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Developing Conviction in Women Leaders:

The Role of Unique Work and Life Experiences

McKendree J. Hickory

A dissertation submitted in partial fulfillment

of the requirements for the degree of

Doctor of Philosophy

In

Industrial/Organizational Psychology

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School of Psychology, Family, & Community

April 2017

Approved by:

Reviewed by:

Robert B. McKenna, Ph.D. Associate Professor of Industrial Organizational Psychology Dissertation Chair Robert B. McKenna, Ph.D. Chair, Industrial Organizational Psychology

Dana Kendall, Ph.D. Assistant Professor of Industrial Organizational Psychology Committee Member Katy Tangenberg, Ph.D. Dean, School of Psychology, Family, & Community

Reverend Beth Armstrong, Ph.D. Strong Leadership Services Committee Member

Dedication

This dissertation is dedicated to all the strong women leaders who have demonstrated conviction and shown me what it means to be authentic. To all the strong male advocates who have seen my potential and called it out. And lastly to the women leaders who are yet to come but are experiencing the moments that matter.

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Abstract

The past 20 years has seen a proliferation of studies identifying the barriers women often face in leadership. Two potent obstacles women face are gender bias and stereotype threat, which manifest in both management selection and performance ratings. One option some women use to combat negative stereotypes is to adapt themselves to their environments, an approach that may lead to a decrease in self-regulation, goal clarity, and authenticity. Demonstrating conviction is a powerful strategy used by leaders to maintain a consistent sense of direction and connection to what is most important to them, even under the most pressing situations. This strategy may be especially useful for enabling women leaders to hold on to what is most important to them amid the pressures they face to adapt to stereotypes. The goal of this study was to determine whether certain career and life experiences affect women's ability to demonstrate conviction. After accounting for missing data and outliers, the sample consisted of 563 male and female leaders enrolled in an online leadership development tool. The age of the participants ranged from 18 to 92, with 323 participants identifying as female and 240 as male. Hierarchical regression analyses were used to test the primary hypotheses and exploratory research questions. All analyses resulted in statistically significant results. Specifically, *Calling* and People Experiences positively predict conviction development. Calling Experiences resulted in the strongest unique predictor of conviction development in women. Exploratory analyses identified *Leadership* and *People Experiences* as being critical for male leaders' conviction development. These result reveal that novel and unique

experiences have a direct impact on women leaders' self-knowledge and create opportunities for learning.

CHAPTER I

Introduction and Literature Review

During the First Persian Empire, between 550 and 330 BCE, there lived a queen by the name of Esther: a woman who gained power by way of societal objectification of women at that time. Despite having been enthroned for such reasons, Esther is most notably remembered for her determined actions and the famous words of her uncle suggesting that "for such a time as this," she was queen. As a result of her role, timing, and conviction, Queen Esther saved an entire generation of Jews from genocide. This story is not an isolated incident. Women's voices and conviction have always produced powerful movements.

In our modern context, in the late 19th century women took their fight to voting booths as they struggled to win basic rights as citizens. Fifty years later, Title VII and Title IX were passed, effectively leveling the playing field for women athletically and vocationally (Civil Rights Act of 1964; Education Amendments of 1972). Today, women take the struggle to board rooms and offices alike as they fight for access to senior leadership positions. In each of these struggles, these women communicate a powerful and consistent message: that their voices, opinions, and leadership matter. Every individual movement toward equality has been the result of the women involved having a clear understanding of what mattered to them while bravely communicating those convictions to the people around them.

Demonstrating conviction is not only a powerful driver of social movements but also a potent strategy used by leaders to maintain a consistent sense of direction and connection to what is most important to them, even under the most pressing situations (McKenna & Yost, 2004). Displaying conviction requires two steps. First, an individual identifies what is important to her or him in terms of values, desired outcomes, and personal purpose. Second, the individual must be able to convey these notions to others. Although this strategy is beneficial to any leader (McKenna & Yost, 2004), it may provide unique outcomes for women based upon the barriers they face in leadership.

For example, demonstrating conviction may provide a buffer for women leaders against pressures to adapt to stereotypical expectations and could be used as a means of role modeling for younger women in organizations (Catalyst, 2007; Hoyt & Blascovich, 2010; O'Neil, Hopkins, & Bilimoria, 2015). However, presently research is limited on the topic of how conviction can be developed in women, making it challenging to effectively recommend its use to women leaders. Therefore, the purpose of this study was to further what we know about the developmental journey of women leaders by exploring the kinds of experiences that develop their conviction.

The following sections cover the theoretical, empirical, and historical evidence relevant to women's conviction development. First, I make the case that women leaders face unique barriers that result in decreased confidence levels and leadership ambition while having few useful techniques for overcoming these barriers (Catalyst, 2011; Eagly, 2007; Ely, Ibarra, & Kolb, 2011). Second, I outline why developing conviction may be a useful technique for women leaders to combat these barriers and the personal, historical, and future implications of women expressing conviction. Third, I discuss research on the ways in which prior experiences shape a person's leadership skills. Finally, I propose that conviction is a useful leadership skill for women that can be developed through unique experiences.

Introduction

Barriers to women's leadership. The past 20 years has seen a proliferation of studies identifying the barriers women often face in leadership (Catalyst, 2007; Catalyst, 2011; Eagly, 2007; Ely et al., 2011). Two potent obstacles women face are gender bias and stereotype threat, which manifest in both management selection and performance ratings (Catalyst, 2007; Fitzsimmons, Callan, & Paulsen, 2014; Heilman & Chen, 2005; Heilman & Haynes, 2005). In conjunction, these two barriers have resulted in locking many women out of leadership positions. For example, women are CEOS in only 2.2% of Fortune 500 companies and only 15% of corporate officer positions or board seats are occupied by women (Catalyst, 2011). These numbers may not be due to blatant discrimination but rather to the subtle operation of gender bias that is seen in stereotypes.

Evidence consistently suggests that common notions of leadership have qualities more strongly associated with men than with women (Eagly & Karau, 2002; Eagly, Wood, & Diekman, 2000; Schein, Mueller, Lituchy, & Liu, 1996). Therefore, stereotypes regarding what a leader is supposed to look like can preclude executives' seeing the leadership potential in many women, because the women's behavior may not match the leaders' behavioral expectations. However, it is not just this overt discrimination through stereotypes that keeps women from these leadership positions. When strong negative stereotypes exist for a group with which one strongly identifies (i.e., women) stereotype threat can exist, resulting in internal pressure to act in non-stereotypical ways (Hoyt & Blascovich, 2007; Steele & Aronson, 1995). This pressure can lead women to doubt their capabilities as leaders, resulting in their opting out of pursuing leadership positions altogether (Kay & Shipman, 2014; Rudman & Phelan, 2010; Sturm, Taylor, Atwater, &

Braddy, 2014). As a whole, these internal doubts and external barriers often keep women out of leadership roles and give them few viable options for moving forward.

Strategies for combating barriers. One option some women use to combat negative stereotypes is to adapt themselves to their environments, an approach in which they display behaviors that they believe others want from a leader but that may not be in keeping with their actual leadership style (Ely et al., 2011; O'Neil et al., 2015). For example, a woman leader may choose to act more aggressive and competitive than is natural to her in an effort to disconfirm stereotypes that women are too emotional or indecisive (Eagly & Carli, 2007; Eagly, Johannesen-Schmidt, & van Engen, 2003; Ely et al., 2011). Although a woman's natural leadership style may encompass transformational qualities such as mentoring her team, she may be inclined to downplay these behaviors to increase her chances of being perceived as a more powerful leader. In fact, research shows that women leaders tend to display more transformational-like behaviors than men (Eagly et al., 2003). This is not to suggest that all women or all men act in these stereotypical ways but rather to highlight the manner in which stereotypes can influence a person's behavior.

In a second option receiving noticeable attention, women are told to "fake it until you make it" (Kay & Shipman, 2014). Similarly, women are told that they need to "lean in" (Sandberg, 2013) and to boldly take on responsibilities they are not confident they can fulfill. Though these recommendations may be well-intentioned, researchers and practitioners have found them to be both ineffective and potentially harmful (Aarts, 2016; Exley, Niederle, & Vesterlund, 2016; McKinsey, 2015).

For example, if a woman "leans in" and takes responsibility for a project that is ultimately unsuccessful, the negative stereotype that women leaders are not as effective as men will be further confirmed (Ryan & Haslam, 2007). Additionally, decades-old research known as the Imposter Syndrome—the belief that others will one day realize that a person is not as capable as she has presented herself as being or as others have thought her to be (Clance & Imes, 1978)—suggests that even when women attain top academic marks and receive high-level degrees, they are more likely than men to doubt their abilities.

One reason women may experience doubts is that confidence and leadership self-efficacy are highly susceptible to stereotype threat, positive or negative priming, and bias in performance ratings (Hoyt & Blascovich, 2010; Rudman & Phelan, 2010). The result of these doubts can leave women with less confidence in their actual abilities, thereby decreasing their leadership ambitions (Killeen, Lopez-Zafra, & Eagly, 2006; Litzky & Greenhaus, 2007; Yeagley, Subich, & Tokar, 2010). Last, although women are encouraged to increase their confidence, studies found that confidence is specifically associated with men, making this a problematic recommendation for women (Heilman, Block, Martell, & Simon, 1989; Maccoby & Jacklin, 1974).

In summary, it is clear that women leaders face unique barriers that can result in internal and external doubts about their capacity to lead and that their options for mitigating these challenges are few. It is essential, then, to identify strategies that may actually be effective for women leaders overcoming these barriers.

Leadership identity and presence in women's leadership development.

Women's leadership development theories are now taking into account the negative

outcomes resulting from barriers women leaders face (Ely at al., 2011; O'Neil et al., 2015). Simultaneously, a growing body of research demonstrates positive performance outcomes and increases in enhanced personal development when individuals are able to bring more of their "whole selves" to work, including sharing their thoughts, values, and feelings (Bushe, 2009; Cable, Gino, & Staats, 2013; Roberts, 2007; Roberts, 2013). As a result, researchers and practitioners suggest that to develop leadership in women, it is necessary to build qualities such as leadership identity and presence in an effort to mitigate negative consequences of barriers and to foster greater self-awareness and authenticity (Bell, 2010; Ely et al., 2011; O'Neil et al., 2015). These theories and emerging findings offer a springboard for an exploration of the important impacts conviction may have for women leaders.

As was mentioned previously, demonstrating conviction is a key strategy used by leaders when they are facing high-pressure situations. For the purposes of this study, *conviction* is defined as the ability to maintain and communicate a clear and consistent sense of who you are and what is most important to you. This strategy allows a leader to identify what is important to her or him while also being able to communicate this to others. Conviction therefore enables a leader to stay connected to her or his purposes when under pressure (McKenna & Yost, 2004). This strategy may be especially useful for enabling women leaders to hold on to what is most important to them amid the pressures they face from biased stereotypes. Conviction could also be used as a strong positive role modeling signal to other women who may also be facing similar barriers (Hoyt & Blascovich, 2010). It is therefore important to increase our understanding of

how conviction is developed, given the powerful outcomes that may exist for women leaders.

The aim of my study was to study the Esther-like moments that have cultivated conviction in women leaders. By exploring the kinds of experiences that develop conviction within women, I situated my work within contemporary research on identity, presence, values, and purpose within leadership theories broadly, and within women's leadership development frameworks specifically (Avolio & Gardner, 2005; DeRue & Ashford, 2010; Ely et al., 2011; Lord & Hall, 2005; O'Neil et al., 2015; van Knippenberg, van Knippenberg, De Cremer, & Hogg, 2004). Important implications of this work include the need to focus women's leadership development on the values and purposes that drive them and not just on managing barriers or faking confidence. Further, understanding the specific experiences that develop conviction could help guide leadership practitioners toward experiences that may not be a part of current leadership development frameworks. The following sections discuss relevant literature in support of this study.

Conviction in Women Leaders: Theory and Limitations

Theoretical foundations of conviction. In their study of more than 200 senior-level leaders, McKenna and Yost (2004) found demonstrating conviction to be a key strategy leaders used to navigate high-pressure situations. This strategy enables leaders to maintain a clear and consistent sense of what is important to them even in the face of pressure. As McKenna and Yost (2004) articulated, demonstrating conviction is a two-pronged strategy that requires both self-knowledge and the ability to communicate these values and wants to others.

Demonstrating conviction requires that a leader first be clear about what is important to her or him, including desired outcomes and personally-held values, situating this strategy well within recent leadership theories that emphasize the need for leaders to be authentic and understanding of their leadership purpose (Avolio & Garnder, 2005; Lord & Hall, 2005; McKenna & Wenzel, 2016). Conviction, however, is conceptually distinct from related concepts because it involves outcomes a leader would like to see happen and requires the second element of actually expressing that desire to others.

Once a leader has identified what is important to her or him in terms of both values and desired outcomes, the leader must then be able to clearly communicate this value to others (McKenna & Yost, 2004). For example, although a leader may know what she values, when placed within a high-pressure situation, she may be inclined to succumb to what others need and want from her, resulting in her losing the ability to effectively communicate what is important to her as the leader. In other words, she may be drawn into the emotions of others and lose her connection to what she believes is most important in that situation. For this reason, demonstrating conviction is most challenging for leaders when they experience personal and systemic anxiety, or rises in pressure due to the emotional systems they are within (Goleman, Boyatzis, & McKee, 2001; McKenna & Yost, 2004; Morris & Keltner, 1998). At this juncture, it is important to discuss two potential limitations for women demonstrating conviction.

