

UNIVERSITY OF OKLAHOMA GRADUATE COLLEGE

VALIDATING A NEW MEASURE OF INCLUSIVE LEADERSHIP
IN A U.S. CONTEXT

A DISSERTATION
SUBMITTED TO THE GRADUATE FACULTY
in partial fulfillment of the requirements for the Degree of
DOCTOR OF PHILOSOPHY

By KAREN L. TILKIN

Norman, Oklahoma

2025

VALIDATING A NEW MEASURE OF INCLUSIVE LEADERSHIP
IN A U.S. CONTEXT

A DISSERTATION APPROVED FOR THE
GRADUATE COLLEGE

BY THE COMMITTEE CONSISTING OF

Dr. Jody Worley, Chair

Dr. Jennifer Kisamore

Dr. Brenda Lloyd-Jones

Dr. Vickie Lake

Dedication

This dissertation is dedicated to my late father, Sheldon Lewis Tilkin, who taught me to think critically, show kindness to strangers, enjoy the present, and follow my dreams. The example he set by pursuing his passion for screenwriting in his retirement was my inspiration to continue my studies and plan my next life chapter. Although he departed from this earth more than twenty years ago, his unconditional love, zest for life, and constant support are ever-present in my life and in the lives of our family. May his memory forever be a blessing.

Acknowledgements

To my family and friends who supported me throughout my long, meandering educational journey, I offer my heartfelt appreciation. I am also grateful to my advisor, Dr. Jody Worley, for his continuous guidance and encouragement. And many thanks to my committee members: Dr. Jennifer Kisamore, Dr. Brenda Lloyd-Jones, and Dr. Vickie Lake for their support throughout the dissertation process.

I am also deeply grateful to my friends and colleagues at CAP Tulsa, where I have spent more than sixteen years of my career benefiting from their honest feedback and unflagging support. I could not have imagined a more open, inclusive, and nurturing environment in which to develop and refine my inclusive leadership skills. I am also profoundly grateful to the founding CEO of CAP Tulsa, Steven H. Dow, who took a leap of faith and brought me into the agency to help him realize his vision for building an exceptional leadership system. I grew tremendously as a leader, and as an individual, over the twelve years we worked together before he turned over the reins to me in 2019.

It has been a privilege to work with many exceptional leaders throughout my career who supported me and encouraged me. Keith Kaneko, Senior Vice President at Manufacturers Hanover Trust Company, demonstrated great compassion and helped me contribute more fully by relocating me from Hong Kong to Taipei, Taiwan, ROC. Paula Marshall, CEO of The Bama Companies, Inc., is the quintessential inclusive leader who taught me that shared decision-making and encouraging diverse contributions make teams stronger. She believed in my leadership potential and gave me the career-stretching opportunity of a lifetime: to set up and manage a pie manufacturing operation

in Beijing, China. They, along with several leaders with whom I have worked in Tulsa, have served as paragons of leadership excellence over the past three decades.

My two sons, Declan and Brendan, have been a perpetual source of love and motivation. I greatly appreciate their encouragement and support throughout my career and educational pursuits.

Finally, I must thank my indomitable Mother, Sandra K. Tilkin, Ed.D., who has been my life-long role model. She has always had the instincts of an inclusive leader long before the term was coined. As a career educator and educational administrator, she is beloved by her former colleagues, teachers, parents, and students for her firm yet compassionate support and guidance, acceptance of others, and collaborative leadership approach. She is my rock, continually pushing me to pursue my doctoral degree despite life's detours.

Table of Contents

List of Tables.....	ix
List of Figures.....	x
Abstract.....	xi
Chapter 1: Introduction.....	1
Chapter 2: Review of Literature.....	7
Optimal Distinctiveness Theory.....	7
Inclusive leadership and psychological safety.....	8
First measure of inclusive leadership	10
Distinguishing inclusion from diversity.....	11
Conceptual model of inclusive leadership.....	13
Contrasting inclusive leadership with other leadership models.....	14
Advancing the measurement of inclusive leadership.....	16
Exploration of alternative mediator and outcome variables.....	18
Individualism and collectivism.....	20
Chapter 3: Method.....	25
Research design.....	25
Participants.....	26
Measures.....	27
Statistics or data analytic protocol.....	29
Chapter 4: Results.....	31
Descriptive statistics of sample.....	31
Exploratory Factor Analysis.....	32

Descriptive statistics of measures.....	34
Correlation and reliability analysis.....	35
Work Performance Inventory (WPI) sub-category analysis.....	36
Correlation and reliability analysis of WPI sub-scales.....	36
Mediation analysis.....	38
Chapter 5: Discussion.....	40
Theoretical implications.....	40
Practical implications.....	41
Limitations and future research.....	43
Conclusion.....	45
References.....	47
Appendix A New Inclusive Leadership Scale (Al-Atwi & Al-Hassani, 2021)	50
Appendix B Work Group Inclusion Scale (Chung et al., 2020)	51
Appendix C Role Performance Model (Griffin, 2007)	52
Appendix D Inclusive Leadership Measure (Carmeli et al., 2010)	53
Appendix E Team Psychological Safety (Edmondson, 1999)	54
Appendix F Histograms	55
Appendix G Scatterplots for Four Measures and Outcome Variable.....	59
Appendix H Exploratory Factor Analysis of NILS	61
Appendix I Principal Component Analysis of NILS.....	64
Appendix J Qualtrics Survey	67
Appendix K IRB Approval Letter.....	81

List of Tables

Table 1. Descriptive statistics of demographic information.....	31
Table 2. Descriptive statistics of measures.....	34
Table 3. Correlation matrix of measures.....	35
Table 4. Correlation matrix of WPI sub-scales.....	37
Table 5. Mediation analysis.....	39

List of Figures

Figure 1. Antecedents and outcomes of inclusion (Shore et al., 2011)	8
Figure 2. Model of engagement in quality improvement work (Nembhard & Edmonson, 2006)	10
Figure 3. A model of inclusive organizations (Shore et al., 2018)	12
Figure 4. Theoretical model of inclusive leadership (Randel et al., 2018)	15
Figure 5. Inclusive leadership model described by Al-Atwi and Al-Hassani (2021)...	19
Figure 6. Proposed inclusive leadership conceptual model.....	20

Abstract

This dissertation validates a new survey of inclusive leadership developed by Al-Atwi and Al-Hassani (2021) in Iraq to determine its relevance in a U.S. context. Based on Randel et al.'s (2018) Theoretical Model of Inclusive Leadership, the survey consists of 25 questions across five constructs: supporting team members, ensuring justice and equity, shared decision-making, encouraging diverse contributions, and helping group members fully contribute. Originally developed in Arabic with a predominantly male sample in Iraq, this study tests the survey in English within a majority female U.S. non-profit organization. Using data from a sample of 206 participants, the findings provide strong support for the 25-item scale's validity and reliability in English. This research contributes to the field by validating a scale which has more granularity than Carmeli et al.'s (2010) widely used 9-item Inclusive Leadership Measure. The findings also show inclusive leadership's applicability in both individualistic and collectivist societies.

Chapter 1: Introduction

“The wise leader settles for good work and does not take all the credit for what happens. When the work is done, let them say with pride, we have done this together.”

~ Lao Tzu, Chinese Taoist Philosopher

Demographics in the U.S. workforce are changing rapidly, contributing to an important and evolving workforce diversity management issue. The participation of women in the labor force increased sharply from 34% in 1950 to 47% by 2023 (U.S. Bureau of Labor Statistics, 2024). And while whites made up the majority of the labor force (76%) in 2023, the proportion declined from 83.5% in 1950 (U.S. Bureau of Labor Statistics, 2024; Toossi, 2002). Blacks and other groups constituted an additional 13% and 11%, respectively. People of Hispanic or Latino ethnicity, who may be of any race, made up 19% of the total labor force (U.S. Bureau of Labor Statistics, 2024). These demographic shifts are compounded by generational changes, with Millennials (born between 1981 and 1996) and Generation Z (born after 1996) comprising a growing proportion of the workforce (Parker & Igielnik, 2020). The Pew Research Center highlights that these younger generations are more racially and ethnically diverse than their predecessors. Among Generation Z, just over half (52%) are non-Hispanic white, which is smaller than the 61% of Millennials who were non-Hispanic white in 2002 (Parker & Igielnik, 2020).

Dramatic changes in demographics pose both opportunities and challenges for organizations striving to create inclusive workplaces. Addressing the needs and

perspectives of a diverse workforce requires proactive diversity management strategies that go beyond token representation to foster a culture of belonging and equity. Byrd (2018) described diversity management as “a voluntary strategy used by organizations that value human diversity and are committed to hiring the best and brightest qualified individuals representing a variety of diversity backgrounds” (p. 4). With growing diversity in the workforce, organizations face increasing challenges on how to manage diversity successfully to realize its benefits (e.g., improved decision-making, increased productivity, and greater innovation) and minimize its pitfalls (e.g., interpersonal discord and prejudice). Organizational researchers assert that management practices must reflect an inclusion perspective that seeks to balance employees’ need for belongingness and uniqueness (Nishii, 2013; Shore et al., 2011), the essence of Brewer’s (1991) Optimal Distinctiveness Theory (ODT). While several established leadership models, namely transformational leadership, leader-member exchange, and authentic leadership, may foster work environments that embrace diversity, they are insufficient to fully realize its benefits to both individuals and organizations (Chrobot-Mason & Roberson, 2022).

