	.112	.052	2.152	.032
<i>Outcome Model (DV = Differentiation)</i>				
Constant	1.526	.266	5.726	.000
Gender	-.003	.067	-.049	.961
Openness to Experience	.014	.006	2.464	.014
Courage	.049	.032	1.512	.132
Vulnerability	-.004	.030	-.125	.901
<i>Conditional indirect effects at moderator</i>	<i>Boot indirect effect</i>	<i>Boot SE</i>	<i>Bias Corrected 95% CI</i>	
			<i>Lower</i>	<i>Upper</i>
1 SD Below	-.0004	.0043	-.0123	.0069
Mean	-.0008	.0073	-.0153	.0146
1 SD Above	-.0013	.0111	-.0235	.0215
<i>Index of Moderated Mediation</i>	<i>Index</i>	<i>Boot SE</i>	<i>Bias Corrected 95% CI</i>	
			<i>Lower</i>	<i>Upper</i>
Vulnerability	-.0004	.0038	-.0095	.0063

Note: N = 296. SE = standard error; CI = confidence interval.

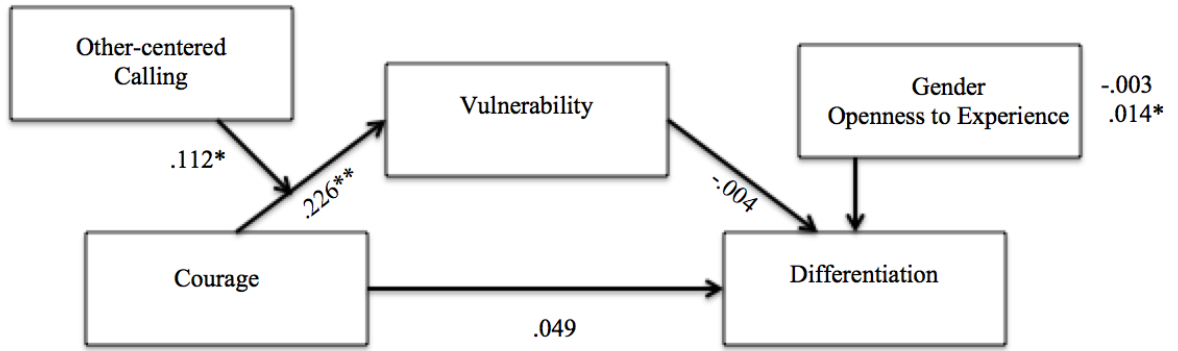


Figure 3. The moderated mediation model in which courage predicts leadership differentiation through vulnerability, conditional upon other-centered calling.

## CHAPTER IV

### Discussion

As authenticity and trust continue to be recognized as key pillars of effective leadership in today's world (Avolio et al., 2004; Mayer et al., 1995; Peus et al., 2012), organizations need leaders who are willing to be vulnerable with those they lead. With constant competing priorities and continual exposure to high pressure situations, it is becoming increasingly important for leaders to balance staying connected to their own values and convictions, while staying in touch with the needs of those they lead (McKenna & Yost, 2004). The current study contributes to the existing literature by exploring which attributes of a leader enable them to be vulnerable with their followers, and examines how this expression of vulnerability is related to leadership differentiation. Specifically, courage was investigated as a predictor of vulnerability as moderated by an other-centered calling. Additionally, vulnerability was investigated as a mediator between courage and leadership differentiation. In other words, it was proposed that the combination of courage and other-centered calling is related to a leader's ability to show vulnerability, which in turn impacts the leader's level of differentiation. The following sections will provide an in depth discussion of the findings.

#### **Gender, Personality, Vulnerability, and Differentiation**

In order to examine the effect of courage and vulnerability on leadership differentiation, courage and vulnerability were examined beyond gender and openness to experience. As societal norms often place varying standards of leadership capability based on one's gender (Ridgeway, 2001; Weyer, 2007), gender was included as a control variable. The focus of this study was to examine the impact of courage and vulnerability

on differentiation regardless of gender. Initial correlation analyses reported in Table 2 indicated gender to be significantly negatively related to all variables except other-centered calling. These findings indicate that males scored significantly higher on courage and vulnerability, while females scored significantly higher on other-centered calling. Although these correlations demonstrated statistical significance, gender was not significantly related to any variables in the moderated mediation model. This suggests that while men and women scored differently on average on these variables, gender did not have a significant impact of the relationship between the variables of interest. While examining the effect of gender on vulnerability and leadership differentiation was beyond the scope of the current study, it is an important and potentially impactful future research topic to pursue due to research suggesting that leadership expectations and perceptions often vary as a function of one's gender (Ridgeway, 2001; Weyer, 2007).