Limitations to women's demonstrating conviction. First, advocating for a leader's ability to communicate what is important to her is not to suggest that she should blindly act on her own agenda but rather that she should be able to maintain a clear and consistent sense of self that will allow her to make the best decisions within her high-

pressure context. In other words, blind conviction is not the goal; rather, the goal is congruence between an individual's sense of self and what that individual communicates to others, even in the face of the external stressors of others' emotions. Further, demonstrating conviction is about clearly communicating to others and is therefore highly personalized. This personalization is particularly relevant to women, given societal expectations regarding appropriate behavior for them (Eagly & Diekman, 2004; Eagly & Karau, 2002).

Some studies suggest that women experience pressure to conform to both organizational and societal expectations of appropriate feminine behavior as a result of role congruency theory (Eagly & Karau, 2002; Rudman, Moss-Racusin, Phelan, & Nauts, 2012). This theory posits that an individual, in this case a woman, will be positively viewed by others if her behaviors align with established gender norms for a woman (Eagly & Diekman, 2005; Eagly & Karau, 2002). This dynamic plays out in evaluations of women leaders in particular ways.

When women act in accordance with what is expected from them, they are seen as more likeable but less competent (Catalyst, 2007; Cialdini & Trost, 1998; Ely et al., 2011; Heilman, Block, & Martell, 1995). Alternatively, when women act in ways that can be construed as counter-stereotypically (e.g., aggressively), they violate these norms and are seen as less likeable. Many women experience hiring discrimination as a result of this double-bind (Phelan, Moss-Racusin, & Rudman, 2008; Rudman, 1998; Catalyst, 2007). Organizational researchers and practitioners should be aware of this backlash and of other costs associated with demonstrating conviction, specifically when making recommendations regarding how women should demonstrate their conviction.

Conviction in Women Leaders: Benefits and Costs

Historical evidence for the importance of conviction in women. History is replete with examples in which women's individual and collective voices resulted in dramatic change for the better. Prominent historical events include the Abolition Movement and women's influential presence during the Labor Rights Movement. Among the ranks of powerful women at this time were Sojourner Truth and Mother Jones, who boldly communicated what was important to them for the sake of others. In today's context, we see a notable example in the Black Lives Matter movement, which was created and fueled by the work of three women. In recent months, the outpouring of women's physical bodies and voices into public spaces as a response to the 2016 United States election has continued to highlight the conviction women collectively display. In each of these examples, we see the power of women's advocating for what they believe must change.

When describing the work of Mother Jones, biographer Clarence Darrow (2004) said, "In all her career, Mother Jones never quailed or ran away. Her deep conviction and fearless soul always drew her to seek the spot where the fight was hottest and the danger greatest" (p. vi). Mother Jones's conviction compelled her to advocate even though she was arrested multiple times and faced prison time of up to 20 years for her organizing (Jones, 2004). What she and her contemporaries exemplify is the long-term benefit of expressing conviction regardless of the momentary costs.

Costs associated with demonstrating conviction. It is not difficult to recollect the moments in history in which an individual's conviction was in opposition to those in power and the status quo. The Civil Rights Movement of the 1960s is just one example in

which those who courageously demonstrated their conviction saw extreme consequences, including death. However, had these individuals remained silent, our current society would have a very different form.

Although within our modern organizations most leaders may not experience such strong consequences for demonstrating conviction, a person whose conviction is in opposition to the status quo will always face a cost. Some potential costs specific to women include economic or social backlash in the form of lower performance reviews and decreased promotion opportunities (Catalyst, 2007; Phelan et al., 2008).

Additionally, women must constantly decide whether to be liked or to be viewed as competent and will need to consider this issue when choosing to display their conviction (Catalyst, 2007).

Though these are very real costs for individual women, history shows us that having the courage to demonstrate conviction despite the costs can lay a foundation for others to thrive and for the voices of many to be heard. In a time in which appalling human rights violations occur weekly, the need is clear for individuals to courageously demonstrate their conviction despite the costs. Demonstrating conviction is not limited to driving societal change, however, but is also a powerful tool for women's personal leadership.

Personal benefits of women leaders' demonstrating conviction. As mentioned earlier, women leaders often have to adapt early in their careers if they desire to be seen as viable candidates for future leadership roles (Eagly & Karau, 2002; Ezzedeen, Budworth, & Baker, 2015; Rudman et al., 2011). For example, a young woman just beginning her career may observe that to advance as a leader, she must be highly agentic

and withhold from expressing emotional responses to situations (Catalyst, 2007; Eagly & Carli, 2007; Ezzedeen et al., 2015). As a result, she may be more concerned with managing other's perceptions than with acting in accordance with her own purposes and values (Quinn, 2004). Although this behavior may allow her to access a higher-level leadership role, a focus on managing others' perceptions can lead to decreased goal clarity, less self-regulation, and a limited ability to learn from failure—important features of effective leadership (Crocker, Moeller, & Burson, 2010). Women may then continue to be seen as less competent and effective leaders as a result of not being able to lead from their authentic style.

However, a woman's ability to demonstrate conviction may help her stay connected to what is important to her while she navigates these kinds of barriers. Given that strongly held beliefs personal values and authenticity can serve as potent buffers against pressure to conform (Ely et al., 2011; Gardner, 1996; McKenna & Yost, 2004), a woman who can maintain a connection to her desired outcomes and values may be able to stay true to her authentic self while facing the pressures to adapt. This is why demonstrating conviction may be uniquely powerful for women. Last, we must consider the potential future societal losses that could be experienced as a result of women's not expressing their conviction.

Future implications of women's demonstrating conviction. Women's demonstrating conviction could have far-reaching implications beyond the fates of the women themselves. Research suggests that it is important for younger women to have female role models as they seek leadership positons (Dasgupta & Asgari, 2004; Lockwood, 2006; Rios, Stewart, & Winter, 2010). This impact can be so powerful that in

laboratory studies, the mere presence of a successful female leader elicited positive leadership behaviors in women who had not yet become formal leaders (Latu, Mast, Lammers, & Bombari, 2013). Even images within media showing women in counterstereotypical roles, including senior-level leadership roles, have a direct impact on women's leadership self-perceptions and ambitions (Simon & Hoyt, 2013).

Although having women in leadership roles does not always evidence role-modeling benefits (Buunk, Collins, Taylor, VanYperen, & Dakof, 1990; Lockwood & Kunda, 1997), when women assume counter-stereotypical roles (e.g., senior leadership), they typically have direct positive impacts on younger women within their organizations (Hoyt & Simon, 2011). It follows that if women leaders demonstrate conviction even in the face of barriers, younger women may find similar courage to express their conviction. This dynamic could result in a greater movement of women leaders acting authentically (Ely at al., 2011; O'Neil et al., 2015). As with any social movement, critical mass is essential to catalyze change (Oliver, 2013); and these subtle ways of demonstrating conviction may add to the mass necessary to change the outlook for women leaders. In summary, the historical, personal, and societal benefits of women's demonstrating their conviction is far too great to ignore. It is therefore necessary to understand how this important element is developed in women.

Developing Conviction Through Experiences

Thus far, research is limited regarding how conviction is formed or developed; therefore, few recommendations exist for how leaders can effectively build their ability to demonstrate conviction (McKenna & Yost, 2004; McKenna & Wenzel, 2016). Some evidence suggests that leadership qualities similar to conviction, such as confidence, self-

efficacy, and leadership identity, are developed through a variety of factors, including going through challenging experiences, learning from role models, and verbal persuasion (Bandura, 1986; DeRue & Ashford, 2010; Kay & Shipman, 2014). Based on these findings and the overlapping conceptual space these constructs share with conviction, I contend that a person's ability to demonstrate conviction develops in part through her or his experiences. Although it is possible that additional factors are relevant to the development of conviction, the focus of this study was on the experiences that most powerfully help women develop their conviction.

Learning through experience. Individuals can gain new skills through experiences they undergo and the lessons they learn as a result (McCall, 2004; McCauley, Ruderman, Ohlott, & Morrow, 1994). Although a complete discussion of the complex nature of individual learning is beyond the scope of this paper, in brief, experiences create opportunities for learning in several ways. First, some experiences present novel or challenging situations that make an individual aware of her or his lack of knowledge or skill (DeRue & Wellman, 2009). This lack of skill or knowledge can increase motivation to learn what is necessary to close this gap (DeRue & Wellman, 2009; Kanfer & Ackerman, 1989). Second, learning can occur when an individual reflects on the outcomes of challenging experiences and subsequently applies this new knowledge to future problems (Knowles, 1975; Kolb, 1984; Marsick & Watkins, 1990). Although challenging experiences may present an opportunity and inspire motivation to learn, reflection, practice, and in some cases feedback, are key mechanisms for skill development (DeRue & Wellman, 2009). These findings have served as foundational

understandings regarding how leaders can learn new skills and competencies through the experiences they undergo.

Leadership outcomes developed through experience. Decades of research on the developmental journey of leaders strongly suggests that leaders' skills are largely developed through the lessons they learn from their career and life experiences (McCall, 2004; McCauley et al., 1994; McKenna, Yost, & Boyd, 2007; Robinson & Wick, 1992; Wick, 1989). For example, influencing others and managing diversity are examples of skills learned through challenging work experiences (DeRue & Wellman, 2009). In addition to tactical leadership skills, their personal character, temperament, and values are things leaders learn about through experience (McKenna et al., 2007).

People also learn about how their values and confidence play out in leadership through experiences (McKenna et al., 2007; O'Neil et al., 2015). Fitzsimmons et al. (2014) found that senior-level women developed their self-efficacy through challenging early life experiences (e.g., death of a loved one, divorce). They also saw that that female CEOs' early work experience taught them independence. Studies also show that individuals learn to be authentic through an individual process of experiences (Shamir & Eilam, 2005), many of which entail overcoming hardship (Shamir, Dayan-Horesh, & Adler, 2005). In fact, Shamir et al. (2005) found that leaders recognized a direct connection between lessons learned through experiences and their self-knowledge. This is not to suggest that women can learn only through difficult experiences that happen to them but rather to highlight the importance of both work-related and non-work-related life experiences. Moreover, it is not only the experiences but how women respond to them that allows these skills to emerge.

This evidence suggests that a multitude of experiences may be related to a woman's development of conviction, and that either life, career, or early work experiences may all influence the ways in which a person's conviction is developed. I propose that conviction is something that can be developed and inherently requires that a person learn lessons about herself or himself through different types of experiences. Considered in the context of the robust research on specific kinds of developmental experiences that result in skill development (DeRue & Wellman, 2009; McCall, 2004; McCauley et al., 1994; McKenna et al., 2007), it seems plausible that particular experiences may even enhance this development.

Developing Conviction in Women Leaders

As was outlined above, demonstrating conviction is both a strategy leaders can use to handle pressure situations and likely developed through experiences. It has also been shown that women face unique barriers to their leadership, requiring that they learn distinctive lessons and strategies for overcoming these barriers. Research also suggests that women often undergo different development experiences in their leadership journeys, possibly because of these barriers or in response to overcoming them (see Fitzsimmons et al., 2014; Ohlott, Ruderman, & McCauley, 1994; Ryan, 2007).

For example, women leaders have been found to accumulate more developmental challenges from difficult working environments than from challenging, task-related experiences (Ohlott et al., 1994). Even the developmental path to the C-suite for women has been found to be uniquely different from that taken by their male colleagues. Fitzsimmons et al. (2014) found that a majority of women leaders in their sample had faced significant disruptions in their childhood (e.g., deaths, divorce, abuse) that resulted

in their developing particular qualities such as self-efficacy. Although this research did not specifically identify the mechanisms through which women developed this skill, based on what is known about lessons from experiences, these experiences were likely novel to some degree, contained a challenge to overcome, and heightened the experiencer's awareness of the skills she or he presently did not have (DeRue & Wellman, 2009; Knowles, 1975; Kolb, 1984; Marsick & Watkins, 1990).

These findings suggest that perhaps the experiences that develop women's conviction may also have unique qualities. In line with research on developmental experiences, it is likely that women respond to these experiences in ways that develop these skills. Though not the primary focus of this study, the learning that results from experiences and from the choices women make about how to respond are likely important mediators of the relationship between conviction and experiences.

Unique experiences develop women's conviction. If it is true, as outlined above, that women leaders learn leadership skills through unique experiences (Ohlott et al., 1994; Ryan, 2007), it is likely that they develop conviction from certain kinds of experiences as well. There are a few reasons for this suggestion. First, historically women have had limited access to certain leadership positions, effectively eliminating the learning potential from the leadership challenges present within those roles. Second, it is possible that because of women's limited access to leadership roles, the important experiences they have had may come from nontraditional work contexts and may be more related to important life experiences, as suggested by Fitzsimmons et al. (2014). For example, a person can learn to manage difficult employees through the leadership experience of having direct reports who do not support her or his initiatives (McCauley et

al., 1994). If a woman has never had an opportunity to be in that role, she is likely to have had to learn that lesson elsewhere, perhaps outside of the work context. Therefore, in hypothesizing about which experiences develop women's conviction, contexts outside of work must also be considered alongside traditional work and leadership experiences.