Inclusive leadership is a relatively new model which offers the promise of realizing the rewards of diversity more fully by “leveraging the benefits of diverse knowledge, perspectives, and skills to facilitate organizational learning and growth” (Chrobot-Mason & Roberson, 2022, p. 323). There is still, however, a lack of consensus on the structural dimensions of inclusive leadership. In other words, what does inclusive leadership encompass? A widely used model and measure of leadership is the Inclusive Leadership Measure (Carmeli et al., 2010) which assesses leadership behaviors along

three dimensions: openness, accessibility, and availability. However, this model lacks a comprehensive theoretical basis and clear distinction from other leadership models (Randel et al., 2018).

The purpose of this study is to extend research about inclusive leadership by validating in the U.S. a new measure developed and administered in Iraq by Al-Atwi and Al-Hassani (2021). Their New Inclusive Leadership Scale is a key study variable, along with the variables used in the measure's development. These include a previously validated measure of inclusive leadership, inclusion perception, and the three dimensions of work performance—proficiency, adaptivity, and proactivity. In addition, this study will evaluate psychological safety as a mediating variable in the relation between inclusive leadership and work performance.

The independent variables in this study are Al-Atwi and Al-Hassani's (2021) New Inclusive Leadership Scale and Carmeli et al.'s (2010) Inclusive Leadership Measure. The latter measures three dimensions of leadership behaviors—openness, accessibility, and availability—which Edmondson (2004) purports to be the most likely characteristics of leaders that facilitate the promotion of psychological safety among employees. Leaders can foster innovation and risk-taking among followers by emphasizing the value of these behaviors and reassuring them that there will be no negative repercussions. Being open, available, and accessible allows leaders to communicate such expectations. When the leader is open and listens to employees, willing to discuss new ways for achieving the work goals, and pays attention to new opportunities, employees are likely to feel that it is safe to bring up new ideas and take risks involved in coming up with ideas that basically defy the norm. In a similar vein,

when leaders are available and accessible to employees, they send a clear signal that it is safe to approach them and that they will be available and accessible to employees attempting to address issues creatively.

Chung et al.'s (2020) Work Group Inclusion Scale and Edmondson's (1999) measure of Team Psychological Safety are both independent variables expected to influence the outcome variables, while also serving as dependent variables (and potential mediators) affected by the leadership behaviors measured by the New Inclusive Leadership Scale. The Work Group Inclusion Scale assesses an employee's dual need to feel a sense of belonging to the work group while also being valued for their uniqueness as an individual. Team Psychological Safety measures the degree to which an employee feels comfortable on a team to speak up, make a mistake, and take a risk.

The dependent variables are the three outcomes of proficiency, adaptivity, and proactivity as measured by Griffin's (2007) Role Performance Model. The model is comprised of nine subdimensions that classify work performance into three levels in which a role contributes to effectiveness (individual, team, and organization) and three forms of behavior (proficiency, adaptivity, and proactivity) for each level.

This study aims to extend research about inclusive leadership by validating in the U.S. a new measure developed by Al-Atwi and Al-Hassani (2021) that is firmly grounded in Brewer's (1991) ODT, and which offers a more complete set of desired leadership behaviors than that of Carmeli et al.'s (2010) scale. Since the new measure was developed and validated in Iraq in Arabic with a predominantly male sample

(67.2%), this study seeks to demonstrate the universality of the measure by testing it in English in a majority female-led non-profit organization in the United States.

Additionally, given that the measure was developed in the collectivist culture of Iraq, the current study also explores the applicability of the measure to an individualistic culture (Hofstede, 1984). This is particularly important since Al-Atwi and Al-Hassani maintain: “Our assumption is in line with prior research asserting that collectivism encompasses important values that promote the effectiveness of inclusive leadership” (Al-Atwi and Al-Hassani, 2021, p. 1236). Indeed, in several studies on inclusive leadership the researchers contend that this model is uniquely suited to their collectivist cultural context (Choi et al., 2017; Fang et al., 2019).

Inclusiveness is a traditional virtue of the Chinese nation...The concept of inclusiveness in the West was mainly derived from the idea of democracy and justice. In Chinese culture, “inclusiveness” is more about the ‘tolerance and greatness’ of the mind and moral cultivation (Fang et al., 2019, p. 2).

The present study seeks to challenge these assumptions and demonstrate that inclusive leadership is an effective leadership model in the individualistic society of the United States and thus generalizable across cultural contexts.

Furthermore, this study will include a graphic representation of a model of inclusive leadership based on the newly developed measure by Al-Atwi and Al-Hassani (2021). The original paper and theory did not show the model graphically. The intent is to advance a more current conceptual model of inclusive leadership since the one first developed by Shore et al. (2011). Also, because Al-Atwi and Al-Hassani (2021) tested the relationship of their scale with perceptions of inclusion as a mediator, there is an opportunity to examine other constructs related to inclusive leadership proposed by

others, such as psychological empowerment (Randel et al., 2018) or psychological safety (Nembhard & Edmonson, 2006).

This study will test Al-Atwi and Al-Hassani's (2021) conceptual model to determine whether the measure of inclusive leadership they created demonstrates construct validity with the current study sample. In addition, internal consistency reliability will be assessed by comparing the Cronbach's alpha obtained from the sample to the alpha of .95 found in the original Iraqi sample. Importantly, this study will assess whether the hypotheses tested in the Al-Atwi and Al-Hassani (2021) study are supported with this sample.

Chapter 2: Review of Literature

Optimal Distinctiveness Theory

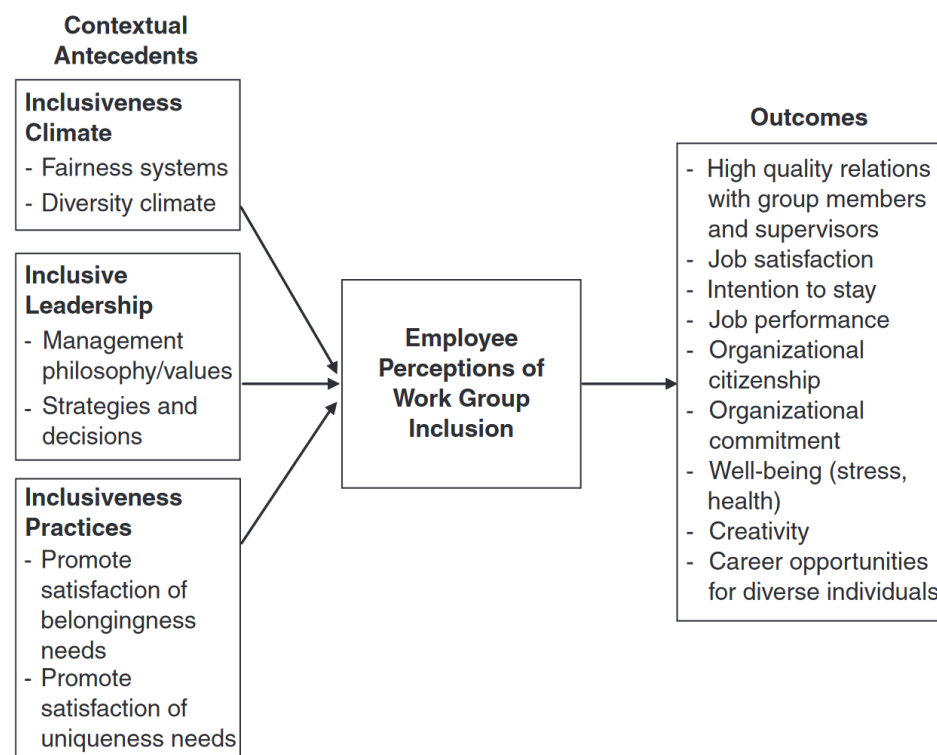
ODT strives to reconcile an individual's opposing needs for assimilation and differentiation from others (Brewer, 1991). It suggests that individuals seek to resolve the fundamental tension between our human needs for validation and similarity to others with a counterbalancing need for uniqueness and individualization by finding the equilibrium between the two opposing forces. ODT has implications for group membership in the workplace, whereby employees are constantly reconciling their need to be recognized as individuals with their need to feel part of the in-group. Thus, ODT formed the foundation for the theory of inclusive leadership in organizations, such as that of Shore et al. (2011) who "define inclusion as the degree to which an employee perceives that he or she is an esteemed member of the work group through experiencing treatment that satisfies his or her needs for belongingness and uniqueness" (p.1265). Shore et al. (2011) developed one of the first models of inclusive leadership (see Figure 1) grounded in ODT, and included both contextual antecedents (i.e., organizational factors) as well as consequences of inclusion (e.g., job satisfaction, intention to stay, and job performance).

ODT is also foundational to the model of inclusive leadership developed by Randel et al. (2018), in which they proposed five categories of leadership behaviors clustered under two constructs: "facilitates belongingness" or "values uniqueness" (p. 191). These same leadership behaviors became the core of the measure developed by Al-Atwi and Al-Hassani (2021), who similarly grouped them into two distinct categories, namely "facilitating belongingness" or "indicating uniqueness" (p. 1223).

Thus, ODT is a foundational construct that was part of the empirical model tested in this study. The first hypothesis tested the relationship between inclusive leadership and employees' perceptions of inclusion using Chung's (2020) 10-item Work Group Inclusion measure:

H1. Inclusive leadership is positively related to employees' perceptions of inclusion.