In addition to controlling for gender, openness to experience was included as a control variable in the present study. Rooted in research on the five-factor model of personality, it was hypothesized that an individual's level of openness to new experiences could be related to their willingness to openly share and demonstrate vulnerability (Hogan & Hogan, 1992). In order to detect the effect of courage on vulnerability and parse out the variance associated with openness to experience, it was included as a control variable. As demonstrated in Table 2, openness to experience was not significantly correlated with any variables in the model other than gender. However, as shown in Table 3 in the outcome model, openness to experience was significantly related to leadership differentiation. Follow up post hoc analyses indicated that leaders who scored higher on openness to experience were significantly more likely to end up in the

high differentiation group than the low differentiation group. This suggests that leaders who are more open to new experiences have a stronger propensity to stay connected to their own needs while simultaneously keeping a pulse on the needs of those around them. Their intellectual curiosity to explore new things about themselves and others could impact their ability to be differentiated. These findings have interesting possible implications and should be further explored in future research to further unpack the role of openness to experience in predicting differentiation.

### **Impact of Courage and Calling on Vulnerability**

Hypothesis 1 examined the impact of courage on a leader's ability to demonstrate vulnerability. Results from this study found courage to be positively related to vulnerability above and beyond gender and openness. These findings suggest that leaders who demonstrate courage by confronting their own fears and uncertainties head on are more likely to lean into vulnerability with those they lead. As suggested by research, vulnerability inherently requires some level of exposure to risk or uncertainty (Brown, 2012), which would suggest courage to be a necessary characteristic for demonstrating vulnerability. The findings of the current study support this theoretical notion and corroborate the idea of needing courage to be vulnerable.

Furthermore, Hypothesis 2 tested whether other-centered calling had a moderating effect on the relationship between courage and vulnerability. Results indicate that the relationship between courage and vulnerability did in fact depend on the extent to which one's calling was focused on others. Courage and other-centered calling had a collaborative effect on vulnerability such that individuals that reported higher levels of courage and a greater focus on others in regards to their calling reported higher levels of

vulnerability with those they led. In order to be vulnerable with those you lead, simply being courageous is not enough. These findings suggest the combination of a strong sense of courage paired with a calling that focused on other people is a synergistic blend that unlocks a leader's ability to be vulnerable. The combination of courage and other-centered calling accounted for eight percent of the variance in vulnerability. Despite the rather small incremental predictive ability of courage and other-centered calling, these findings can provide important practical significance for leaders (Cohen, 1992). The effect is suggested to be significant because of the identified research linkages between vulnerability and important leadership outcomes (e.g., Mayer et al., 1995; Nienaber et al., 2015; Rousseau et al., 1998). Leaders who take a courageous step out first toward a call of serving others are more likely to make that plunge into vulnerability. This courageous step into a vulnerable state allows them to be truly seen by their followers, allowing for deeper levels of connection and trust (Deb & Chavali, 2010; Nienaber et al., 2015; Rousseau et al., 1998).

This study greatly contributes to understanding vulnerability as a facet of leadership. By identifying courage and other-centered calling as necessary components of vulnerability, this study provides leaders with two tangible constructs to pursue in order to increase their vulnerability with their followers. As research specifically focused on understanding the role of vulnerability in leadership is still in the early stages of development, the findings of the current study exemplify connections between vulnerability and important leadership theories (i.e. authentic leadership, transformational leadership). For example, other-centered calling closely aligns with the concept of idealized influence in transformational leadership literature (Avolio, 2011; Bass, 1985). It



requires a leader to transcend self-interest for the greater good of the group (Avolio, 2011). Additionally, vulnerability requires relational transparency, a key component of authentic leadership (Avolio et al. 2004; Gardner et al., 2005). In order to be vulnerable, a leader must share their true thoughts and feelings and be upfront about their reasoning behind decisions. Through these acts of vulnerability, leaders are perceived as being more authentic, transparent, and trustworthy (Avolio, 2011). These parallels pose support for the connection between vulnerability, authentic leadership, and transformational leadership and highlight the importance of the current findings.