It is likely true that certain experiences are more closely related to developing conviction than others because they entail distinctive qualities. First, the self-knowledge necessary to demonstrate conviction likely requires experiences related to one's sense of self and meaning in life. Further, in demonstrating conviction, some women may have to embrace momentary consequences as a result of expressing themselves this way (Eagly, 2005). Thus, the experiences that would lead a woman to accept these consequences would likely have to be connected to a deeper meaning or value that would make the consequences worth the risk. An example may be an experience in which someone felt a strong sense of purpose, or a calling, regarding a particular cause or activity (Dik & Duffy, 2009; McKenna et al., 2015). Second, when someone demonstrates her or his conviction, that person is asking others to accept, challenge, or build on what the first person shared. For that reason, having particular experiences dealing with others could result in a person's learning how to communicate her or his conviction regardless of how others respond.

In conclusion, I propose that women leaders are likely to develop conviction through two kinds of experiences. First, I believe experiences that create a sense of purpose for women are likely to be strongly related to conviction development. These experiences may have included a woman's feeling a sense of calling or a reconnection to what she feels is her purpose in life or work. Second, I believe experiences that involve

other people, whether in a work or a life context, are likely to develop women's conviction. Because upholding personal conviction is most challenging in the context of increases in pressure and emotion (McKenna & Yost, 2004), these experiences involving others would highlight what a person values and desires and would provide the person with the opportunity to learn how to engage that conviction with others. These experiences could include having good or bad role models, having conflict with others, or serving others (e.g., volunteer work).

The Present Study: Developing Conviction in Women Leaders Through Experiences

The aim of this study was to determine whether certain career and life experiences related to calling and interactions with others are more significantly related to women's ability to demonstrate conviction than are more traditional leadership experiences. Providing impetus for this study was the finding that a majority of the research on women's leadership development highlights women's lack of confidence and ambition. Although future research will need to underscore the exact mechanisms through which women learn to lead, beginning with the experiences themselves will provide fertile ground to build upon. The resulting recommendations for overcoming these factors are suboptimal. Conversely, evidence supports the notion that women may uniquely benefit from demonstrating conviction. This research study was undertaken in an attempt to identify the experiences that shape women's ability to demonstrate conviction in an effort to provide women leaders with alternative recommendations for developing their leadership capacity.

Practical implications. If the hypotheses outlined below are supported, several practical implications will result. First, establishing that conviction can be developed in

part through experiences will provide valuable information for future research on how a person develops and uses conviction. This knowledge will inform future empirical studies, resulting in a greater understanding of the development of and important outcomes related to a person's conviction in her or his leadership. Specifically, studying the impact of women's demonstrating their conviction in the workplace and the outcomes of their doing so will be an important next step in the study of conviction.

Second, coaching, training, and development programs can further be enhanced using the finding that certain experiences make a unique contribution in developing women's conviction. For example, because knowing one's overarching purpose can help to develop one's conviction, coaches and leadership trainers can design specific questions and activities to help women leaders apply this learning to their leadership. Third, the outcomes of this study may generate new insights into women's leadership development theories by providing an alternative perspective regarding what has been commonly recommended to women leaders for overcoming barriers.

Statistical analysis. I used a multiple regression technique to analyze the data. Multiple regression allows for the prediction of an outcome variable, in this case conviction, based upon the value of multiple variables included (Field, 2013). Multiple regression provides information regarding which predictor(s) will emerge as unique while taking into account the impact the other variables included within the model are having on the outcome variable. For the purposes of this study, I regressed conviction upon each category of experiences (*Transitions, People, Calling,* and *Leadership*) to discern the relationship between conviction and experiences, including directionality and the unique impacts of each predictor.

Hypotheses

The hypotheses for this study were as follows:

- 1. For women, *Calling*, *Leadership*, *Transition*, and *People Experiences* will be positively related to conviction.
- 2. For women, *Calling* and *People Experiences* will be unique and positive predictors of conviction development.
- 3. For women, *Calling Experiences* will positively predict conviction above and beyond Interpersonal, Transitions, and Leadership experiences.

CHAPTER II

Method

Sampling Procedure

This study used archival data collected from an online platform used for an individual's personal leadership development. Participants were recruited from a variety of academic, business, and not-for-profit organizations over the course of 4 years.

Individuals participated as a part of their own leadership development process, and were recruited through a variety of classroom, training, and coaching events. Participants completed a profile that collected demographic and personal data, including age, gender, race, personality, and number of years in leadership.

I chose the sampling procedure in an effort to gain insights into a person's leadership as perceived by the individual herself or himself and to preclude its being used as an evaluative measure that might tempt someone to fake her or his results. In other words, the compiled responses within the surveys were for an individual's own use and not for the sake of leadership evaluations. This study received Institutional Review Board approval and followed all human subjects procedures, including obtaining informed consent.

Participant Demographics and Sample Size

The online leadership development inventories were completed by 2,114 individual users from more than 90 organizations and teams. Of these users, 1,582 agreed to allow their data to be used for research. Inclusion criteria required participants to have completed all the surveys included within this study. All women were included who indicated that their responses could be used for research and who had fully completed

each inventory. The final sample, after accounting for missing data and outliers, was 563 – 323 women and 240 men. This sample exceeded the necessary sample size of 74 as suggested by G* Power 3.1 (Faul, Erdfelder, Buchner, & Lang, 2009) when specifying a one-tailed, fixed-effects linear model regression and effect size (f^2) of .15, alpha = .05, 1- β = .95, with 4 predictors.

I also identified demographic variables for participants. The age of participants ranged from 18 to 92 (M = 30.25, SD = 14.31). The type of organizations participants were from were business (20.8%), state/fed/government agency (2.4%), educational institution (10.9%), church/ministry setting (27.2%), para-church organization (5.0%), nonprofit (9.5%), and unidentified (22.1%). Participants also indicated their religious preferences, which were categorized as follows: Catholic (6.8%), Protestant (62.2%), Jewish (.5%), Muslim (.7%), Buddhist (1.0%), Hindu (.2%), atheist/agnostic (4.3%), and unidentified (22.6%). Participants' ethnic backgrounds were also captured: Caucasian/White (75.4%), African American/Black (4.3%), Hispanic/Latino (5.0%), Asian/Pacific Islander (8.5%), Native American (3.2%), and unidentified (1.6%).

Measures and Covariates

Participants completed the surveys in phases over the course of 4 months to 1 year using an online leadership tool. The measures used within this study have undergone initial psychometric validation work (Haney, 2015; McKenna, Blackshire, & Hickory, 2015; McKenna, Haney, & Wenzel, 2013) and were determined to be adequate for the use of this study based upon appropriate fit indices (Byrne, 2000) and alpha levels (Cortina, 1993); see specific details below.

Leading Under Pressure Inventory. The Demonstrating Conviction scale (see Appendix A) is included within a larger inventory called the Leading Under Pressure Inventory, which is based on McKenna and Yost's (2004) research and is designed to measure an individual's tendencies when she or he is under pressure (LUPI; McKenna, 2004). The inventory begins by asking participants to articulate a high-pressure situation they are currently facing and to respond to remaining items while considering this context. The remaining questions assess a leader's behaviors and attitudes when she or he is facing a high-pressure experience.

The LUPI scale was created based on the work of seven subject matter experts (SME) who had interviewed more than 100 senior-level leaders. Initial psychometric evaluation that was conducted on the LUPI assessments showed support for the scales (Haney, 2015; McKenna et al., 2015; McKenna et al., 2013).

The Demonstrating Conviction scale is a 6-item measure (α = .78 in this study) within the LUPI that assess individual's self-knowledge of what is most important to the individual and what she or he wants to see happen. The LUPI also asks participants about their ability to communicate what is important to them to others (McKenna, 2004). Example items are: *I clearly communicate what I want to see happen* and *I make decisions based on the values that matter most to me, even during conflicts with other people*. The items are scored on a 5-point Likert scale from 1 (*not like me*) to 5 (*like me*). Higher scores on the Demonstrating Conviction scale indicate higher levels of conviction.

Learning Audit (LELA; see Appendix B) is designed to capture a variety of factors important to a leader's development regarding past, current, and future experiences. More

specifically, the LELA provides an audit of experiences and lessons learned in the past, experiences and lessons desired in the future, and the importance of those experiences in the context of both life and work. Finally, the LELA identifies the personal learning strategies individuals use to connect their experiences and learning.

The LELA is based on nearly three decades of research on the key developmental experiences across a variety of leadership contexts that are most influential in impacting the way leaders lead (McCall, 1988; McKenna et al., 2007). Specifically, these contexts cover leaders in traditional business settings as well as those in a ministry and nonprofit context. These different contexts provide a variety of lessons rarely incorporated within traditional leadership domains, including calling and one's purpose. By allowing leaders to assess their lessons from a variety of contexts, the LELA provides a robust picture of all the lessons important to leadership. Further, a growing body of research highlights the importance that having a calling or purpose can have on a person's leadership effectiveness, work motivation, and career satisfaction, regardless of work context (Dik & Duffy, 2009; Wrzesniewski, McCauley, Rozin, & Schwartz, 1997).

The LELA was developed by combining these developmental experiences and lessons to capture a more complete picture of the developmental journey of leaders (Lindsey, Homes, & McCall, 1987; McCall, Lombardo, & Morrison, 1988; McKenna et al., 2007). As a tool, the inventory allows individuals to assess the experiences and lessons they have had, identify those they would still like to have in the future, and assess the degree of importance of each experience. Experiences were measured using the experience items from the LELA (McKenna, 2004). The LELA includes 27 different experiences. Participants rate the degree to which they have experienced each experience.

Exploratory factor analysis. I used an exploratory factor analysis (EFA) to assess the extent to which the individual LELA experiences clustered together to create subscales that represented similar kinds of experiences. Given a sample size of 577, well over the 300-person threshold for factor analysis, I determined that an exploratory factors analysis would be an adequate method for subscale creation (Field, 2013). Additionally, I used a promax rotation based on the size of the dataset being analyzed and the theoretical assumption that the experiences within the LELA likely shared variances with each other (Field, 2013). Eigenvalues were set to be greater than 1 (Kaiser, 1970) and small factor loadings were suppressed at the .4 level (Stevens, 2002). I added all 27 items to the EFA to assess how the items loaded onto individual factors and how they related with each other.

Results from the EFA can be found in Table 1. Initial indicators revealed that the data were adequate for an EFA. The Kaiser-Meyer-Olkin (KMO; Kaiser, 1970) test of sampling adequacy resulted in .924, indicating that the patterns of correlations should result in distinct and compact factors (Field, 2013; Hutcheson & Sofroniou, 1999). Additionally, most communalities were found to be at least .5. Despite some communalities resulting in less than .5, with a sample size greater than 500 it can be assumed that data are acceptable for factor extraction (MacCallum, Widaman, Zhang, & Hong, 1999). Five factors were initially extracted, with three items (i.e., experiences) having such low loadings that they could not be included on any factor. Only three items had cross loadings.

Table 1 Summary of Exploratory Factor Analysis Results for LELA Experiences Scale

			Factor Loadings				
Item		1	2	3	4	5	
357	You fixed, stabilized, and/or guided a failing organization, group, program and helped to turn it around.	.519			.446		
360	You confronted a subordinate about a significant performance issue.	.710					
327	You were responsible for leading a group or organization without any other staff to support you.	.659					
333	You experienced leading or managing others for the first time.	.697					
336	You experienced leading people who manage others (e.g., being a leader of leaders).	.784					
339	You have been in a senior leadership role (e.g., a leader of leaders of leaders).	.746					
396	You experienced a crisis or trauma that had a powerful emotional impact on you, whether the event was work-related or personal.		.426		.495		
399	You had a specific experience outside a formal workplace that impacted who you are or what you do.		.446				
375	You have experienced or observed a person doing something to another person that profoundly influenced your beliefs and values.		.679				
378	You have had an experience with your family that had a profound impact on your approach to leadership or life. You have been able to observe great role models. These		.624				
381	people are often described in superlative terms, and are examples of "what <i>to</i> do or be."		.715				
384	You have observed difficult individuals (often senior leaders) who may have had fatal flaws. These people have been examples of "what <i>not</i> to do or be."		.536				
309	You were exposed to new environments, cultures, or management philosophies through non-management jobs early in your career.			.683			
321	You experienced having gained increased responsibility that is both broader and different from previous work.			.542			
324	You moved from one type of organization to a new one, in a different industry, with a different population or set of stakeholders, or with a different location and culture.			.875			
330	You voluntarily changed jobs or careers to seek new challenges, opportunities, or growth.			.683			
354	You built something from nothing (e.g., launching a new business, starting a new program).				.483		
363	You experienced what you perceived as a career setback (e.g., not getting a coveted position, getting demoted, being derailed or even fired).				.647		
366	You experienced what you perceived as a failure or mistake on your part, even if you may now see it as positive (e.g., ideas that didn't work out, conflicts that got out of hand, failures to make the most of opportunities, or failed goals).				.558		
369	You helped lead other people through a personal crisis or trauma in their life or lives.				.474		

Note: N = 563. Bold denotes items retained for final analysis.

Table 1 Continued
Summary of Exploratory Factor Analysis Results for LELA Experiences Scale

		Factor Loadings				
Item		1	2	3	4	5
387	You have had the firsthand opportunity to see or care for people in poverty-stricken areas, or to care for people who have other deeply challenging physical/psychological/spiritual needs.					.436
312	You experienced a defining moment when you dedicated your life to God or another spiritual or philosophical way of life.					.767
315	You experienced a moment when you felt called to a specific or more general purpose (e.g., through dreams, the voice of God, or other messages outside yourself).					.779
342	You experienced a redefining moment in your life that reaffirmed your call to leadership or to your purpose.					.479
	Eigenvalue	8.30	2.03	1.54	1.39	1.07
	% Total Variance	30.75	7.53	5.71	5.16	3.98
	Total Variance		5	3.110%	ı	

Note: N = 563. Bold denotes items retained for final analysis.