Figure 1. Antecedents and outcomes of inclusion (Shore et al., 2011)



Inclusive leadership and psychological safety

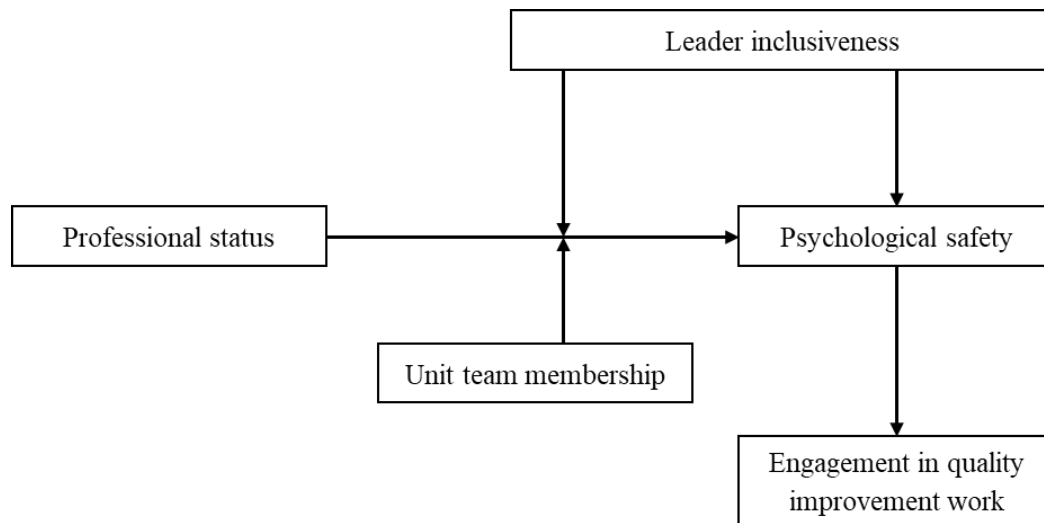
Edmondson (1999) introduced the construct of “psychological safety” within an organizational work team, which she defined as “a shared belief held by members of a team that the team is safe for interpersonal risk taking” (p. 350). She also presented a model of the effects of team psychological safety and team efficacy on learning and

performance in work teams. Drawing on this work, Nembhard and Edmondson (2006) introduced the construct of “leader inclusiveness,” defined as “words and deed by a leader or leaders that indicate an invitation and appreciation for others’ contributions” (p. 947). The researchers identified the need for leaders to create psychological safety, which they characterize as a necessary condition to encourage employees to speak up, learn from their mistakes, and feel a sense of team cohesion. They specified several leader inclusiveness behaviors: including others in discussions who would not otherwise be invited to share their perspectives, providing clarification and feedback, consulting with workers to foster shared decision-making, and delegating decision-making authority to subordinates (Nembhard & Edmondson, 2006). Their primary assertion was: “Leader inclusiveness describes behavior that, through direct invitation, should create psychological safety for speaking up” (p. 947).

Nembhard and Edmondson’s (2006) study also provided insight into team learning for quality improvement. They found evidence that “psychological safety, in combination with leader inclusiveness, promotes team engagement in quality improvement work” (p. 959) as depicted in Figure 2. While the study focused on the health care sector and the relationship between status and psychological safety as measured by four items from Edmonson’s (1999) seven-item Team Psychological Safety Scale, there are important implications for a broader organizational context. Nembhard and Edmondson’s (2006) paper offered the first attempt to define the construct of inclusive leadership and highlighted the importance of psychological safety on teams to foster cohesion, communication, and engagement in quality improvement efforts. Their study did not, however, embed the core assumptions of ODT, an omission

that is resolved in later theoretical models of inclusive leadership developed by Shore et al. (2018) and Randel et al. (2018).

Figure 2. Model of engagement in quality improvement work (Nembhard & Edmonson, 2006)



First measure of inclusive leadership

Carmeli et al. (2010) investigated the relationship between inclusive leadership (IL) and employee creativity (EC), and whether perceptions of psychological safety (PS) fully mediate that relationship. By focusing on inclusive leadership, the researchers highlighted the need to examine the role of relational leadership in organizations. They developed the first widely used measure of inclusive leadership, a 9-item survey which encompasses three dimensions: openness, accessibility, and availability ($\alpha = .94$). The results of their study supported all three of their research hypotheses: (1) there is a positive relationship between IL and PS; (2) there is a positive relationship between PS and EC; and (3) PS fully mediates the relationship between IL and EC.

Some limitations of the study were the recognition that other unobserved variables beyond inclusive leadership may be important for explaining employee

creativity, and factors beyond psychological safety may foster employee creativity.

Because the outcome variable in their study is creativity, an additional limitation is that there are other outcome variables of interest when examining inclusive leadership and the impact of psychological safety, such as greater employee retention, improved job performance, and increased employee creativity (Shore et al., 2011 & 2018; Randel et al., 2018). Nevertheless, Carmeli et al.'s (2010) article was prevalent in the ensuing literature in the field for the next decade, with 1,648 citations (as of January 19, 2025), and their Inclusive Leadership Measure has been cited 10,200 times (as of January 19, 2025).

Distinguishing inclusion from diversity

To provide a theoretical foundation for inclusion in organizations, it is important to distinguish it from diversity. In their integrated review of the literature, Shore et al. (2018) explained the difference between the two concepts as follows:

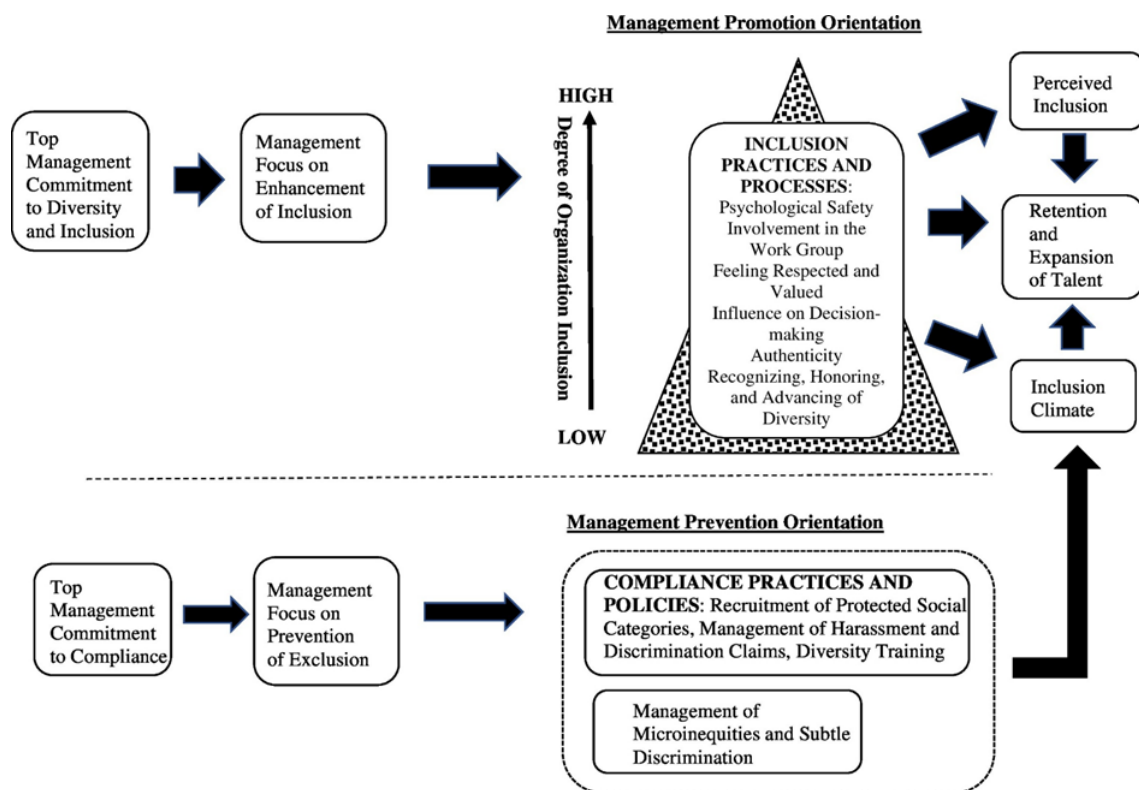
While diversity management practices have focused chiefly on bringing women, people of color, and members of other marginalized groups into the workplace, inclusion practices have sought to create equal access to decision-making, resources, and upward mobility opportunities for these individuals (p. 177).

They highlighted five different constructs of inclusion present in the literature: work group inclusion, leader inclusion, perceived organizational inclusion, organizational practices inclusion, and inclusion climate (see Figure 3).

The framework proposed by the authors is divided into two layers: Management Promotion Orientation and Management Prevention Orientation. In the Management Promotion layer, six inclusion practices and processes are specified: psychological safety; involvement in the work group; feeling respected and valued; influence on

decision-making; authenticity; and recognizing, honoring, and advancing diversity. These practices and processes are supported by management's commitment to diversity and inclusion. Outcomes are perceived inclusion, inclusion climate, and, ultimately, retention and expansion of talent. The Management Prevention layer reflects top management commitment to compliance with and adherence to the following practices and policies: recruitment of protected social categories, management of harassment and discrimination claims, and diversity training, along with management of microinequities and subtle discrimination. In presenting a comprehensive inclusion model, the authors acknowledged the need for all facets to be tested empirically. This article is a valuable compendium of the inclusion literature as of 2017 and has been cited 1,182 times in subsequent research as of January 19, 2025.