### **Courage, Vulnerability, and Leadership Differentiation**

In addition to examining the predictors of vulnerability, Hypothesis 3 proposed that leaders who were more vulnerable with their followers would demonstrate higher levels of differentiation (the ability to stay connected to one's own convictions, while remaining in touch with the needs of one's followers). As vulnerability was predicted by a combination of courage and other-centered calling demonstrating the tension between sense of self and others, it was then predicted that demonstrating this vulnerability would lead into the similar tension of differentiation. As reported in Table 3, findings in the current study did not support this hypothesized relationship between vulnerability and differentiation. Vulnerability was not significantly related to differentiation, and the mediating relationship of courage to differentiation through vulnerability was not significant.

Lack of support for the complete model could be a result of varying factors. For instance, range restriction on the outcome variable of differentiation could have inhibited the ability to detect an effect (Shadish, Cook, & Campbell, 2001). As operationalized,

differentiation was measured with only three categories (high/high differentiation, high/low differentiation, and low/low differentiation). Due to the lack of range on the outcome variable, the effect could have been masked. Additionally, the study could have been underpowered. As suggested by Preacher, Rucker, and Hayes (2007), moderated mediation models often need upwards of 200 to 300 participants in order to detect an effect depending on its size and other factors. While the current study was within this range, additional participants could have increased the power of the study and increased the ability to detect a significant effect. Finally, our findings could be a result of the possibility that vulnerability and differentiation are simply not related.

### **Suggestions for Leaders**

Results from the current study suggest that courage and others-focused calling are key contributors to enabling vulnerability in leaders. Leaders who are able to remain courageous in the face of adversity and stay focused on serving others are able to demonstrate vulnerability. Knowing these results, leaders can practice demonstrating courage in safe environments when the stakes are not too high. Whether it is during a weekly team meeting or in a one-on-one setting with their direct reports, leaders can act courageously in a step towards authenticity and vulnerability. By placing cues around the office to remind the leader to be courageous, they will be more likely to stand tall in high-pressure moments (Gollwitzer, 1999). Some examples of courageous acts could include standing up for an unpopular perspective, sharing a personal story or experience, constructively responding to criticism, or admitting one's mistakes. After a week, the leader can then take time to reflect and document small courageous wins they had in the

past week to build their sense of efficacy in choosing courage in the face of adversity (Weick, 1984).

In combination with practicing courageous acts, leaders can also take time to reflect on and document their perceptions of their calling in life. The practice of taking time for reflection and documenting one's thoughts is powerful (Locke & Latham, 2002). While some leaders might consider calling to be a religious or spiritual construct, another direction they could focus is on the purpose of their work or career. By connecting one's work to a greater mission or purpose, individuals are able to be more engaged, committed, and authentic in their work (Holbeche & Springett, 2004; Milliman, Czaplewski, & Ferguson, 2003). After taking time to reflect on that personal sense of calling or purpose, the leader should then think about how others are impacted by that calling. This goes beyond a simple understanding of calling as work or service that feels meaningful, to a calling that is specifically focused on serving others. By identifying the role of others in one's greater direction and purpose in life, we become connected into the people around us and are more inclined to connect with others on a more personal level. This enables us to choose vulnerability even when it might not be the safest option.

With that being said, these practices will not negate the inherent risks that often accompany vulnerability. By definition, vulnerability is described as emotional exposure that often includes risk and uncertainty (Brown, 2012). These risks must be evaluated and weighed as potential costs to the leader. Choosing vulnerability does not guarantee positive outcomes for the leader, but opens up the door to true authenticity and human connection.

**Limitations**

Although the findings of the current study provide support for the first two hypotheses, several limitations should be noted.

**Measurement.** While the measure of leadership differentiation has undergone validation and demonstrates acceptable structural validity standards, the variables of courage and vulnerability were measured by single-item measures within the same scale and lack validation. Because the measures consisted of only one item each, this prevents the ability to conduct validation testing and examine the convergent and discriminant validity of the scales (Byrne, 2010). These limits could lead to possible measurement error by enhancing the relationship between the variables of interest and increase the likelihood of committing a Type I error (Shadish et al., 2001).

**Sample.** Even though the sample was relatively diverse in terms of gender and age, participants were fairly homogenous in other potentially impactful categories. Of the participant group, 83.7% identified as white/Caucasian and 41.2% reported working in a church/ministry setting (77.4% Protestant). As a strong majority of the sample reported working in a church or ministry setting, their backgrounds could have influenced the reports of calling given that Protestant ministries emphasize receiving one's calling from God.