Despite the presence of adequate factor loadings, upon further inspection of the items within the extracted factors, it appeared that, on a theoretical level, it did not make sense to include two items (LELA 369 & LELA 387) within the factor with which they were initially loaded. Upon item inspection, it became apparent that double-barreled questions were probably the reason for these results. Specifically, on factor four, one item mentions helping someone else through a trauma or crisis. Although the content of crisis, trauma, and failure is similar to that of other items within factor five, the remaining items on factor five are specific to personal failures or setbacks. Due to the "other's focus" LELA 369 had in common with those on factor two, I explored the possibility that this item could fit better on factor two. Follow-up reliability tests proved that the inclusion of this item on factor two increased the reliability of these items as a subscale of experiences (see Table 3).

Second, LELA 387, which loaded onto factor five, discusses caring for others and does not discuss anything related to a leader's calling or purpose, like the other items on

factor five. This result may have been due to the heavily Christian/Protestant sample used for this study and the emphasis on both caring for those in poverty and calling within this religious belief system. Based on theoretical rationale, I included LELA 387 on factor two within the reliability analysis.

Based on EFA results, I created five individual experience scales by summing item scores and using the average for ease of results interpretation. Each experience scale was further evaluated by using reliability analyses. All but one reliability analysis resulted in a Cronbach's alpha above the .70 minimum threshold, making the scales acceptable for research purposes (Cortina, 1993). The remaining items on factor four did not meet the .70 threshold and were thus not used within the primary analyses of this study. The final scales were labeled *Leadership Experiences* ($\alpha = .86$), *People Experiences* ($\alpha = .71$), *Transition Experiences* ($\alpha = .73$), and *Calling Experiences* ($\alpha = .72$). I scored each item on a 6-point Likert scale that ranged from 1 (not relevant to me yet) to 6 (definite experience with this) and averaged the scores to create a composite score. Examples of experiences were: *You experienced what you perceived as a career setback* (e.g., not getting a coveted position, getting demoted, being derailed, or even fired) and *You helped lead other people through a personal crisis or trauma in their life or lives*.

Procedure

Data was collected from a variety of individuals, teams, and organizations over a 5-year period. Participants completed the various components over a series of months, with at least 1 week to 2 months between surveys to minimize common method variance, which can result when data are collected using the same method (Podsakoff, MacKenzie,

Lee, & Podsakoff, 2003). As described previously, participants included individuals interested in developing their leadership who were recruited through a variety of methods (e.g., leadership coaching, classes). I collected data through an online portal that participants could access once logged into the system. Prior to completing the assessments, participants were required to complete a profile including demographic variables. After completing an individual survey, participants received a feedback report that they used to assess their results. Individual surveys did not undergo any changes during the years during which the data were collected.

CHAPTER III

Results

Preliminary Analyses

Preliminary analyses were conducted to assess the appropriateness of the data and to identify any outliers or missing data. Prior to hypothesis testing, the data were cleaned and scanned for outliers and missing data. The following sections provide descriptions of each preliminary analysis.

Missing Data

As the researcher, I conducted initial screening of the data to assess whether data were missing. First I evaluated the dataset for missing cases; more specifically, I removed any participant who had more than 24% missing data from the study (Olinsky, Chen, & Harlow, 2003). Patterns of missing data were analyzed at the item level and showed less than 5% of data were missing for all cases. I used Little's Missing Completely at Random (MCAR) test to statistically identify any reasons for data to be missing. The MCAR test was nonsignificant, indicating the data were missing completely at random (χ^2 (219) = 222.645, p = .419). Thus, the results were a nonsignificant MCAR test with less than 5% of the data missing for all, and I took no further steps in response to missing data (Schafer, 1999).

Outliers

The data were scanned to determine whether any outliers were present. The initial visual inspection of histograms and scatterplots indicated some potential outliers were present. I conducted additional tests for outliers. I standardized scores for all variables to determine whether any z scores were greater than 3.29 (p < .001 [Tabachnick & Fidell,

2013]), indicating an extreme score. Because 17 cases had z scores greater than 3.29 and plots that clearly lay outside of the boxplot for each variable, I removed them. The final dataset included 563 participants—323 women and 240 men. Descriptive statistics for all variables can be found in Table 2.

Table 2
Descriptive Statistics for Predictor and Criterion Variables

	Variable	M	SD	Min.	Max.
Women					
	Conviction	3.95	0.60	2.29	5.00
	People Experiences	4.57	0.87	1.67	6.00
	Transition Experiences	4.28	1.10	1.00	6.00
	Leadership Experiences	3.00	1.13	1.00	6.00
	Calling Experiences	4.05	1.35	1.00	6.00
Men					
	Conviction	4.07	0.58	2.43	5.00
	People Experiences	4.70	0.81	1.83	6.00
	Transition Experiences	4.45	1.07	1.50	6.00
	Leadership Experiences	3.75	1.37	1.00	6.00
	Calling Experiences	4.60	1.20	1.00	6.00

Note: N for women = 323: N for men = 240.

Normality

I used a variety of techniques to assess the normality of the data. Initial visual inspection using histograms showed that all variables were negatively skewed except for *Leadership Experiences*, which appeared to be positively skewed. The visual inspection was further supported by descriptive statistics that indicated the data were in fact negatively skewed for all variables except *Leadership Experiences*, which was positively skewed. Next, I used the Shapiro-Wilk test to assess whether the data were significantly different from those in a normal distribution in which all variables were significant. I addressed limitations resulting from non-normal data by using bias-corrected and

accelerated confidence intervals (Efron & Tibshirani 1993; Field, 2013) to determine significance.

Assumptions

Multiple assumptions are made by those using regression for statistical analysis.

The first assumption that was tested for was homoscedasticity, in which data are assessed to determine whether the spread of residuals is consistent at each level of the predictor.

Visual inspection of scatterplots of the unstandardized residuals indicated that data were evenly spread across all levels of the predictor for each variable. Next, I evaluated linearity using visual inspection of scatterplots for each predictor and criterion variable. Scatterplots revealed a linear relationship in each case.

I used the Durbin–Watson test to assess whether residuals were independent, meaning they are uncorrelated. This test resulted in a value of 2.002, indicating that this assumption was met (Field, 2013). To assess the normality of residuals, I assessed a histogram of the distribution of residuals against a normal distribution. Visual inspection indicated that the residuals were normally distributed. Additionally, I evaluated collinearity statistics, which resulted in tolerance statistics well above the .2 guideline (Menard, 1995) and, on average, VIF scores close to 1, far below the score of 10 that would arouse concerns regarding bias (Bowerman & O'Connell, 1990; Field, 2013; Myers, 1990). As a result of these tests, I determined that no other statistical assumptions were violated and that the data were adequate for the primary analysis.

Primary Analyses

Hypothesis 1 proposed that for women, *Calling, Leadership, Transition*, and *People Experiences* would be positively related to conviction. To assess this hypothesis, I

would need to observe a statistically significant correlation between conviction and each category of experiences. Hypotheses 1 was supported with statistically significant positive correlations between each category of experiences and conviction (r = .24 to .51.). See Table 3 for details.

Table 3
Correlation Matrix Between Conviction and Experiences for Women

	Variable	1	2	3	4	5
1	Conviction	(.78)				
2	People Experiences	.36**	(.71)			
3	Transition Experiences	.24**	.39**	(.73)		
4	Leadership Experiences	.26**	.45**	.51**	(.86)	
_ 5	Calling Experiences	.35**	.49**	.36**	.40**	(.72)

Note: ** Indicates $p \le .01$. N = 323.

Hypothesis 2 proposed that for women, *Calling Experiences* and *People Experiences* will be unique and positive predictors of conviction development. Hypothesis 2 was supported by a significant ΔR^2 of 9.1%, indicating incremental validity above and beyond *Leadership Experiences* and *Transition Experiences*. Results from a hierarchical multiple regression analysis can be found in Table 4.

Table 4
Hierarchical Regression Analysis Estimates of Test Variables Predicting Conviction

Model and Predictors	В	SE _B	β	R^2	ΔR^2	BCa Lower	BCa Upper
Step 1				.083			- 11
Leadership Experiences	.099	.031	.192**			.038	.160
Transition Experiences	.109	.048	.138*			.015	.205
Step 2				.174	.091**		
Leadership Experiences	.035	.030	.067			026	.090
Transition Experiences	.035	.047	.044			059	.124
People Experiences	.140	.045	.211**			.051	.228
Calling Experiences	.173	.052	.202**			.067	.275

Note. ** Indicates $p \le .01$; * Indicates $p \le .05$. N = 323.

Hypothesis 3 proposed that for women, *Calling Experiences* will positively predict conviction above and beyond *People Experiences*, *Transition Experiences*, and *Leadership Experiences*. For this hypothesis to be supported, there had to be a statistically significant ΔR^2 from step 1 to step 2. Hypothesis 3 was supported with a small yet significant 2.9% change in ΔR^2 . Results from the hierarchical multiple regression analysis can be found in Table 5.

Table 5
Hierarchical Regression Analysis Estimates of Test Variables Predicting Conviction

Model and Predictors	В	SE _B	β	R^2	ΔR^2	BCa	BCa
			,			Lower	Upper
Step 1				.145			
Leadership	.051	.031	.100			011	.111
Experiences							
Transition	.056	.049	.071			040	.148
Experiences							
People Experiences	.190	.040	.286**			.113	.267
Step 2				.174	.029**		
Leadership	.035	.031	.067			026	.092
Experiences							
Transition	.035	.047	.044			058	.123
Experiences							
People Experiences	.140	.043	.211**			.051	.227
Calling Experiences	.173	.052	.202**			.065	.274

Note. ** Indicates $p \le .01$; * Indicates $p \le .05$. N = 323.

Exploratory Analyses

Although the primary goal of this study was to determine which experiences develop conviction in women, I ran additional tests to explore any differences that may exist for men and women. First, I assessed a correlation matrix to determine which individual experience was most strongly correlated with conviction for men and women

respectively. For both women $(r = .36, p \le .01)$ and men $(r = .34, p \le .01)$, the experience most highly correlated with conviction was *You experienced a redefining moment in your* life that reaffirmed your call to leadership or to your purpose. However, in terms of the second most highly correlated experience, women selected *You helped lead other people* through a personal crisis or trauma in their life or lives $(r = .34, p \le .01)$. For men, the second most important individual experience was *You have been in a senior leadership* $role \ (r = .32, p \le .01)$. See Table 6 for results from this analysis.

Table 6
Correlations Between Gender, Conviction, and Individual Experiences

		•	Con	viction
Item		Gender	Men	Women
357	You fixed, stabilized, and/or guided a failing organization, group, program and helped to turn it around.	.21	.29**	.15**
360	You confronted a subordinate about a significant performance issue.	.22**	.27**	.24**
327	You were responsible for leading a group or organization without any other staff to support you.	.18**	.23**	.24**
333	You experienced leading or managing others for the first time.	.18**	.16*	.20**
336	You experienced leading people who manage others (e.g., being a leader of leaders).	.28**	.28**	.18**
339	You have been in a senior leadership role (e.g., a leader of leaders of leaders).	.31**	.32**	.16**
396	You experienced a crisis or trauma that had a powerful emotional impact on you, whether the event was work-related or personal.	05	.15*	.24**
399	You had a specific experience outside a formal workplace that impacted who you are or what you do.	05	.09	.19**
375	You have experienced or observed a person doing something to another person that profoundly influenced your beliefs and values.	.02	.26**	.24**
378	You have had an experience with your family that had a profound impact on your approach to leadership or life.	04	.18**	.25**
381	You have been able to observe great role models. These people are often described in superlative terms, and are examples of "what <i>to</i> do or be."	.02	.17*	.17**
384	You have observed difficult individuals (often senior leaders) who may have had fatal flaws. These people have been examples of "what <i>not</i> to do or be."	.09*	.21**	.22**
309	You were exposed to new environments, cultures, or management philosophies through non-management jobs early in your career.	.03	.05	.16**

Note: ** Indicates $p \le .01$. N = 563. Gender was coded women (0) and men (1).

Table 6 continued Correlations Between Gender, Conviction, and Individual Experiences

				Gender		
Item		Gender	Men	Wome		
	You experienced having gained increased					
321	responsibility that is both broader and different from	.11*	.15*	.18**		
	previous work.					
	You moved from one type of organization to a new					
224	one, in a different industry, with a different population	02	10	1 1 *		
324	or set of stakeholders, or with a different location and	.03	.10	.14*		
	culture.					
220	You voluntarily changed jobs or careers to seek new	06	154	25**		
330	challenges, opportunities, or growth.	.06	.15*	.25**		
254	You built something from nothing (e.g., launching a	01**	01**	01**		
354	new business, starting a new program).	.21**	.21**	.21**		
	You experienced what you perceived as a career					
363	setback (e.g., not getting a coveted position, getting	.13**	.09	.11		
	demoted, being derailed or even fired).					
	You experienced what you perceived as a failure or					
	mistake on your part, even if you may now see it as					
366	positive (e.g., ideas that didn't work out, conflicts that	.12**	.17**	.07		
500	got out of hand, failures to make the most of					
	opportunities, or failed goals).					
	You helped lead other people through a personal crisis					
369	or trauma in their life or lives.	.14**	.25**	.34*		
	You have had the firsthand opportunity to see or care					
	for people in poverty-stricken areas, or to care for					
387	people who have other deeply challenging	.03	.16*	.16**		
	physical/psychological/spiritual needs.					
	You experienced a defining moment when you					
312	dedicated your life to God or another spiritual or	.16**	.12	.17**		
312	philosophical way of life.	.10	.12	.17		
	You experienced a moment when you felt called to a					
	specific or more general purpose (e.g., through					
315	dreams, the voice of God, or other messages outside	.17**	.20**	.32**		
	yourself). You experienced a redefining moment in your life that					
342	reaffirmed your call to leadership or to your purpose.	.16**	.34**	.36**		
	You had to get things done through other people					
348	without having any direct authority over them.	.06	.12	.20**		
	You worked on a special project or temporary					
351	assignment established for the sole purpose of	01	.25**	.19**		
	fulfilling a specific mission under a specific timeframe					
	, done as part of a team or individually.					
	You completed a degree, attained some certification,					
202	went through a training program or seminar, or	0.5	10	0.50		
393	experienced some other formal education that	.05	.12	.25**		
	significantly impacted your approach to your work					
	and/or leadership. Indicates $n < 0.1$, $N = 563$, Gender was coded women (0) and					

Note: ** Indicates $p \le .01$. N = 563. Gender was coded women (0) and men (1).