Figure 3. A model of inclusive organizations (Shore et al., 2018)



Conceptual model of inclusive leadership

In their seminal paper, Randel et al. (2018) proposed a comprehensive conceptual model of inclusive leadership (see Figure 4) and established it as a distinct form of leadership by building on optimal distinctiveness theory. Their framework became a pivotal contribution to the field and has been cited in more than 1,106 articles on inclusive leadership as of January 19, 2025. The researchers articulated three unique factors exhibited by inclusive leaders: pro-diversity beliefs, humility, and cognitive complexity. Inclusive leaders practice three behaviors that facilitate belongingness—supporting individuals as group members; ensuring justice and equity; and shared decision-making—and two behaviors that value uniqueness—encouraging diverse contributions; and helping group members fully contribute. As a result, followers perceive a climate of inclusion, which promotes identification with their work group and a sense of psychological empowerment. This is proposed to lead to three outcomes: creativity, job performance, and reduced turnover.

The authors included a useful comparison of inclusive leadership to other leadership styles with a clear articulation of what makes this approach unique from transformational leadership, empowering leadership, servant leadership, authentic leadership, and leader-member exchange. In short, the distinction they make is that:

...relative to inclusive leadership, other forms of leadership place much less emphasis on an individual's perceptions of belongingness and value for uniqueness specifically in relation to the work group via behaviors that incorporate all members within the work group and promote their diverse contributions and abilities (p. 196).

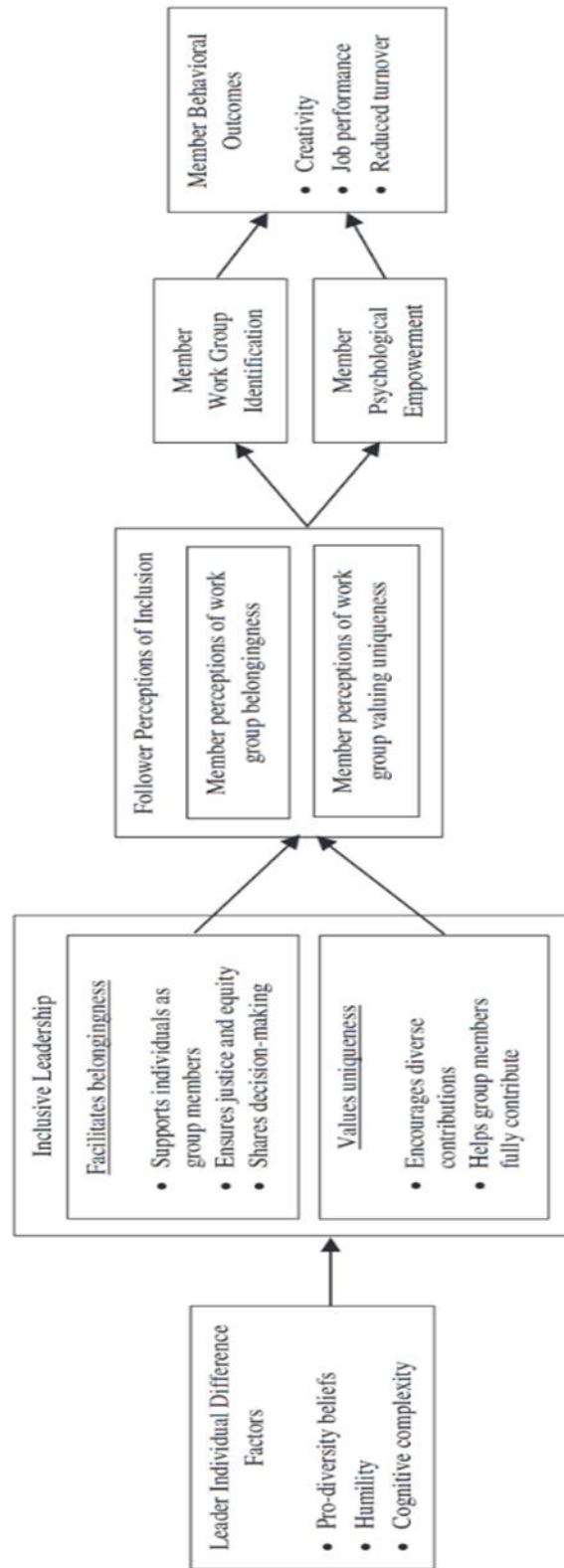
In other words, ODT is at the core of their model.

Randel et al.'s (2018) model provided a theoretical grounding of inclusive leadership by identifying the defining characteristics of inclusive leaders and stipulating the behaviors of inclusive leaders that lead to empowerment through inclusion. While psychological safety is not explicitly called out in their model, they identified the related construct of “psychological empowerment” as a necessary condition for achieving desired member behavioral outcomes. An important feature of the model is its orientation towards “ensuring the inclusion of all group members (both historically underrepresented members as well as those in the societal majority) in achieving a high level of performance” (Randel et al., 2018, p. 199). The paper highlighted the need to develop a measure of inclusive leadership to test the core relationships in the model.

Contrasting inclusive leadership with other leadership models

Several models of leadership emphasize the value of developing positive relationships with followers, such as transformational leadership, leader-member exchange, and authentic leadership. Researchers draw a clear distinction, however, between inclusive leadership and these models as lacking both essential dimensions of ODT: facilitates belongingness and values uniqueness. When contrasting transformational leadership (TF) with inclusive leadership (IL), Hollander states: “TF leadership centers in the leader, and not with active follower involvement, reciprocal influence, and rewards. All of these are central features of the IL conception” (p. 18). Similarly, Choi et al. (2017) maintain that a transformational leader influences employees through the pursuit of organizational goals, while an inclusive leader emphasizes follower needs to encourage employee well-being and innovative behavior. And Randel et al. (2018) assert that transformational leadership “...is focused on

Figure 4. Theoretical model of inclusive leadership (Randel et al., 2018)



motivating and developing members based on the organization's needs while inclusive leadership is focused on accepting members for who they are and allowing them to contribute their unique abilities and perspectives” (p. 195).

Regarding the leader-member exchange (LMX) model, Randel et al. (2018) describe it as:

...focused on facilitating the positive exchange of resources and support between leaders and members. In contrast, inclusive leadership creates feelings of belongingness and a sense that the individual's ability to contribute his or her uniqueness is valued and welcomed by the organization (p. 195).

Likewise, Hollander (2009) characterizes LMX as a transactional model given it describes the quality of relationships a leader has with individual followers. Those with better quality relationships with the leader “have higher expectations for their loyalty and performance; the others receive fewer personal demands from the leader, but fewer rewards” (Hollander, 2009, p. 142). Thus, LMX does not emphasize team cohesion nor the core dimensions of ODT found at the core of inclusive leadership.

While there may be some overlap between authentic leadership and inclusive leadership, authentic leadership focuses on leader actions or behaviors to create a positive psychological climate. Inclusive leadership, however, centers on the perceptions of followers in terms of their feelings of acceptance and ability to contribute their unique talents and perspectives (Randel et al., 2018).

Advancing the measurement of inclusive leadership

Al-Atwi and Al-Hassani (2021) advanced the measurement of inclusive leadership by developing and validating a 25-item scale in Iraq grounded in ODT (see Figure 5). They sought to empirically support Randel et al.'s (2018) conceptual model of inclusive leadership. The researchers cited previous measures of inclusive leadership,

including that of Carmeli et al. (2010), asserting they “do not have a comprehensive theoretical basis and have not clearly differentiated inclusive leadership as distinct from, for example, transformational leadership and servant leadership” (Al-Atwi & Al-Hassani, 2021, p. 1222).

The researchers also tested some potential consequences of inclusive leadership using Griffin’s (2007) three dimensions of work performance—proficiency, adaptivity, and proactivity—which are reflected in the following three hypotheses:

H2. Employee perceptions of inclusion are positively related to group-member proficiency.

H3. Employee perceptions of inclusion are positively related to group-member adaptivity.

H4. Employee perceptions of inclusion are positively related to group-member proactivity.

While this aligns with one of the three outcomes stipulated in Randel et al.’s (2018) model, job performance, their model does not explore the relationship between inclusive leadership and the other two behavioral outcomes hypothesized in Randel et al.’s (2018) model, namely creativity and reduced turnover. Additionally, Al-Atwi and Al-Hassani’s (2021) model used Chung et al.’s (2020) “inclusion perception” as a mediator, rather than testing the constructs of “member work group identification” or

“psychological empowerment” postulated in Randel et al.’s (2018) model. These deviations from Randel et al.’s model present opportunities for future research.

Exploration of alternative mediator and outcome variables

This study validated Al-Atwi and Al-Hassani’s (2021) conceptual model by testing the same relationships depicted in Figure 5:

H5. The perception of inclusion mediates the relationships between inclusive leadership and work performance behaviors (proficiency, adaptivity, and proactivity).

In addition, previous evidence supports consideration of psychological safety as an alternative mediator in the relationship between inclusive leadership dimensions and work performance outcomes (Edmondson, 1999; Nembhard & Edmondson, 2006).

Specifically, “psychological safety in combination with leadership inclusiveness promotes team engagement in quality improvement work” (Nembhard & Edmondson, 2006, p. 959). In keeping with both Shore et al. (2018) and Randel et al.’s (2018) models, the construct of psychological safety (Edmondson, 2009) will therefore be tested as an alternative mediator in the relationship between inclusive leadership and work performance dimensions:

H6. Psychological safety mediates the relationship between inclusive leadership and work performance behaviors (proficiency, adaptivity, and proactivity).