Furthermore, the generalizability of the current findings is limited due to the sample and participant response rates. Out of 2517 participants in the entire database, only 296 met inclusion criteria equating to only an 11.8% response rate. While various factors lead to the selected sample (e.g. formal leadership role required, not all participants completed all assessments), results could vary when attempting to replicate

the study's findings with a different sample. Future research should investigate a more diverse sample and aim for a greater response rate.

**Mono-method bias.** As described by Shadish and colleagues (2001), when one method is used to collect all measurement of the variables of interest (e.g. self-report measures) mono-method bias is introduced. Mono-method bias can impair one's ability to detect a reliable effect in a study because all variables are coming from one source (Podsakoff, MacKenzie, & Podsakoff, 2012). In the current study, all variables other than other-centered calling were collected via self-report. Future research should examine alternative measures of these constructs. For instance, courage, vulnerability, and differentiation could all be measured from the perspective of a leader's direct reports.

**Skewness.** The variables of courage and vulnerability were negatively skewed, indicating that participants scored higher on average than a normal distribution on these measures. This could be a result of a few varying reasons. Specifically, self-serving bias could have impacted scores on these variables (Campbell & Sedikides, 1999). Leaders perhaps perceive courage and vulnerability as important leadership characteristics, thus reporting themselves as higher on these measures. Also, the negatively skewed data could be a result of the homogeneity of the sample. Future research should examine alternative methods of measurement with a more diverse sample.

**Differentiation measure.** The differentiation measure used in the current study is noted as a limitation for two primary reasons. First, the measure of differentiation only had three groups (high, high; high, low; low, low), which led to range restriction and inhibited our ability to detect an effect. Secondly, the measure included the paradoxical constructs of attention to self and attention to others in the same measure. As initially

described by Bowen (1978), the concept of differentiation is primarily focused on the self. Only more recent examinations in practice have begun to describe differentiation as a balance between attention to self and other (McKenna & Yost, 2004). In order to further understand the relationship between vulnerability and differentiation as originally defined, future research should examine the connection between one's vulnerability and sense of self as described in the attention to self scale. Additionally, future research should expand the differentiation measure to a continuous scale that allows for greater variability, increasing the likelihood of detecting a true effect.

### **Future Research**

In addition to addressing the previously described limitations, future research should explore the relationship between courage and vulnerability on a broader sample that not only includes leaders, but rather all individuals, regardless of their leadership responsibility. As observed from research and raw human experience, these characteristics are innately human. Courage and vulnerability are not only experienced by leaders, but are instead felt by all people because they are so deeply embedded in what it means to be human (Brown, 2012; Cavanagh & Moberg, 1999). Future studies could compare the relationship between these variables as they occur in leaders and followers. Similarities and differences could be compared to determine which characteristics differentiate a leader from their followers and vice versa.

Secondly, research can examine the relationship between courage, vulnerability, and differentiation through the lens of gender. As previously mentioned, leadership expectations and perceptions often vary as a function of one's gender (Ridgeway, 2001; Weyer, 2007). In order to better understand how gender impacts the demonstration and

perception of vulnerability in leaders, follower perceptions of male and female leaders could be compared. Comparisons could include the extent to which followers perceive their leader as vulnerable and then juxtapose those perceptions with their impressions of leadership differentiation and effectiveness. This could provide insight into leadership double standards and help educate researchers and practitioners on closing the gender gap in perceptions of leadership capability. Furthermore, it could help understand gender differences that are true differences versus those that are developmental in nature.

Finally, instead of examining the relationship between courage, vulnerability, and the construct of differentiation as a whole, future research could look at the impact of courage and vulnerability on each aspect of differentiation (attention to self and attention to others) separately. While research suggests differentiation to be comprised of both a sense of self and a connection into the needs of those around you (Bowen, 1978; Kerr & Bowen, 1988; Skowron & Friedlander, 1998), most people tend to lean towards one or the other. By investigating each component of differentiation separately, researchers could identify if this combination of characteristics (courage, vulnerability, and other-centered calling) is more predictive of a leader who has a strong sense of self or a strong connection into the needs of the people around them. This would expand the literature on differentiation and provide insight into which characteristics lead to each type of leader.