Second, I assessed if any differences existed between men and women within each category of leadership experiences. Gender was dummy coded in order to assess the correlation between gender and experiences. Results from this analysis revealed that gender was significantly and positively related to Leadership and Calling Experiences. People and Transition experiences were not significantly correlated with gender. See Table 7 for results from this analysis.

Table 7
Correlation Matrix Between Gender, Conviction, and Experiences

	Variable	1	2	3	4	5	6
1	Gender	1.00					
2	Conviction	.10*	(.78)				
3	People Experiences	.07	.35**	(.71)			
4	Transition Experiences	.07	.21**	.42**	(.73)		
5	Leadership Experiences	.30**	.31**	.48**	.50**	(.86)	
6	Calling Experiences	.20**	.34**	.49**	.38**	.47**	(.72)

Note: ** Indicates $p \le .01$. N = 563. Gender was coded women (0) and men (1).

Experiences for men. See Table 9 for results of this analysis.

Lastly, an exploratory question was asked to assess whether there were differences between the categories of experiences that resulted in conviction in men and in women. For both men and women, the regression models were significant, suggesting that experiences positively predict conviction for both populations. Results suggest that for both men and women, *People Experiences* significantly predicted conviction. However, for women, *Calling Experiences* was a stronger predictor than was *Leadership*

Table 8
Regression Analysis Estimates of Test Variables Predicting Conviction for Men and Women

Model and Predictors		В	SE _B	β	BCa	BCa
	id i redictors		ББ Б	Ρ	Lower	Upper
Men						
	Leadership Experiences	.087	.036	.212*	.023	.150
	Transition Experiences	067	.056	085	173	.055
	People Experiences	.132	.056	.192*	.030	.235
	Calling Experiences	.119	.069	.127	027	.225
Women						
	Leadership Experiences	.035	.032	.067	030	.094
	Transition Experiences	.035	.048	.044	063	.124
	People Experiences	.140	.044	.211**	.056	.226
	Calling Experiences	.173	.052	.202**	.076	.274

Note: ** Indicates $p \le .01$; * Indicate $p \le .05$. Women N = 323; Men N = 240.

CHAPTER IV

Discussion

Researchers over the past several decades have identified multiple barriers that exist for women pursuing leadership roles. Among these barriers are direct gender discrimination and more subtle mechanisms such as stereotype threat and subsequent self-limiting behaviors (Catalyst, 2007; Fitzsimmons et al., 2014; Heilman & Chen, 2005; Heilman & Haynes, 2005). Despite a plethora of studies indicating the problems women face, few effective techniques for overcoming these barriers have emerged. This study adds valuable insights to this body of research by suggesting that conviction is a useful technique for women leaders in overcoming barriers.

Specifically, this study highlights the kinds of experiences that affect women's conviction. The knowledge of these experiences provides useful insights for both researchers and practitioners interested in effectively developing women leaders' conviction. Additionally, differences between men and women in terms of the experiences that develop their conviction were explored. The following sections first review the results of this study. Second, implications for theory and practice are addressed. Third, limitations and future research are discussed.

Summary of Results

Primary analyses. All primary analyses within this study were supported. First, results from testing Hypothesis 1 suggest that experiences are significantly and positively related to conviction, providing an important first step toward empirically connecting the skill of conviction to a variety of developmental experiences women have had. Although decades of research have demonstrated that many leadership skills are gained through

experiences (Lindsey et al., 1987; McCall et al., 1988; McKenna et al., 2007), research has been limited to the use of conviction within a high-pressure context and has contained only limited discussion of how an individual actually develops her conviction (McKenna & Yost, 2004). Furthermore, these results support the notion that conviction can be developed as opposed to being a trait that not all have inherently. In light of recent recommendations for women leaders to elevate their confidence, "faking it until they make it" (Kay & Shipman, 2014), these results highlight that perhaps there are actual experiences that women can draw from to build their sense of self that do not require a woman to fake having something she lacks.

Second, Hypothesis 2 was supported by revealing that *People* and *Calling Experiences* are unique positive predictors of women's conviction, above and beyond both *Leadership* and *Transition Experiences*. Experiences related to calling include moments of feeling a strong sense of being called to a specific purpose, to leadership, or to a more general life purpose. Additionally, one item within the calling scale asked about moments of feeling a loss of one's calling that is later reaffirmed. Experiences related to people included observing good and bad role models, helping others through crisis or trauma, and dealing with difficult individuals. Discussed later within this paper is the continuous theme that conviction seems to be related to the moments in life that have a profound impact on us. These results begin to paint a picture suggesting that to develop her conviction, a woman must pay attention to the moments and the people that influence her deeply.

Third, in support of Hypothesis 3, I found that *Calling Experiences* uniquely and positively predicted conviction above and beyond all other categories. These results

suggest that the experience of knowing one's calling or reaffirming one's sense of calling has direct implications for an individual's conviction. These results further illustrate that a person's conviction, more specifically her or his ability to maintain a clear and consistent sense of self despite pressure, is deeply connected to that person's sense of calling to leadership or to her or his purpose in life more generally. This is a very different finding from that of traditional leadership development research, which tends to focus on leadership development through the lens of difficult task-based work assignments and experiences (DeRue & Wellman, 2009; Lindsey et al., 1987; Ohlott et al., 1994). Taken together, these results provide practical implications for both practice and theory.

Exploratory research questions. Three exploratory research questions were considered alongside the primary analyses. The first exploratory analysis considered individual experiences to see which was most strongly related to conviction for men and for women. For both men and women, experiencing a defining moment that reaffirmed one's call to leadership or purpose had the greatest correlation with conviction. What is interesting to note is that the item asks about a redefining moment, suggesting that not only is having a calling important but also that perhaps losing that sense of calling and later coming back to it greatly impacts conviction. This finding indicates that conviction may be most strongly connected to experiences that reminded us of what we once believed we were supposed to be doing but are no longer doing. Additionally, these results amplify the idea that an individual's sense of purpose or calling has a strong impact on what that individual wants and values and even affects the person's ability to

communicate this calling to others. Some differences between men and women were also present in the findings.

For women, the experience that was second-most-highly correlated with conviction involved helping another through a personal crisis or trauma. For men, having been a senior leader was most strongly related to conviction. Differences were present between the kinds of experiences that predicted the development of conviction in men and in women. For both men and women, *People Experiences* had a strong impact on conviction. For men, *Leadership Experiences* were stronger, and for women, *Calling Experiences* were stronger. Taking these two analyses together, it is clear that for both men and women, experiences are in fact related to conviction, and that although context is likely important, the development of men and women's conviction may not be that different from one another.

Implications for Theory

The results from this study provide multiple avenues for moving forward in developing the theory of conviction. Specifically, the results shed light on why certain experiences facilitate both self-knowledge and the ability to communicate, which are both necessary for demonstrating conviction. The following section will address implications for the theory of conviction, for women's leadership research, and leadership development research more broadly.

Implications for a theory of conviction. To date, what is known about conviction is that maintaining one's sense of self in combination with the ability to communicate this out to others, is useful to leaders in high-pressure circumstances. What has not been made clear thus far, however, is how this skill is developed. Results from

this study indicate that for women, experiences with calling and people, through the profound impact they have on women, seem to produce the self-knowledge necessary for conviction. Additionally, constructs that share similar conceptual space with conviction, such as self-efficacy and leadership identity, suggest that there are a variety of explanations for why these experiences also result in an ability to communicate.

Specifically, the items contained within the *People* and *Calling Experiences* scales create multiple opportunities to learn from others, to increase motivation for individual development, and to allow people to connect their identity to their leadership (Bandura, 1986; Dasgupta & Asgari, 2004; DeRue & Ashford, 2010; Dik & Duffy, 2009; Lockwood, 2006; Rios et al., 2010). As a result of both the novelty of these experiences and the opportunities for learning they provide, it is easy to see why these experiences develop conviction. The following sections address both of these features in greater detail.

Novel and unique experiences promote self-learning. The results of this study highlight that experiences important to conviction are those that have a lasting impact on a person's values, beliefs, and approaches to life. For example, three items within the People Experiences scale ask about experiences that have had a profound impact on a person's values and beliefs and on that person's approach to leadership. The Calling Experiences scale also asks about significantly meaningful moments of feeling called, which research has shown have a strong psychological impact on a person's well-being and work motivation (Pratt & Ashforth, 2003; Wrzesniewski & Dutton, 2001). These kinds of experiences have qualities similar to those previously found to be significant in

the domain of leadership development (DeRue & Wellman, 2009; McCall, 1988; McKenna et al., 2007).

This study shows that experiences that are highly unique, meaningful, or novel appear to increase the level of cognitive processing an individual undergoes during the experience. Due to their novelty or uniqueness, these experiences often result in cognitive dissonance or a perceptive shift (Berlyne, 1960; DeRue & Wellman, 2009; Kanfer & Ackerman, 1989; Knowles, 1975; Kolb, 1984; Marsick & Watkins, 1990; Scott, 1966). This dissonance can then result in learning as an individual becomes aware of gaps in her or his knowledge or experience (DeRue & Wellman, 2009; Kanfer & Ackerman, 1989). Novelty in the context of this study could take the form of experiencing a calling or observing someone acting in either a positive or negative way that was unexpected or new. The results of this study indicate that perhaps these particular experiences create opportunities for a person to learn about her or his values and beliefs.

For example, an individual may have a strong negative reaction to viewing a senior leader acting aggressively toward another team member. One possible reason for this reaction is the mismatch between what the individual is presently experiencing and what she had previously expected of that leader, or of a senior leader more generally. In this case, the observer is presented with an opportunity to reflect on how and what she saw does not align with her own values and expectations. Such an experience could also have a positive result in that observing role models can influence an individual's future actions (Bandura, 1986; Dasgupta & Asgari, 2004; Lockwood, 2006; Rios et al., 2010). In fact, the observation of a negative role model may serve as an example of what not to do and increase one's behavioral intentions to act differently than what was observed

(Baden, 2014; Lockwood, Jordan & Kunda, 2002; Lockwood, Sadler, Fyman, & Tuck, 2004). In further support of the important quality of these experiences, this study's findings seem to be consistent for both men and women. For example, the items that predicted conviction in men asked specifically about the first time they had had a specific leadership role. It therefore becomes clear that novelty is likely a critical reason that these experiences matter to conviction and should be considered within the broader theory of conviction.

Collectively, the results of this study suggest that these experiences result in the self-knowledge that is the critical first piece of conviction. It appears that what we learn from experiences that we categorize as important has the capacity to either reaffirm or foster values, beliefs, and our approaches to life. The novelty of these experiences, the value alignment or misalignment they raise, and the meaning an individual makes, all seem to all affect the individual's self-knowledge regarding personal values and wants. However, learning is not simply a byproduct of going through an experience. Conviction is likely further developed as a result of an individual's particular response, in addition to the likely response these experiences may be expected to elicit (Bandura, 1986; DeRue & Wellman, 2009; Knowles, 1975; Kolb, 1984; Marsick, & Watkins, 1990).

Response to experiences. As outlined above, the results of this study indicate that experiences create opportunities to increase valuable self-knowledge. However, demonstrating conviction also involves the ability to communicate, which may be separate from identifying what is important or valued. It appears, then, that the experiences found to be important within this study may allow for both elements of conviction to emerge—self-knowledge and communication. The following sections

address the motivational and goal-directed responses that are likely to result in the learned ability to demonstrate conviction.

Experiences as behavioral learning opportunities. On the simplest level, many of the experiences important to conviction provide actual opportunities to learn new behaviors. These opportunities are similar to what Bandura (1986) has consistently found, which is that individuals learn through role modeling when building their self-efficacy. For example, watching a role model engage in certain behaviors may be noteworthy for a variety of internalized reasons. However, the experience of observing the behavior gives the observer the opportunity to reflect on how she or he would have responded to the situation similarly or differently. Although *People Experiences* were found to be important for both men and women, observing others is perhaps even more important for women, given the impact role modeling is known to have on women leaders (Dasgupta & Asgari, 2004; Lockwood, 2006; Rios et al., 2010).