Figure 5. Inclusive leadership model described by Al-Atwi and Al-Hassani (2021)

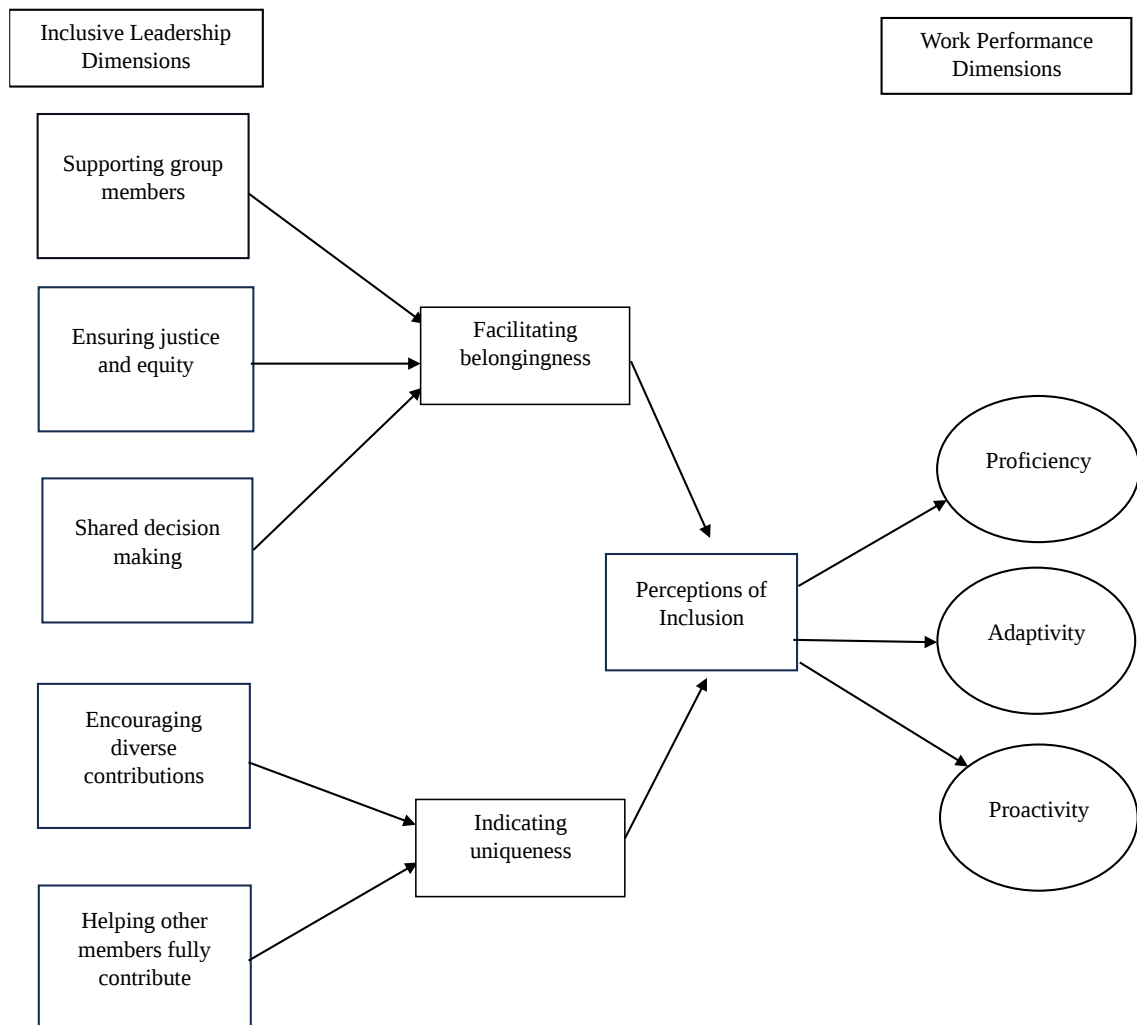
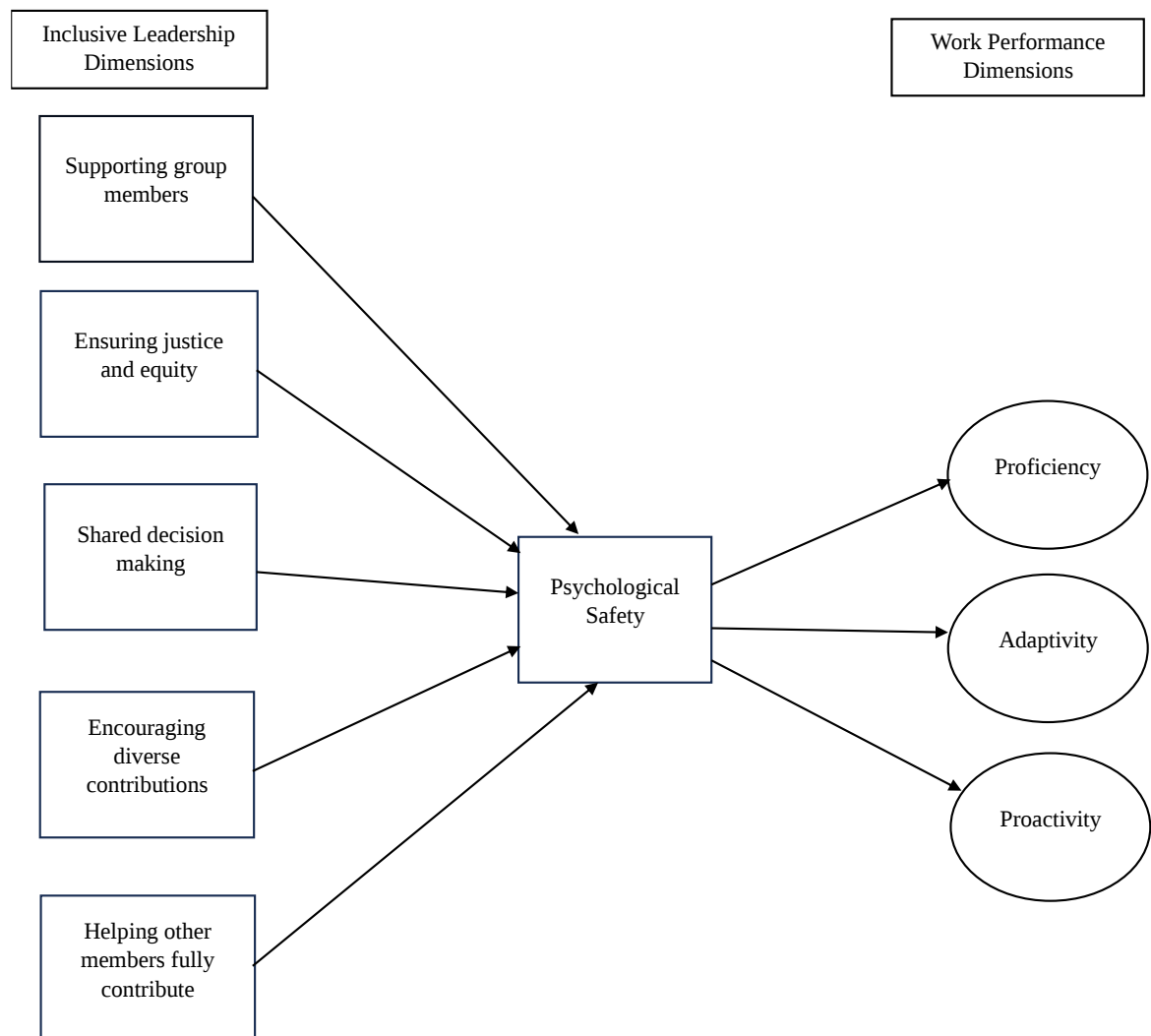


Figure 6. Proposed inclusive leadership conceptual model



Individualism and collectivism

As described in his influential Cultural Dimensions Theory, Hofstede's (1984) construct of individualism vs. collectivism examines how societies prioritize the needs and goals of individuals versus those of the collective group. In cultures characterized by individualism, the emphasis is on personal achievement, freedom, and autonomy

(Hofstede, 1984). Individuals are encouraged to pursue their own interests and goals, and there is a strong emphasis on personal responsibility. Personal success is often defined by individual accomplishments, and people tend to prioritize their own needs and those of their immediate family over the needs of the larger community. Conversely, in collectivist cultures, there is a strong emphasis on group harmony, cooperation, and interdependence (Hofstede, 1984). Individuals are expected to prioritize the needs of the group, such as their extended family, community, or workplace, over their own personal goals. Loyalty to the group and maintaining social harmony are highly valued, and individuals may be more willing to sacrifice personal desires for the greater good of the community.

Importantly, these dimensions exist on a continuum, and no culture is purely individualistic or collectivist. Instead, most cultures exhibit varying degrees of both, with some leaning more towards individualism and others towards collectivism. In his seminal study, Hofstede (1984) ranked the United States as having the highest Individualism Index Value (IDV) with a score of 91 out of 100 among the 50 countries and three regions researched (p. 215). In comparison, many Asian and Latin American nations had relatively low IDVs, for example, South Korea, Taiwan, and Guatemala scored 18, 17, and 6, respectively (Hofstede, 1984, p. 215). Moreover, these cultural norms can influence various aspects of life, including communication styles, decision-making processes, and social relationships.

How organizations function in countries with differing cultural norms is an important consideration in this study. Though not included in Hofstede's (1984) research, Iraq—the site of Al-Atwi and Al-Hassani's (2021) study—is generally

considered a collectivist society and is culturally close to Iran which scored an IDV of 41 out of 100 (p. 215).