## **Conclusion**

Vulnerability is immanent in building trust between a leader and their followers (Mayer et al., 1995; Rousseau et al., 1998). The purpose of this study was to examine the role of courage and calling in impacting vulnerability and to understand how those constructs related to leadership differentiation. While results did not show support for the

connection between these variables and differentiation, they did highlight the power of courage and other-centered calling on an individual's willingness or capacity to be vulnerable. And vulnerability, as an aspiration, is a human ideal that we must approach with thoughtfulness and care as we seek to become authentically connected to one another. These findings give us initial tools for building a generation of leaders that have the courage to descend into vulnerability when it might be unpopular to do so, but for the sake of becoming better versions of ourselves. By building up leaders with this quality, we have the opportunity to change the landscape of business and create organizations that are built on human connection and authenticity, instead of self-serving greed and achievement for the sake of nothing.



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**Appendix A: Vulnerability Measure**

**Appendix A**

The Vulnerability Measure is included in the Incarnational Character Scale within the Leadership tool.

Instructions: The Profile is designed to provide important information about your current life and work situation, and serves as an important benchmark that will allow you to look back when you are further down the road of work and life to identify what you were feeling and doing at different points during your journey as a leader and/or a person.

Please indicate the extent to which each of the following statements describe you.

I am willing to let my guard down with others, even in situations where I feel like

I should protect myself and only show strength.

Not at All  
Like Me  
1

2

Somewhat  
Like Me  
3

4

Very Much  
Like Me  
5

**Appendix B: Courage Measure**



## Appendix B

The Courage Measure is included in the Incarnational Character Scale within the Leadership tool.

Instructions: The Profile is designed to provide important information about your current life and work situation, and serves as an important benchmark that will allow you to look back when you are further down the road of work and life to identify what you were feeling and doing at different points during your journey as a leader and/or a person.

Please indicate the extent to which each of the following statements describe you.

If I feel it is right, I confront my own fear, pain, risk, danger, and uncertainty head on, even in situations where it may be unpopular to do so.

Not at All  
Like Me  
1

2

Somewhat  
Like Me  
3

4

Very Much  
Like Me  
5

**Appendix C: Other-centered Calling Measure**

### **Appendix C**

The Other-centered Calling Measure is included in the Calling and Purpose Inventory within the Leadership tool.

Instructions: To what extent are you doing what you are supposed to be doing at this point in your life and career? What is your overarching calling or purpose in life? Where did it come from? What difference does it make? These are all important and very personal questions. This tool will give you the opportunity to articulate what all that means to you, where you are going in life, and why you are on this earth.

If you believe you have a calling in life, what is that calling?

**Appendix D: Differentiation Scale**

### Appendix D

The Differentiation Scale is included in the Leading Under Pressure Inventory within the Leadership tool.

Instructions: The Leading Under Pressure Inventory (LUPI) is designed to give you insight into how you respond to the most important high pressure situations in your life and work, your strengths under pressure, and your areas that may need development if you are to manage yourself more effectively in the relationships around you.

Not at All  
Like Me  
1

2

Somewhat  
Like Me  
3

4

Very Much  
Like Me  
5

I am cautious of the way I behave and of what I say to others around me.

I express my opinions without hesitation.

When I say no to the requests of others, I'm usually concerned with how they will feel about it.

I have no problem saying no to the requests of others, even if they will be unhappy with my response.

When an emotionally charged situation occurs, I confront others immediately.

There are times when my tendency to react too quickly gets the best of me.

I adapt my behavior so that others are comfortable.

I usually do not change my behavior to please another person.

If I have an intense argument with others, it tends to stay on my mind for a while.

If others are upset with me, I can't let it go easily.

It doesn't bother me if others are upset with me.

The thoughts and feelings of others impact what I do.

I do what I think is right, regardless of how other people feel about it.

It is important for me to find common ground with others.

I like others to respect me.

I don't place importance on what others think of me.

I care about the impression I create when things get emotionally charged.

I am not concerned about the impression I create in emotionally charged situations.

**Appendix E: Demographic Items**

**Appendix E**

**What is your sex?**

- Male
- Female

**Which of these best describes your ethnic background?**

- Caucasian/White
- African American/Black
- Hispanic/Latino
- Asian/Pacific Islander
- Native American
- Other

**What year were you born?**

\_\_\_\_\_

**Are you currently in a formal leadership role (e.g., do you have people you are responsible for leading)?**

- Yes
- No

**Please indicate your religious preference.**

- Catholic
- Protestant
- Jewish
- Muslim
- Buddhist
- Hindu
- Atheist/Agnostic
- Other