Experiences as opportunities to drive motivation. Having a calling or purpose has been found to influence a person's work, satisfaction, meaning in work, and career decisions (Baumeister, 1991; Dik & Duffy, 2009; Pratt & Ashforth, 2003; Wrzesniewski & Dutton, 2001). It is possible, then, that the experience of feeling called to leadership or to a more general purpose could facilitate goal-directed behavior that would move a person toward that calling. In other words, having the experience of feeling called may lead an individual to pursue certain kinds of experiences that develop her or his calling. This response to a calling is similar to the way a person builds leadership identity by seeing herself or himself as a leader, which motivates the person to pursue developmental

leadership opportunities (Day & Harrison, 2007; Gardner & Avolio, 1998; Shamir, House, & Arthur, 1993).

These experiences therefore seem to drive attention and action toward a person's goals and desires as a leader and possibly toward experiences that could elicit the need to demonstrate their conviction. It is known that learning can occur when an individual reflects on the outcomes of experiences and subsequently applies this new knowledge to future problems (Knowles, 1975; Kolb, 1984; Marsick, & Watkins, 1990). Therefore, if a woman leader goes through an experience of observing a role model demonstrating her or his conviction, she may learn from that experience, enabling her to prepare for how she might like to respond in future high-pressure situations.

Experiences as opportunities to establish identity. Last, it is possible that these specific experiences result in conviction because of the impact they may have on a person's identity. To the extent that women internalize their purpose or calling as a part of their identity (DeRue & Ashford, 2010), remembering what this purpose is, even under pressure, may be helpful in navigating high-pressure situations (Haney, 2015). This connection to one's identity may also explain why conviction is most challenging to maintain in emotionally charged settings in which our identity might be challenged. It is possible that, for an individual, going through moments of feeling as if she or he has a purpose or a calling allows that person to demonstrate conviction by acting in a clear and consistent manner (McKenna & Yost, 2004).

Framing conviction as a driver of social change highlights a variety of elements just discussed. As was outlined previously in this paper, women's collective conviction has had profound impacts on society. One reason women may be willing to incur the

costs of displaying a potentially unpopular conviction (e.g., women's suffrage) is that this conviction is driven by something deeper within themselves, such as a calling and their values. Because a person's conviction is built by having profound moments that foster learning about personal values and identity, acting in a clear and consistent manner is a hallmark of demonstrating conviction.

Implications for women's leadership theories and research. The results of this study lend support to assertions made by leadership theorists and practitioners that women's leadership development must consider the specific contexts and barriers women leaders face (Bushe, 2009; Cable et al., 2013; Roberts, 2007; Roberts, 2013). As was mentioned in the introduction of this paper, women leaders often face strong negative stereotypes about their leadership and face a double-edged sword in terms of how people respond to their leadership (Catalyst, 2007; Fitzsimmons et al., 2014; Heilman & Chen, 2005; Heilman & Haynes, 2005). Therefore, although men and women may learn similarly from experiences, the specific demonstration of each person's conviction will likely be unique.

Similar contextual issues were also found to be important in studying calling and vocation among different socioeconomic groups (Dik, Duffy, & Steger, 2012). This is highly relevant given that one of the top categories of experience was in fact *Calling Experiences*. As such, teaching women and men to develop conviction from their experiences seems to be a valid recommendation, but wise practitioners and researchers should continue to consider the impact these different barriers will have on conviction's use and development. For example, perhaps a male leader may need to demonstrate conviction to set a direction for his team whereas a female leader may also have to

demonstrate her conviction to repudiate negative stereotypes about her leadership (Eagly, 2005). Similarly, differences regarding the use of conviction are likely to exist between different demographics of women, given the well-documented concept of intersectionality (Crenshaw, 1993).

Included within research on context should also be a thoughtful inquiry into true differences that may exist between men and women leaders. Results from this study highlight unique development of conviction. However, it is difficult to know what is a result of context and what may be a result of actual differences. Furthermore, with recent calls to develop authenticity in one's leadership (Avolio & Garnder, 2005; Lord & Hall, 2005; McKenna & Wenzel, 2016), it seems important to discuss what is authentically true of men and women while also studying the contextual issues that can impact how one choses to act as a leader. Although it is beyond the scope of this discussion to address biological differences between men and women, this research suggests the there should be a focus on both the organizational contexts that may impact women leader's choices of actions as leaders in addition to potential innate differences.

Finally, based on the results of this study, women's leadership theorists and researchers should consider studying the impact conviction has on women's ability to withstand pressure and overcome barriers. It is worth considering what might happen if women leaders, rather than being encouraged to "fake it until they make it" (Kay & Shipman, 2014), were encouraged to remember why they believe they are in the leadership positions in the first place. If women's conviction is developed from profound moments of relating to others or having felt called to their role, it seems obvious that it is expedient to let this sense of calling, as opposed to a drive to overcome insecurity, drive

women's leadership. The focus on values and wants is similar to what authentic leadership researchers have underscored (Avolio & Gardner, 2005) as being an essential component of leadership. Perhaps this perspective shift could allow women to draw from a deeper well than that traditionally offered.

Implications for leadership development research. Similar to McKenna et al.'s (2007) findings from studying pastoral leaders, these data suggest that experiencing moments in life when we focus on what we feel called to do or be has significant impacts on our leadership development. For some, this marks a fundamentally different change: from thinking about leaders as individuals capable of fulfilling a role, to thinking about leadership development as inherently connected to a leader's sense of self and purpose. The findings also reveal that development of leadership skills (i.e., conviction) can happen outside of a formal work context and that personal experiences of calling and observing others can profoundly affect these skills for the reasons mentioned previously. Further, although a person's calling and purpose have been shown to be important features of her or his to life and work (Dik & Duffy, 2009; McKenna et al., 2015), the connection between calling and conviction has not yet been tested. This study further supports established research suggesting that having a sense of purpose or calling can be powerful in one's work (Dik & Duffy, 2009; McKenna et al., 2007; Wrzesniewski et al., 1997).

Implications for Practice

Results from this study provides women leaders, leadership practitioners, and leadership program designers with suggestions for many practical applications.

Implications for leadership development programs. First, an emphasis on conviction could easily fit within the current recommendations for women who are considering their leadership presence and identity (Ely et al., 2011; O'Neil et al., 2015). In designing women's leadership programs, practitioners should coach women leaders on the skill of conviction and the role it plays in withstanding high-pressure situations (see McKenna & Yost, 2004). Included within this coaching could be opportunities for women to directly identify what it is they want, what they value, and the decision criteria they used to identify what is important to them. Clearly defining and articulating these values and wants may allow women to act more quickly on their conviction, particularly if they have not had the experiences outlined in this study.

Through coaching and well-designed activities, practitioners could give women the opportunity to assess when it is most challenging to demonstrate conviction.

Conversely, knowing when women feel the most capable to demonstrate their conviction will also be important to their self-awareness as leaders (Crocker et al., 2010). Exploring the reasons that certain circumstances challenge women leaders to forget their sense of self could create opportunities for them to prepare for future circumstances and to create the environments that encourage their conviction.

For example, a woman leader may find that she most easily loses her ability to demonstrate conviction when she is called to defend a contradictory decision she has made. She may also find that having strong role models and a purpose for being in her role help to develop her conviction. Having this knowledge would perhaps allow her to prepare for these situations by discussing the decision with a trusted mentor or identifying the people who are likely to argue against her. Like a well-prepared runner

who trains for the course on which she is going to race, the woman who identifies these moments may be better equipped to withstand the pressure they bring.

Next, having women discuss the use of conviction may allow them to begin to see the important calling and people experiences that influenced their conviction. As the results of this study indicate, the impact of experiences with observing, working with, or helping others have deep impacts on a person's conviction and thus should not be overlooked in women leader's development. Coaches and leadership trainers should consider designing specific questions and activities that would help women leaders apply the learning from these experiences to their leadership. An example may be having women observe role models displaying conviction and then having women map out what they learned from these observations and practice how they would envision themselves responding in a similar situation. Engaging in self-reflective activities that challenge women to consider the important experiences they have had with other people would continue to increase their self-awareness related to why, when, and where they display conviction.

It also seems important for leadership development programs to encourage greater depth in conversations regarding what it means for women to lead from an internal place where they are connected to their sense of self. As was addressed previously, a focus on internal states would likely require a shift or adaption in terms of what is typically encompassed in leadership development programs (e.g., feedback, business acumen). As a result of designing programs that allow for open dialogue about the profound experiences that have influenced them, program designers are likely to find that women leader's sense of purpose and meaning in their work increases. An enhanced sense of

meaning is important given the ways in which values and purpose can buffer against the pressures to conform, a critical challenge for women leaders.

Lastly, as was addressed within the literature review of this paper, encouraging women to develop and express conviction should be done so thoughtfully. Given the contextual issues that can impact the perception of women leaders (Eagly, 2005), it will be important for women to assess the cost of displaying their conviction. If their conviction is likely to counter to the status quo, women's leadership development programs should also provide additional techniques for women leaders overcoming the potential negative outcomes. In other words, while programs should be designed to prepare women for leadership roles, the contextual barriers should also be taken into consideration.

Implications for mentorship. Given the beneficial outcomes specifically for women leaders (Dasgupta & Asgari, 2004; Lockwood, 2006; Rios et al., 2010) of observation, mentorship programs could include a formalized series of questions that ask women leaders to reflect on the lessons they have learned from observing others. The results of this study indicate that women learn from observing others acting in positive or negative ways. Therefore, included within a mentoring process could be role playing and mapping out difficult scenarios women have observed and opportunities for them to reflect on how they would have responded similarly to, or differently from, those whom they observed. In addition, women leaders could ask their mentors about how they have handled situations in the past that called for a display of conviction and about the outcomes. Even asking their mentors about their own conviction moments could increase

women's development of this skill. Reflecting on these experiences would continue to prepare women for high-pressure or difficult scenarios.

Limitations and Future Research

Limitations. Multiple practical and research implications were present in this study. Thus, despite the presentation of support for each of the hypotheses made, some limitations do exist.

Sample. Although the sample contained diversity in terms of age and the types of organizations individuals were from, the sample contained a certain level of homogeneity. The sample consisted of a largely Protestant population (63% of women and 80% of men). This factor may have influenced the sense of calling that participants had, given the strong emphasis Protestant communities place on hearing one's calling from God.

Additionally, a majority of the sample (89%) had had 10 years or less of leadership experience. This factor is important in considering the breadth of experiences had and the possibility that some experiences are more prevalent and significant when had in early years of leadership rather than in later stages. In other words, it is possible that important leadership experiences that develop conviction later in a person's leadership journey were not adequately accounted for.

Measurement. Although Cronbach's alpha for each of the measures used were above the .70 threshold, making them adequate for research (Cortina, 1993), one significant limitation was present. The scale used to assess experiences was rated on a 1-to-6-point scale where one means an experience is *Not relevant to you yet*, and a 6 means an individual has had *Definite experience with this*. Given these anchors, it is difficult to

know if one powerful experience would warrant a rating of definite experience or if participants ranked their experiences based on frequencies alone. In other words, had the scale identified what warranted a rating of *definite experience*, it is possible that certain experiences might have been either stronger or weaker in predicting conviction. Future research should consider both the frequency and the importance of these experiences to better elucidate the experiences related to conviction development.

Mono-method bias. A third limitation is based on the fact that all measures used in this study were self-reported. Shadish, Cook, and Campbell (2001) indicated that retrieving all data via one method can influence the results of a study. Conviction was measured with one scale that may not have fully captured the entirety of the construct. Future research studies should consider how conviction can be measured using different methods, perhaps even judgments made by others (Podsakoff et al., 2003).

Future research. For women leaders specifically, future research could explore the role conviction could play in buffering against high-pressure situations in which women feel as if they have to change who they are to be perceived as a leader. Because women often must change their behavior to meet societal expectations regarding who an effective leader is and to manage others' perceptions of them, their self-regulation and goals can be negatively affected (Crocker et al., 2010). It would be of interest to understand the ways in which conviction may play an important role in buffering common stressors women leaders face.

Second, research has established that through reflection and feedback, learning at a deeper level is enabled (DeRue & Wellman, 2009; Knowles, 1975; Kolb, 1984; Marsick & Watkins, 1990). This study did not measure the extent to which participants

had reflected on or received feedback through these experiences, and thus an important feature of learning was not captured. Although it could be argued that the profound nature of these experiences and the actual experience of filling out the leadership survey resulted in reflection, it will be important to understand the exact ways in which reflection and feedback influence the development of conviction (DeRue & Wellman, 2009).

Third, given that conviction is twofold in that it requires both self-knowledge and an ability to communicate purpose to others, future research should work to disentangle what specific elements of conviction are developed by different experiences. Similar to what was outlined previously, whereas a person's sense of self may be directly connected to her or his calling, the ability to communicate may come from a person's having had regrets about not expressing herself or himself in the past. It is possible that having a strong experience of calling may influence a person's sense of self and that watching a role model give a compelling speech may increase actual communication skills.

Fourth, it would be interesting to explore how women who do not have a strong sense of calling or purpose develop their conviction. Although research points to the importance of a person's having a purpose and meaning in her or his work (Dik & Duffy, 2009), it is possible that the concept of calling or purpose may not resonate with all women leaders. For that reason, future research should consider whether experiences not included within this study also affect conviction for those women who do not have a sense of calling.

Fifth, future research should consider the role of important mediators and moderators of this study's results. Specifically, capturing the extent to which an

individual has reflected on the relevant experiences may be an important mediator that would likely add valuable insights to the conviction development knowledge base.

Additionally, important moderators such as religious background, years in leadership, internalization of calling, and frequency of experiences may all have relevance for the findings of this study.