From an organizational perspective, employees in individualistic cultures act out of self-interest and are likely to put their own needs ahead of those of the organization. According to Hofstede (1984), "...the relationship between employer and employee is primarily conceived as a business transaction" (p. 237). In contrast, employees in collectivist cultures are automatically considered to be part of the in-group and will act in the group's best interest, which may outweigh their own individual needs. As Hofstede (1984) describes: "The relationship between employer and employee is seen in moral terms. It resembles a family relationship, with mutual obligations of protection in exchange for loyalty" (p. 237).

Viewed through this lens, the implications for leadership are profound. Regardless of the degree of individualism or collectivism in a country, leaders must balance their organization's needs with those of individual employees. In collectivist societies, management centers on groups, employees are viewed in family and societal context, and direct appraisal of performance is not the norm. In ODT terms this may benefit fostering a sense of belonging, but it does not promote valuing uniqueness, which could result in sub-optimal work performance:

The relationship between employer and employee is seen in moral terms. It resembles a family relationship, with mutual obligations of protection in exchange for loyalty. Poor performance of an employee in this relationship is no reason for dismissal: One does not dismiss one's child. Performance and skills, however, do determine what tasks an employee is assigned` (Hofstede, 1984, p. 237).

In the individualistic society, the relationship between employer and employee is more like a business transaction. If an employee performs poorly or receives a better

offer elsewhere, both reasons are regarded as legitimate motives for terminating the employment relationship. Against the backdrop of this societal norm, leaders in individualistic cultures are more likely to value uniqueness of individual employees over fostering a sense of belonging in their decisions around hiring and promotion, providing incentives, and offering direct feedback to increase productivity (Hofstede, 1984). Thus, leaders across all cultures could benefit by embracing both dimensions of ODT more fully, a notion which runs counter to the assertion by some researchers (Al-Atwi & Al-Hassani, 2021; Choi et al., 2017; Fang et al., 2019). This study explores whether ODT as a core construct of inclusive leadership is valid in the individualistic culture of the U.S.

In summary, this study validated whether the same five hypotheses tested in Al-Atwi and Al-Hassani's study were supported with the study sample, along with a sixth hypothesis regarding psychological safety as an alternate mediator:

H1. Inclusive leadership is positively related to employees' perceptions of inclusion.

H2. Employee perceptions of inclusion are positively related to group-member proficiency.

H3. Employee perceptions of inclusion are positively related to group-member adaptivity.

H4. Employee perceptions of inclusion are positively related to group-member proactivity.

H5. The perception of inclusion mediates the relationships between inclusive leadership and work performance behaviors (proficiency, adaptivity, and proactivity).

H6. Psychological safety mediates the relationship between inclusive leadership and work performance behaviors (proficiency, adaptivity, and proactivity).

Chapter 3: Method

Research design

This study empirically tested Al-Atwi and Al-Hassani's (2021) conceptual model and evaluated the psychometric properties of the New Inclusive Leadership Scale to determine whether data from the sample provided support for construct validity of the measure of inclusive leadership. In addition, internal consistency reliability was assessed by comparing Cronbach's alpha of my sample to the alpha of .95 found by Al-Atwi and Al-Hassani (2021).

The same five hypotheses tested in Al-Atwi and Al-Hassani's study were tested to determine whether they are supported with this study sample, along with a sixth hypothesis regarding psychological safety as an alternate mediator. The research study used a correlational design to determine whether and how strongly variables were related without assuming causal relationships.

H1. Inclusive leadership is positively related to employees' perceptions of inclusion.

H2. Employee perceptions of inclusion are positively related to group-member proficiency.

H3. Employee perceptions of inclusion are positively related to group-member adaptivity.

H4. Employee perceptions of inclusion are positively related to group-member proactivity.

H5. The perception of inclusion mediates the relationships between inclusive leadership and work performance behaviors (proficiency, adaptivity, and proactivity).

H6. Psychological safety mediates the relationship between inclusive leadership and work performance behaviors (proficiency, adaptivity, and proactivity).

There are a few limitations of this study which may have affected results. First, this study was tested with a sample from a single organization where employees are mostly female, which could preclude generalizability. Also, the NILS questions in Al-Atwi and Al-Hassani's (2021) study were back-translated into English, but there could be organizational or regional language differences which led to misinterpretation and threatened the internal validity of results. Finally, the measure used for the outcome variables (proficiency, adaptivity, and proactivity) may not align well with the nature of the work at the organization in my study, posing another potential threat to internal validity.

Participants

Data were collected from CAP Tulsa, a non-profit, anti-poverty organization based in Tulsa, Oklahoma focused on delivering early childhood education to nearly 1,600 low-income children and supportive services to their families. At the time of data collection, CAP Tulsa had 630 full-time employees across 12 locations: 10 schools, a warehouse, and a headquarters. The majority of employees were female (93%), and the organization was racially and ethnically diverse, with 65% of employees self-reporting that they were a person of color as of October 28, 2024.

There were 315 participants, but 107 declined to answer all questions. Thus, the final sample of participants included 206 full-time employees. Descriptive statistics and details on demographic information from the sample are presented in the results section.

Measures

New Inclusive Leadership Scale. Participants completed Al-Atwi and Al-Hassani's (2021) new 25-item measure of inclusive leadership which was developed in Arabic and back-translated into English (see Appendix A). It uses a 5-point Likert scale with response options ranging from 1 = strongly disagree and 5 = strongly agree. The items on the scale were designed to measure the five constructs proposed in Randel et al.'s (2018) model: supporting team members (SG = 6 items), ensuring justice and equity (EJ = 5 items), shared decision-making (SD = 5 items), encouraging diverse contributions (ED = 6 items), and helping group members fully contribute (HG = 3 items). Also, these constructs map to the two dimensions of Brewer's (1991) Optimal Distinctiveness Theory (ODT): facilitating belongingness (SG, EJ, and SD) or indicating uniqueness (ED and HG).

When developed and administered in Iraq, Al-Atwi and Al-Hassani (2021) reported Cronbach's alpha as the estimate of internal consistency reliability among scores in their sample ($\alpha = .95$). They also tested the convergent and discriminant validity of their scale for the five sub-constructs (SG, EJ, SD, ED, and HG) and for the main constructs of facilitating belongingness and indicating uniqueness. Results for composite reliability (CR) and average variance extracted (AVE) exceeded the thresholds of 0.70 and 0.50, respectively, with values ranging from 0.78 - .95 for CR, and from 0.60 - .83 for AVE.

Inclusion perception. Chung et al.'s (2020) 10-item measure of Work Group Inclusion (see Appendix B) uses a 5-point Likert scale with response options ranging from 1 ("strongly disagree") to 5 (strongly agree"). Grounded in ODT, the first five items map to belongingness, while the second five map to uniqueness. Internal consistency reliability as estimated by Cronbach's alpha was .94 and .91 for each of the main constructs of belongingness and uniqueness (Chung et al., 2020; n=397). In Al-Atwi and Al-Hassani's (2021) study, the measure is referred to as "Perceptions of inclusion" with $\alpha = .87$ (n = 363); Cronbach's alpha scores were not reported for the two main constructs.

Work performance dimensions. The outcome variables of proficiency, adaptivity, and proactivity were measured using the 9-item Team Member portion of Griffin's (2007) 27-item Role Performance Model (see Appendix C). The model comprises nine subdimensions that classify work performance into three levels, indicating how a role contributes to effectiveness (individual, team, and organization) and three forms of behavior (proficiency, adaptivity, and proactivity) for each level. There are three items for each of the nine subdimensions on which respondents self-report how often they had carried out the behavior during the past month, using a Likert response scale ranging from 1 ("very little") to 5 ("a great deal"). Alpha reliability scores were greater than .70 for all performance subdimensions apart from team member proficiency ($\alpha = .67$) in Griffin's (2007) study (n = 1,228). They were higher in the Al-Atwi and Al-Hassani (2001) study, however, with $\alpha = .86$, .81, and .90, respectively (n = 363 employees; n = 63 supervisors).

Inclusive Leadership Measure. To demonstrate convergent validity with a conceptually similar measure, participants completed Carmeli et al.'s (2010) 9-item Inclusive Leadership Measure (see Appendix D), which measures leadership behavior across three dimensions: openness, availability, and accessibility. Items are scored on a 5-point Likert scale ranging from 1 ("not at all") to 5 ("to a large extent"), measuring the extent to which employees believe their leader displays openness and is available and accessible to them at work. Cronbach's alpha internal consistency reliability estimate was .94 (Carmeli et al., 2010; n = 150).

Psychological safety. To test an alternate mediator between inclusive leadership and work performance, data was collected using Edmondson's (1999) Team Psychological Safety scale (see Appendix E). The measure contains seven items rated on a 7-point Likert scale (from "very inaccurate" to "very accurate"). The maximum score is 49, and scores above 40 indicate high levels of an individual's psychological safety on their team. Edmondson (1999) reported the estimate of score reliability in the original sample (n = 427) was .82 using Cronbach's alpha.

In addition to the key study variables described above, demographic information on age, gender, tenure, and role (supervisor vs. individual contributor), was also collected. All survey questions were administered electronically using Qualtrics via employee email sent from the Director of Organizational Culture who reports to the Chief Talent Officer.

Statistics or data analytic protocol

First, exploratory factor analysis was conducted to confirm the items that make up each of the five distinct sub-constructs of Al-Atwi and Al-Hassani's New Inclusive

Leadership Scale, as well as those of the main constructs of ODT: facilitating belongingness and indicating uniqueness.