Conclusion

As noted within the opening of the paper, one of the most notable features of Queen Esther's story was her rise to power "for such a time as this" that allowed her to save the lives of her people. However, the experiences and lessons she had learned while coming of age cannot be overlooked. Women's conviction, whether it be directed toward the right to vote or toward the right to have a seat at the leadership table, is clearly a powerful driver of individual and collective actions. This study highlights the importance of experiences to the development of this conviction and the identification of the Estherlike moments that empower women to act when it might be costly to do so. Recognizing the influence of a woman's calling and purpose, as well as the experiences she has had with others, provides valuable insight into the continued development of women's leadership, conviction, and presence.

References

- Aarts, D. (2016). Leaning in isn't working. Canadian Business, 89, 16.
- Avolio, B., & Gardner, W. (2005). Authentic leadership development: Getting to the root of positive forms of leadership. *Leadership Quarterly*, 16, 315–338. doi:10.1016/j.leaqua.2005.03.001
- Baden, D. (2014). Look on the bright side: A comparison of positive and negative role models in business ethics education. *Academy of Management Learning & Education*, 13, 154-170. doi: 10.5465/amle.2012.0251
- Bandura, A. (1989). Social cognitive theory. In R. Vasta (Ed.), *Annals of child development: Six theories of child development* (Vol. 6, pp. 1–60). Greenwich, CT: JAI Press.
- Baumeister, R. F. (1991). *Meanings of life*. New York, NY: Guilford.
- Bell, E. L. J. E. (2010). Career GPS: Strategies for women navigating the new corporate landscape. New York, NY: Harper-Collins.
- Byrne, B. (2010). Structural equation modeling with AMOS: Basic concepts, applications, and programming (2nd ed.). New York, NY: Routledge.
- Bushe, G. R. (2009). Clear leadership: Sustaining real collaboration and partnership at work. Boston, MA: Davies-Black.
- Buunk, B. P., Collins, R. L., Taylor, S. E., VanYperen, N. W., & Dakof, G. A. (1990).
 The affective consequences of social comparison: Either direction has its ups and downs. *Journal of Personality and Social Psychology*, 59(6), 1238–1249.
 doi:10.1037/00223514.59.6.1238

- Cable, D. M., Gino, F., & Staats, B. R. (2013). Breaking them in or eliciting their best?

 Reframing socialization around newcomers' authentic self-expression.

 Administrative Science Ouarterly, 58(1), 1–36. doi:10.1177/0001839213477098
- Catalyst. (2007). The double-bind dilemma for women in leadership: Damned if you do, doomed if you don't. New York, NY: Catalyst. Retrieved from www.catalyst.org/publication/83/the-double-bind-dilemmafor-women-in-leadership-damned-if-you-do-doomed-ifyou-dont
- Catalyst. (2011). Statistical overview of women in the workplace. New York, NY:

 Catalyst. Retrieved from http://www.catalyst.org/publication/219/statisticaloverview-of-women-in-the-workplace
- Cialdini, R. B., & Trost, M. R. (1998). Social influence: Social norms, conformity, and compliance. In D. T. Gilbert, S. T. Fiske, & G. Lindzey (Eds.), *The handbook of social psychology* (4th ed., Vol. 2, pp. 151–192). Boston, MA: McGraw-Hill.
- Clance, P. R., & Imes, S. A. (1978). The imposter phenomenon in high achieving women: Dynamics and therapeutic intervention. *Psychotherapy: Theory,**Research & Practice, 15(3), 241–247. doi:10.1037/h0086006
- Cortina, J. (1993). What is coefficient alpha? An examination of theory and applications. *Journal of Applied Psychology*, 78(1), 98–104. doi:10.1037/0021-9010.78.1.98
- Crenshaw, K. (1993). Mapping the margins: Intersectionality, identity politics, and violence against women of color. *Stanford Law Review*, 43(6), 1241–1299. doi:10.2307/1229039

- Crocker, J., Moeller, S., & Burson, A. (2010). The costly pursuit of self-esteem:

 Implications for self-regulation. In R. Hoyle (Ed.), *Handbook of personality and self-regulation* (pp. 403–429). Hoboken, NJ: John Wiley.
- Dasgupta, N., & Asgari, S. (2004). Seeing is believing: Exposure to counter-stereotypic women leaders and its effect on automatic gender stereotyping. *Journal of Experimental Social Psychology*, 40, 642–658. doi:10.1016/j.jesp.2004.02.003
- Darrow, C. (2004). Introduction. In M. F. Parton (Ed.), *Autobiography of Mother Jones* (pp. v–vii). Mineola, NY: Dover Publications.
- Day, D. V., & Harrison, M. M. 2007. A multilevel, identity-based approach to leadership development. *Human Resource Management Review*, 17(4), 360–373. doi:10.1016/j.hrmr.2007.08.007
- Dik, B. J., & Duffy, R. D. (2009). Calling and vocation at work: Definitions and prospects for research and practice. *The Counseling Psychologist*, 37(3), 424–450. doi:10.1177/0011000008316430
- Dik, B. J., Duffy, B. J., & Steger, M. F. (2012). Enhancing social justice by promoting prosocial values in career development interventions. *Counseling and Values*, 57(1), 31–37. doi:10.1002/j.2161-007X.2012.00005.x
- DeRue, D. S., & Wellman, N. (2009). Developing leaders via experience: The role of developmental challenge, learning orientation, and feedback availability. *Journal of Applied Psychology*, 94(4), 859–875. doi:10.1037/a0015317
- DeRue D. S., & Ashford, S. J. (2010). Who will lead and who will follow? A social process of leadership identity construction in organizations. *Academy of Management Review*, 35(4), 627–647. doi:10.5465/AMR.2010.53503267

- Eagly, A. H., Wood, W., & Diekman, H. (2000). Social role theory of sex differences and similarities. A current appraisal. In T. Eckes & H. M. Trautner (Eds.), *The developmental social psychology of gender* (pp. 123–174). Mahwah, NJ: Erlbaum.
- Eagly, A. H., & Karau, S. J. (2002). Role congruity theory of prejudice toward female leaders. *Psychological Review*, 109(3), 573–598. doi:10.1037//0033-295X.109
- Eagly, A. H., Johannesen-Schmidt, M. C., & van Engen, M. L. (2003). Transformational, transactional, and laissez-faire leadership styles: A meta-analysis comparing women and men. *Psychological Bulletin*, *129*(4), 569–591. doi:10.1037/0033-2909.129.4.569
- Eagly, A. H., & Diekman, A. B. (2004). The common-sense psychology of changing social groups. In J. Jost, M. Banaji, & D. Prentice (Eds.), *The yin and yang of social psychology: Perspectivism at work* (pp. 201–213). Washington, DC: American Psychological Association.
- Eagly, A. H. (2005). Achieving relational authenticity in leadership: Does gender matter? *Leadership Quarterly*, 16(3), 459–474. doi:10.1016/j.leaqua.2005.03.007
- Eagly, A. H. (2007). Female leadership advantage and disadvantage: Resolving the contradictions. *Psychology of Women Quarterly*, *31*(1), 1–12. doi:10.1111/j.1471–6402.2007.00326.x
- Eagly, A. H., & Carli, L. L. (2007). Women and the labyrinth of leadership. *Harvard Business Review*, 85, 62–71. Retrieved from https://hbr.org/2007/09/women-and-the-labyrinth-of-leadership

- Efron, B., & Tibshirani, R. (1993). *An introduction to the bootstrap*. New York, NY: Chapman & Hall.
- Ely, R. J., Ibarra, H., & Kolb, D. M. (2011). Taking gender into account: Theory and design for women's leadership development programs. *Academy of Management Learning & Education*, 10(3), 474–493. doi:10.5465/amle.2010.0046
- Exley, C. L., Niederle, M., & Vesterlund, L. (2016). Knowing when to ask: The cost of leaning-in. *Harvard Business School*, 16-115 (working paper). Retrieved from http://www.hbs.edu/faculty/Publication%20Files/16-115_3b785edc-1ee4-4b83-9f73-2f1a4df4ccc6.pdf
- Ezzedeen, S. R., Budworth, M., & Baker, S. D. (2015). The glass ceiling and executive careers: Still an issue for pre-career women. *Journal of Career Development*, 42, 355–369. doi:10.1177/0894845314566943
- Faul, F., Erdfelder, E., Buchner, A., & Lang, A. (2009). Statistical power analyses using G*Power 3.1: Tests for correlation and regression analyses. *Behavior Research Methods*, 41(4), 1149–1160. doi:10.3758/BRM.41.4.1149
- Fitzsimmons, T. W., Callan, V. J., & Paulsen, N. (2014). Gender disparity in the C-suite:

 Do male and female CEOs differ in how they reached the top? *Leadership*Quarterly, 25(2), 245–266. doi:10.1016/j.leaqua.2013.08.005
- Field, A. (2013). Discovering statistics using SPSS (4th ed). London, UK: Sage.
- Gardner, P. (1996). Four anxieties and a reassurance: Hare and McLaughlin on being open-minded. *Journal of Philosophy of Education*, 30(2), 271–276. doi:10.1111/j.1467-9752.1996.tb00395.x

- Gardner, W. L., & Avolio, B. J. 1998. The charismatic relationship: A dramaturgical perspective. *Academy of Management Review*, 23(1), 32–58. doi:10.5465

 /AMR.1998.192958
- Goleman, D., Boyatzis, R. E., & McKee, A. (2001, December). Primal leadership. The hidden driver of great performance. *Harvard Business Review*, 79(11), 42–51.

 Retrieved from https://hbr.org/2001/12/primal-leadership-the-hidden-driver-of-great-performance
- Haney, D. (2015). *Leader self-regulation: The role of personality, purpose, and pressure* (Unpublished doctoral dissertation). Seattle Pacific University, Seattle, WA.
- Heilman, M. E., & Chen, J. J. (2005). Same behavior, different consequences: Reactions to men's and women's altruistic citizenship behavior. *Journal of Applied Psychology*, 90(3), 431–441. doi:10.1037/0021-9010.90.3.431
- Heilman, M. E., & Haynes, M. C. (2005). No credit where credit is due: Attributional rationalization of women's success in male-female teams. *Journal of Applied Psychology*, 90(5), 905–916. doi:10.1037/0021-9010.90.5.905
- Hoyt, C. L., & Blascovich, J. (2010). The role of leadership self-efficacy and stereotype activation on cardiovascular, behavioral, and self-report responses in the leadership domain. *Leadership Quarterly*, 21(1), 89–103. doi:10.1016/j.leaqua.2009.10.007
- Hoyt, C., & Simon, S. (2011). Female leaders: Injurious or inspiring role models for women? *Psychology of Women Quarterly*, *35*(1), 143–157. doi:10.1177 /0361684310385216

- Hutcheson, G., & Sofroniou, N. (1999). *The multivariate social scientist*. London, UK: Sage.
- Jones, M. H. (2004). *Autobiography of Mother Jones*. In M. F. Parton (Ed.). Mineola, NY: Dover Publications.
- Kaiser, H. F. (1970). A second-generation little jiffy. *Psychometrika*, 35, 401–415. doi:10.1007/BF02291817
- Kanfer, R., & Ackerman, P. L. (1989). Motivation and cognitive abilities: An integrative/aptitude–treatment interaction approach to skill acquisition. *Journal of Applied Psychology*, 74, 657–690. doi:10.1037/0021-9010.74.4.657
- Kay, K., & Shipman, C. (2014, May). The confidence gap. *The Atlantic*. Retrieved from https://www.theatlantic.com/magazine/archive/2014/05/the-confidence-gap/359815/
- Killeen, L. A., Lopez-Zafra, E., & Eagly, A. H. (2006). Envisioning oneself as a leader:

 Comparisons of women and men in Spain and the United States. *Psychology of Women Quarterly*, 30(3), 312–322. doi:10.1111/j.1471-6402.2006.00299.x
- Knowles, M. (1975). *The modern practice of adult education: The pedagogy to andragogy*. New York, NY: Cambridge: The Adult Education Company.
- Kolb, D. A. (1984). Experiential learning: Experience as the source of learning and development. Englewood Cliffs, NJ: Prentice Hall.
- Latu, C. F., Mast, M. S., Lammers, J., & Bombari, D. (2013). Successful female leaders empower women's behavior in leadership tasks. *Journal of Experimental Social Psychology*, 49, 444-448.

- Lindsey, E. H., Homes, V., & McCall, M. W., Jr. (1987). *Key events in executives' lives*.