Next, this study tested the convergent and discriminant validity for each of the five sub-constructs of NILS and the two main constructs of ODT. Estimates of internal consistency reliability for scores from each of the five measures in this dissertation's sample were calculated and compared to the results to the Cronbach's alpha values found in the Al-Atwi and Al-Hassani (2021) study and/or the study from which the scale originated.

Then, means, standard deviations, and correlation coefficients were run for all variables in the study, and compared to the results in the Al-Atwi and Al-Hassani (2021) study, where applicable. Of interest was how correlations between Inclusion Perception and the three outcome variables (proficiency, adaptivity, and proactivity) compared with those found in the Al-Atwi and Al-Hassani (2021) study of 0.46, 0.53, and 0.36, respectively.

In addition, the correlation found between Al-Atwi and Al-Hassani's New Inclusive Leadership Scale and the widely used Inclusive Leadership Measure developed by Carmeli et al. (2010) determined the degree of convergent validity between the two measures. Finally, mediation was tested to understand the indirect effects of inclusive leadership through both workgroup inclusion and psychological safety on each of the three outcome variables (proficiency, adaptivity, and proactivity).

Chapter 4: Results

Descriptive statistics of sample

The survey was administered to 630 full-time employees. There were 315 participants in the data collection; however, approximately 107 declined to answer all the questions and were removed from the sample. Therefore, the final dataset was comprised of responses from 206 full-time employees (10 men, 179 women, 3 non-binary, 14 “prefer not to say”). The age of participants was normally distributed across the sample with 74% falling between ages 30 and 59, while one-half (51%) have tenure greater than 7 years. Three-quarters of respondents (76%) were in a non-supervisory role. See Table 1 for additional demographic information.

Table 1. Descriptive statistics of demographic information (n = 206)

Variable	<i>n</i>	%
Location		
School	140	68
Headquarters	66	32
Tenure		
< 2 years	48	23
2 – 5 years	32	15
5 – 7 years	22	11
> 7 years	106	51
Age group		
< 30	28	14
30 – 39	54	26
40 – 49	52	25
50 – 59	48	23
> 60	25	12
Hispanic or Latino		
No	151	74
Yes	53	26

Race		
American Indian/Alaskan Native	12	6
Asian	3	1
Black or African American	30	15
Two or more races	12	6
White	117	57
Prefer not to say	31	15
Gender		
Male	10	5
Female	179	87
Non-binary	3	1
Prefer not to say	14	7
Supervisory role		
No	157	76
Yes	50	24

Note: % represents valid percentage. Missing *ns* for demographic information range from 107 – 111.

Exploratory Factor Analysis

Individual responses from the 25 items of the New Inclusive Leadership Scale (NILS) were subjected to a principal axis factor (PAF) analysis followed by oblique rotation. Considerations that precede the PAF include factorability and establishing criteria for determining the number of factors to retain. One assumption in conducting a principal factor analysis is that meaningful and significant correlations exist among the items of interest. Bartlett's Test of Sphericity provides a Chi-square test of the null hypothesis that the correlation matrix is an identity matrix. From the set of items, Bartlett's Test of Sphericity indicates that the PAF analysis may be appropriate given the level of relationship among the NILS items [$\chi^2_{(300)} = 8640.879$, $p < .001$]. Additionally, the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy was 0.971 (see Appendix H). If the partial correlations are small, the KMO approaches 1.0. A KMO value of 0.60 or higher is generally considered an acceptable indicator for factorability,

thus supporting the factor analysis of these items. A KMO value of 0.971 is very high as one expects when factoring items with high average inter-item correlations.

Several criteria were used for determining the number of factors to retain, namely, Kaiser's rule of retaining factors with eigenvalues greater than 1.0, examination of the Cattell scree plot test, Parallel Analysis methodology for selecting the correct number of factors to retain, examination of factor correlations, and a theoretical analysis of the individual items. Al-Atwi and Al-Hassani (2021) reported five distinct factors for the 25 NILS items. Inspection of the eigenvalues, however, indicate only two factors with eigenvalues greater than 1.0 were extracted by performing the PAF analysis on the correlations of the 25 items. The eigenvalues of variance accounted for by the initial factors are summarized in Appendix H. The first factor extracted accounted for 76.98% of the variance, whereas the second factor accounted for only 2.08% of the variance. This evidence supports a decision to retain a single factor, contrary to the factor structure reported by Al-Atwi and Al-Hassani (2021). Furthermore, visual inspection of the scree plot presented in Appendix H, as well as results from the parallel analysis, also suggested that one factor best represents the structure of NILS in the current study sample.

Because the analytic protocol reported in Al-Atwi and Al-Hassani (2021) is not clear, a Principal Component Analysis (PCA) was performed on the 25 NILS items. The result was 24 items falling into one factor with an eigenvalue of 19, accounting for 78% of the variance. The 25th item, which was the only reverse-coded item in the sample, fell into its own factor accounting for 4% of the variance (see Appendix I).

The results of these two analyses are likely due to the small sample size relative to Al-Atwi and Al-Hassani's study, and the homogeneity of the sample. Based on these analyses, I did not proceed with testing the convergent and discriminant validity for each of the five sub-constructs of NILS (SG, EJ, SD, ED, and HG) as reported in Al-Atwi and Al-Hassani (2021), nor for the main constructs of facilitating belongingness and indicating uniqueness, as originally planned. Instead, I treated all 25 items as one factor for the remainder of the analysis.

Table 2. Descriptive statistics of measures

	n	Min	Max	Mean	SD	Skewness	SE	Kurtosis	SE
NILS	220	265	365	340.18	26.83	-1.307	.164	0.625	.327
WGI	220	10	50	41.85	9.47	-1.450	.164	1.649	.327
ILM	217	9	45	36.40	10.80	-1.172	.165	0.119	.339
TPS	212	13	41	32.78	6.50	-0.663	.167	-0.045	.333
WPI	207	14	45	38.88	5.73	-1.005	.169	1.152	.337
WPI Sub-Scales:									
PROF	207	7	15	13.44	1.90	-1.227	.169	1.023	.337
ADAP	209	4	15	13.02	2.11	-1.068	.168	1.163	.335
PROA	210	3	15	12.46	2.54	-0.900	.168	0.439	.334

Note: NILS = New Inclusive Leadership Scale; WGI = Work Group Inclusion; ILM = Inclusive Leadership Measure; TPS = Total Psychological Safety; WPI = Work Performance Inventory. WPI Sub-scales: PROF = Proficiency; ADAP = Adaptivity; PROA = Proactivity.

Descriptive statistics of measures

Descriptive statistics for the five measures are shown in Table 2. I ran a histogram for each of the five measures, all of which showed some degree of negative skewness with a clustering of scores at the high end of the range. In each case, however,

the distributions were relatively normal and there were no extreme outliers (see Appendix F).

I also examined the bivariate relationship between the four scales and the outcome variable: Work Performance Inventory (WPI). All measures showed a linear relationship as anticipated and were similar in how tightly they were clustered around the line of best fit (see Appendix G).

Table 3. Correlation matrix of measures

Construct	n	1	2	3	4	5
1 NILS	220	(.985)				
2 WGI	209	.768**	(.968)			
3 ILM	207	.892**	.687**	(.985)		
4 TPS	202	.677**	.714**	.694**	(.835)	
5 WPI	197	.346**	.431**	.393**	.406**	(.918)

Note: NILS = New Inclusive Leadership Scale; WGI = Work Group Inclusion; ILM = Inclusive Leadership Measure; TPS = Team Psychological Safety; WPI = Work Performance Inventory. Cronbach's alpha scores are indicated in parentheses. ** $p < .01$

Correlation and reliability analysis

I conducted a Pearson bivariate correlation analysis to measure the relationship between each of the five scales, all of which had a statistically significant relationship with each other (see Table 3). Moreover, the first four scales showed strong correlations with each other (> 0.50), while the outcome variable, Work Performance Inventory, showed a moderate correlation of at least 0.30 (Cohen, 1988). Additionally, there was strong internal consistency for all five measures with Cronbach's alpha scores greater than 0.80 (Hinkin, 1998). Of note is the strong correlation between NILS and WGI (.768) which supports Hypothesis 1:

H1. Inclusive leadership is positively related to employees' perceptions of inclusion.

Work Performance Inventory (WPI) sub-category analysis

I created three new variables of the WPI to test the following hypotheses:

H2. Employee perceptions of inclusion are positively related to group-member proficiency.

H3. Employee perceptions of inclusion are positively related to group-member adaptivity.

H4. Employee perceptions of inclusion are positively related to group-member proactivity.

Descriptive statistics for these three variables are displayed in Table 2.

Additionally, I ran a histogram for each of the three measures, all of which showed some degree of negative skewness with a clustering of scores at the high end of the range. In each case, however, the distributions were relatively normal and there were no extreme outliers (see Appendix F).

Correlation and reliability analysis of WPI sub-scales

I conducted a Pearson bivariate correlation analysis to measure the relationship between the three WPI sub-scales and the two mediating variables: WGI and TPS. All measures had a statistically significant relationship with each other. As shown in Table 4, there was strong internal consistency for all three sub-measures with Cronbach's alpha scores greater than 0.80 (Hinkin, 1998). Moreover, the three sub-scales showed strong correlations with each other (> 0.50).