 Greensboro, NC: Center for Creative Leadership.
- Litzky, B., & Greenhaus, J. (2007). The relationship between gender and aspirations to senior management. *Career Development International*, 12(7), 637–659. doi:10.1108/13620430710834404
- Lockwood, P., & Kunda, Z. (1997). Superstars and me: Predicting the impact of role models on the self. *Journal of Personality and Social Psychology*, 73(1), 93–103. doi:10.1037/0022–3514.73.1.91
- Lockwood, P., Jordan, C., Kunda, Z. (2002). Motivation by positive or negative role models: Regulatory focus determines who will best inspire us. *Journal of Personality and Social Psychology*, 83(4), 854-864. doi: 10.1037/0022-3514.83.4.854
- Lockwood, P., Sadler, P., Fyman, K., & Tuck, S. (2004). To do or not to do: Using positive and negative role odels to harness motivation. *Social Cognition*, 22(4), 422-450.
- Lockwood, P. (2006). "Someone like me can be successful": Do college students need same-gender role models? *Psychology of Women Quarterly, 30*(1), 36–46. doi:10.1111/j.1471–6402.2006.00260.x
- Lord, R. G., & Hall, R. J. (2005). Identity, deep structure and the development of leadership skill. *Leadership Quarterly*, 16(4), 591–615. doi:10.1016/j.leaqua.2005.06.003
- MacCallum, R. C., Widaman, K. F., Zhang, S., & Hong, S. (1999). Sample size in factor analysis. *Psychological Methods*, 4(1), 84–99. doi:10.1037/1082-989X.4.1.84

- Marsick, V. J., & Watkins, K. (1990). *Informal and incidental learning in the workplace*. London, UK and New York, NY: Routledge.
- McCall, M. W., Jr., Lombardo, M. M., & Morrison, A. M. (1988). *The lessons of experience: How successful executive develop on the job*. Lexington, MA: Lexington Books.
- McCall, M. (2004). Leadership development through experience. *Academy of Management Executive*, 18(3), 127–130. doi:10.5465/AME.2004.14776183
- McCauley, C. D., Ruderman, M. N., Ohlott, P. J., & Morrow, J. E. (1994). Assessing the developmental components of managerial jobs. *Journal of Applied Psychology*, 79(4), 544–560. doi:10.1037/0021-9010.79.4.544
- McKenna, R. B. (2004). Leading Under Pressure Inventory. Unpublished manuscript.
- McKenna, R. B., & Yost, P. R. (2004). The differentiated leader: Specific strategies for handling today's adverse situations. *Organizational Dynamics*, 33(3), 292–306. doi:10.1016/j.orgdyn.2004.06.006
- McKenna, R. B., Yost, P. R., & Boyd, T. N. (2007). Leadership development and clergy understanding: The events and lessons that shape pastoral leaders. *Journal of Psychology and Theology, 35*, 179–189. Retrieved from https:

 //www.thefreelibrary.com/Leadership+development+and+clergy%3a+understanding+the+events+and...-a0170733094
- McKenna, R. B., Haney, D. M., & Wenzel, K. K. (2013, June). *Getting better at being together: Assessing validity of a developmental differentiation scale*. Paper presented at the World Congress on Positive Psychology, Los Angeles, CA.

- McKenna, R. B., Blackshire, A., & Hickory, M. J. (2015, April). *Leading under pressure: A validation study of leadership differentiation strategies*. Poster session presented at the meeting of the Society of Industrial Organizational Psychologists, Philadelphia, PA.
- McKenna, R. B., Haney, D. M., Ecker, D. L., Matson, J., Becker, O., Boyd, T. N., & Hickory, M. J. (2015). Calling, the caller, and being called: A qualitative study of transcendent calling. *Journal of Psychology & Christianity*, *34*, 294–303.
- McKenna, R. B., & Wenzel, K. K. (2016). Developing whole leaders for the whole world. *The Journal of Values-Based Leadership*, 9(1), Article 12.
- McKinsey. (2015). Women in the workplace 2016. Retrieved from https://womenintheworkplace.com
- Morris, M. W., & Keltner, D. (1988). How emotions work: The social functions of emotional expression in negotiations. *Research in Organizational Behavior*, 22, 1–50. doi:10.1016/S0191-3085(00)22002-9
- O'Neil, D. A., Hopkins, M. M., & Bilimoria, D. (2015). A framework for developing women leaders: Applications to executive coaching. *Journal of Applied Behavioral Science*, *51*(2), 253–276. doi:10.1177/0021886315575550
- Ohlott, P. J., Ruderman, M. N., & McCauley, C. D. (1994). Gender differences in managers' developmental job experiences. *Academy of Management Journal*, 3(1)7, 46–67. doi:10.2307/256769
- Oliver, P. (2013). Critical mass theory. *The Wiley-Blackwell Encyclopedia of Social & Political Movements*. doi:10.1002/9780470674871.wbespm059

- Phelan, J. E., Moss-Racusin, C. A., & Rudman, L. A. (2008). Competent yet out in the cold: Shifting criteria for hiring reflect backlash toward agentic women.

 *Psychology of Women Quarterly, 34, 406–413. doi:10.1111/j.1471-6402

 .2008.00454.x
- Podsakoff, P. M., MacKenzie, S. B., Lee, J., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommend remedies. *Journal of Applied Psychology*, 88(5), 879–903. doi:10.1037/0021-9010.88.5.879
- Pratt, M. G., & Ashforth, B. E. (2003). Fostering meaningfulness in working and at work.

 In K. Cameron, J. E. Dutton, & R. E. Quinn (Eds.), *Positive organizational*scholarship (pp. 309–327). San Francisco, CA: Barrett-Koehler.
- Quinn, R. E. 2004. Building the bridge as you walk on it: A guide for leading change.

 San Francisco, CA: Jossey-Bass.
- Rios, S., Stewart, A. J., & Winter, D. G. (2010). 'Thinking she could be the next

 President': Why identifying with the curriculum matters. *Psychology of Women Quarterly, 34*(3), 328–338. doi:10.1111/j.1471-6402.2010.01578.x
- Roberts, L. M. (2007). Bringing your whole self to work: Lessons in authentic engagement from women. In B. Kellerman & D. L. Rhode (Eds.), *Women and leadership: The state of play and strategies for change* (pp. 329–360). San Francisco, CA: Jossey Bass

- Roberts, L. M. (2013). Reflected best self-engagement at work: Positive identity, alignment, and the pursuit of vitality and value creation. In I. Boniwell & S. David (Eds.), *The Oxford handbook of happiness* (pp. 767–782). New York, NY: Oxford University Press.
- Robinson, G. S., & Wick, C. W. (1992). Executive development that makes a business difference. *Human Resource Planning*, *15*, 63–76.
- Rudman, L. A. (1998). Self-promotion as a risk factor for women: The costs and counter stereotypical impression management. *Journal of Personality and Social Psychology*, 74, 629–645. Retrieved from http://search.committee.module .rutgers.edu/pdf/Rudman self promoing.pdf
- Rudman, L. A., & Phelan, J. E. (2010). The effect of priming gender roles on women's implicit gender beliefs and career aspirations. *Social Psychology*, 41, 192–202. doi:10.1027/1864-9335/a000027
- Rudman, L. A., Moss-Racusin, C. A., Phelan, J. E., & Nauts, S. (2012). Status incongruity and backlash effects: Defending the gender hierarchy motivates prejudice against female leaders. *Journal of Experimental Social Psychology*, 48, 165–179. doi:10.1016/j.jesp.2011.10.008
- Ryan, M. K., & Haslam, S. A. (2007). The glass cliff: Exploring the dynamics surrounding the appointment of women to precarious leadership positions.

 **Academy of Management Review, 32(2), 549–572. doi:10.5465

 /AMR.2007.24351856
- Schafer, J. L. (1999). Multiple imputation: A primer. *Statistical Methods in Medical Research*, 8(1), 3–15.

- Schein, V. E., Mueller, R., Lituchy, T., & Liu, J. (1996). Thnk manager-think male: A global phenomenon? *Journal of Organizational Behavior*, 17(1), 33–41. doi:10.1002/(SICI)1099-1379(199601)17:1<33::AID-JOB778>3.0.CO;2-F
- Shadish, W. R., Cook, T. D., & Campbell, D. T. (2001). Experimental and quasiexperimental designs for generalized causal inference. Belmont, CA: Wadsworth, Cengage Learning.
- Shamir, B., Dayan-Horesh, H., & Adler, D. (2005). Leading by biography: Toward a life-story approach to the study of leadership. *Leadership*, *I*(1), 13–29. doi:10.1177/1742715005049348
- Shamir, B., & Eilam, G. (2005). 'What's your story?' A life-stories approach to authentic leadership development. *Leadership Quarterly*, *16*, 395–417. doi:10.1016/j.leaqua.2005.03.005
- Shamir, B., House, R. J., & Arthur, M. B. 1993. The motivational effects of charismatic leadership: A self-concept based theory. *Organization Science*, *4*, 577–594. doi:10.1287/orsc.4.4.577
- Simon, S., & Hoyt, C. L. (2013). Exploring the effect of media images on women's leadership self-perceptions and aspirations. *Group Processes & Intergroup Relations*, 16(2), 232–245. doi:10.1177/1368430212451176
- Steele, C. M., & Aronson, J. (1995). Stereotype threat and the intellectual test performance of African-Americans. *Journal of Personality and Social Psychology*, 69, 797–811.
- Stevens, J. P. (2002). *Applied multivariate statistics for the social sciences* (4th ed.). Hillsdale, NJ: Erlbaum.

- Sturm, R. E., Taylor, S. N., Atwater, L. E., & Braddy, P. W. (2014). Leader self-awareness: An examination and implications of women under-prediction. *Journal of Organizational Behavior*, *35*(5), 657–677. doi:10.1002/job.1915
- U.S. Constitution. Amendment VII.
- U.S. Constitution. Amendment IX.
- van Knippenberg, B., van Knippenberg, D., De Cremer, D., & Hogg, M. A. (2004).

 Research in leadership, self, and identity: A sample of the present and a glimpse of the future. *Leadership Quarterly*, 16(4), 495–499. doi:10.1016

 /j.leaqua.2005.06.006
- Wick, C. W. (1989). How people develop: An in-depth look. HR Report, 6, 1–3.
- Wrzesniewski, A., & Dutton, J. E. (2001). Crafting a job: Revisioning employees as active crafters of their work. *Academy of Management Review*, 26(2), 179–201. doi:10.5465/AMR.2001.4378011
- Wrzesniewski, A., McCauley, C., Rozin, P., & Schwartz, B. (1997). Jobs, careers, and callings: People's relations to their work. *Journal of Research in Personality*, 31(1), 21–33. doi:10.1006/jrpe.1997.2162
- Yeagley, E., Subich, L. M., & Tokar, D. M. (2010). Modeling college women's perceptions of elite leadership positions with social cognitive theory. *Journal of vocational Behavior*, 77(1), 30–38. doi:10.1016/j.jvb.2010.02.003

Appendix A: Conviction Scale

Conviction Scale

The Conviction Scale is included within the Leading Under Pressure Inventory.

Instructions: Think about a recent high-pressure situation you have faced or are currently facing—one that has challenged your personal convictions and your ability to stay connected to the thoughts, needs, and feelings of other people involved. This situation might include a direct conflict, a conversation you need to have, or a person or group who is challenging for you in some way. In 100 words or fewer, describe the situation and why it is challenging for you.

Conviction Scale

After describing a high-pressure situation, participants respond to questions regarding the situation they described.

Instructions: Considering the recent high-pressure experience you just described, rate the extent to which each statement below is like you or not like you.

- 1. Not at All Like Me, 3. Somewhat Like Me, or 5. Very Much Like Me.
 - 1. I know what I want to see happen.
 - 2. I speak my mind, even if it might be risky for me to do so.
 - 3. I clearly communicate what I want to see happen.
 - 4. I make decisions based on the values that matter most to me, even during conflicts with other people.
 - 5. I think about the outcomes I would like to see happen before I have important conversations.
 - 6. I know what's important to me.

Appendix B: Experience Scales

Experience Scales

The Experience Scales is included within the Leadership Experiences and Lessons Audit tool.

Instructions: Below are descriptions of different experiences you may or may not have been through at this point in your career. Read the description of each experiences to the left and indicate the extent to which you have had the experience (relevance), and its importance to your career and life.

1. Not Relevant To You Yet, 2. No Experience But Desire It, 3. Little Experience With This, 4. Moderate Experience With This, 5. Significant Experience With This, or 6. Definite Experience With This.

Experience Scales

Leadership Experiences

- You were responsible for leading a group or organization without any other staff to support you.
- 2. You experienced leading or managing others for the first time.
- 3. You experienced leading people who manage others (e.g., being a leader of leaders).
- 4. You have been in a senior leadership role (e.g., a leader of leaders of leaders).
- 5. You had to get things done through other people without having any direct authority over them.
- 6. You confronted a subordinate about a significant performance issue.
- 7. You experienced what you perceived as a career setback (e.g., not getting a coveted position, getting demoted, being derailed or even fired).

People Experiences

- 1. LELA 375: You have experienced or observed a person doing something to another person that had profound impact on your beliefs and values.
- 2. LELA 378: You have had an experience with your family that had a profound impact on your approach to leadership or life.
- 3. LELA 381: You have been able to observe great role models. These people are often described in superlative terms and are examples of "what *to* do or be."
- 4. LELA 384: You have observed difficult individuals (often senior leaders) who may have had fatal flaws. These people have been examples of "what *not* to do or be."
- 5. LELA 387: You have had the firsthand opportunity to see or care for people in poverty-stricken areas, or to care for people who have other deeply challenging physical/psychological/spiritual needs.
- 6. LELA 369: You helped lead other people through a personal crisis or trauma in their life or lives.

Transition Experiences

- 1. LELA 309: You were exposed to new environments, cultures, or management philosophies through nonmanagement jobs early in your career.
- 2. LELA 321: You experienced having gained increased responsibility that is both broader and different from previous work.

- 3. LELA 324: You moved from one type of organization to a new one, in a different industry, with a different population or set of stakeholders, or with a different location and culture.
- 4. LELA 330: You voluntarily changed jobs or careers to seek new challenges, opportunities, or growth.

Calling Experiences

- LELA 312: You experienced a defining moment when you dedicated your life to God or another spiritual or philosophical way of life.
- LELA 315: You experienced a moment when you felt called to a specific or more general purpose (e.g., through dreams, the voice of God, or other messages outside yourself).
- 3. LELA 342: You experienced a redefining moment in your life that reaffirmed your call to leadership or to your purpose.

Appendix C: Demographic Items

Demographic Items

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

N/A