Table 4. Correlation matrix of WPI sub-scales

Construct	n	1	2	3	4	5
1 PROF	207	(.834)				
2 ADAP	209	.769**	(.826)			
3 PROA	209	.537**	.638**	(.933)		
4 WGI	202	.435**	.448**	.259**	(.918)	
5 TPS	197	.386**	.418**	.277**	.714**	(.835)

Note: PROF = Proficiency; ADAP = Adaptivity; PROA = Proactivity; WGI = Work Group Inclusion; TPS = Team Psychological Safety. Cronbach's alpha scores are indicated in parentheses. ** $p < .01$

For the mediators, WGI had a strong correlation with Proficiency and Adaptivity, but a weak correlation with Proactivity (<0.30). It also had a strong correlation with TPS. Similarly, TPS showed a weak correlation (< 0.30) with Proactivity (Cohen, 1988). Additionally, the correlations between WGI and the three outcome variables (proficiency, adaptivity, and proactivity) were slightly weaker than those found in the target study of 0.46, 0.53, and 0.36, respectively. Nevertheless, this analysis demonstrates that the following three hypotheses were supported:

H2. Employee perceptions of inclusion are positively related to group-member proficiency.

H3. Employee perceptions of inclusion are positively related to group-member adaptivity.

H4. Employee perceptions of inclusion are positively related to group-member proactivity.

Mediation analysis

Testing Work Group Inclusion as a mediator

I tested mediation by computing the indirect effects using PROCESS (see Table 5). When reporting the indirect effects of mediation analysis in which the dependent variable is continuous, it is acceptable to report either standardized or unstandardized coefficients (Abrar, Zhang & Jiang, 2024). Given the goal of this study is to understand the process that underlies the relationship between inclusive leadership and work performance behaviors via a third hypothetical variable, perception of inclusion, unstandardized coefficients are more suitable for meaningful interpretation (Abrar, Zhang & Jiang). I chose to report indirect effects both as unstandardized as well as standardized to align with the way Al-Atwi and Al-Hassani (2021) reported their mediation analysis results. Though they did not explicitly state whether the results were standardized or unstandardized, the indirect effect sizes reported (0.35, 0.41 and 0.34; $p < .001$) would suggest they are standardized when compared to those in Table 5.

The indirect effects of inclusive leadership through work group inclusion (WGI) on proficiency ($b = .0266$; 95% CI = .0140, .0431) and adaptivity ($b = .0259$; 95% CI = .0117, .0401) were significant. For proficiency, however, the effect of inclusive leadership through WGI was significant only when reported as unstandardized ($b = .0167$; 95% CI = .0002, .0363). Given this is the appropriate reporting method, I concluded that H5 was fully supported:

H5. The perception of inclusion mediates the relationships between inclusive leadership and work performance behaviors (proficiency, adaptivity, and proactivity).

This result matches that of the Al-Atwi and Al-Hassani (2021) study, where WGI was found to have a significant mediation effect on all three work performance behaviors.

Table 5. Mediation analysis

Paths		Indirect Effects	SE	95% LLCI	95% ULCI
Inclusive leadership → work group inclusion → proficiency	<i>b</i>	.0266***	.0075	.0140	.0431
	<i>b¹</i>	.3763***	.0948	.2069	.5835
Inclusive leadership → work group inclusion → adaptivity	<i>b</i>	.0259***	.0071	.0117	.0401
	<i>b¹</i>	.3300***	.0849	.1532	.4895
Inclusive leadership → work group inclusion → proactivity	<i>b</i>	.0167***	.0093	.0002	.0363
	<i>b¹</i>	.1760	.0988	-.0038	.3823
Inclusive leadership → team psychological safety → proficiency	<i>b</i>	.0167***	.0049	.0075	.0267
	<i>b¹</i>	.2358***	.0629	.1106	.3574
Inclusive leadership → team psychological safety → adaptivity	<i>b</i>	.0175***	.0053	.0069	.0278
	<i>b¹</i>	.2226***	.0635	.0930	.3438
Inclusive leadership → team psychological safety → proactivity	<i>b</i>	.0152***	.0064	.0023	.0275
	<i>b¹</i>	.1600***	.0688	.0241	.2937

Note: *b* = unstandardized; *b¹* = completely standardized. LLCI = Lower level of the 95% confidence interval; ULCI = Upper level of the 95% confidence interval. ****p* < .001

Testing Team Psychological Safety as a mediator

I then tested an alternate mediator, Team Psychological Safety (TPS), using the same method. As shown in Table 5, the indirect effects of inclusive leadership through TPS for proficiency (*b* = .0167; 95% CI = .0075, .0267), adaptivity (*b* = .0175; 95% CI = .0069, .0278), and proactivity (*b* = .0152; 95% CI = .0023, .0275) were all significant. Thus, H6 was supported:

H6. Psychological safety mediates the relationship between inclusive leadership and work performance behaviors (proficiency, adaptivity, and proactivity).

Chapter 5: Discussion

This study validates a new measure of inclusive leadership for use in the United States to further the field of leadership research based on Randel et al.'s (2018) conceptualization. Using data from a sample of 206 participants, my findings provide strong support for the validity and reliability of Al-Atwi and Al-Hassani's 25-item New Inclusive Leadership Scale (NILS) in English.

Theoretical implications

There are several implications of this research. First, it supports the theory of psychological safety advanced by Edmondson (1999), asserting that the duality of facilitating belongingness and promoting uniqueness are core components of inclusive leadership behaviors. This core construct underlies Randel et al.'s (2018) model, as well as models advanced by other notable researchers in the field of inclusive leadership, including Shore et al. (2011, 2018) and Nemhard and Edmondson (2006).

Second, my findings demonstrate that both Chung et al.'s (2020) Work Group Inclusion Scale and Edmondson's (1999) Team Psychological Safety mediate the relationship between inclusive leadership and work performance outcomes. In developing their measure of Work Group Inclusion, the researchers aimed to test the validity of Shore et al.'s (2011) model with the goal of "advancing knowledge of the antecedents and outcomes of inclusion" (Chung et al., 2020, p. 76). Further, Chung et al.'s (2020) measure validates the theory that belongingness and uniqueness are related but distinct components of work group inclusion. In contrast, Edmonson's (1999) Team Psychological Safety measures "the construct of team psychological safety...and models the effects of team psychological safety and team efficacy together on learning

and performance in organizational work teams” (p. 350). Thus, both scales present two separate pathways for further testing of NILS.

Third, the factor structure of NILS was notably different in the current study as compared to the sample of Al-Atwi and Al-Hassani (2021). They observed five distinct factors of inclusive leadership, whereas the U.S. sample observed in this study found a single-factor structure using the same 25 items for inclusive leadership. This may have significant implications for further theoretical construct development of inclusive leadership across cultural backgrounds when using NILS.

Finally, this study challenges the notion that inclusive leadership is a more suitable leadership approach in a collectivist society than an individualistic one as claimed by Al-Atwi and Al-Hassani, as well as researchers in China (Fang et al., 2019) and Vietnam (Choi et al., 2017). This finding has important implications for the literature, given it demonstrates that inclusive leadership has global application. Further testing of the measure is recommended in the U.S. and other individualistic societies, such as Canada, Western Europe, Australia, and New Zealand. It is also important to test NILS in other organizations, as a mission-driven, non-profit organization may draw more collectivist-oriented individuals and thus may not be truly representative of an individualistic culture.

Practical implications

My findings contribute to the field by validating a scale which has more granularity than Carmeli et al.’s (2010) widely used 9-item Inclusive Leadership Measure. The 25 items of Al-Atwi and Al-Hassani’s (2021) New Inclusive Leadership Scale are divided into five underlying constructs advanced by Randel et al. (2018):

supporting team members, ensuring justice and equity, shared decision-making, encouraging diverse contributions, and helping group members fully contribute. While further testing of NILS is needed across organizational contexts to support five distinct constructs, nevertheless, these discrete components provide a rich opportunity for developing comprehensive inclusive leadership training.

Provided that further research supports the five-factor structure of NILS, having the ability to measure these five constructs of inclusive leadership allows leaders to reflect on their own skills and behaviors with greater specificity, enabling them to answer the question: how do I know whether my leadership style is inclusive and exactly what improvements are needed? Chrobot-Mason and Roberson's (2022) Inclusive Leadership Reflection Instrument endeavors to help leaders assess their own behaviors and challenge themselves to demonstrate inclusive behaviors daily with their team across various types of interactions (p. 346 - 349). Completing checklists and self-assessments may be helpful to illuminate areas for improvement; however, obtaining ratings on a leader's effectiveness from direct reports using a validated instrument like NILS provides greater accuracy and insight.

Moreover, assisting leaders to improve their inclusive leadership skills benefits the organization as a whole. This study demonstrated that NILS had a positive relationship with work performance outcomes. Other studies of inclusive leadership have indicated a positive correlation with employee creativity, work engagement, organizational commitment, and employee well-being (Carmeli et al., 2010; Choi et al., 2015; Choi et al., 2017). Thus, improving inclusive leadership skills within organizations is essential for achieving desired organizational outcomes.

The decision to test the alternate mediator of Edmondson's (1999) Team Psychological Safety in this study enabled the exploration of this key construct as it relates to work performance. Embedding psychological safety in organizations has become a popular topic that is widely discussed across fields in both the private and public sectors. In fact, a search of the phrase "psychological safety in the workplace" on Bing yielded 270 million results (as of January 19, 2025). Therefore, training leaders on how to create high-performing teams by establishing psychological safety is an acknowledged aspect of inclusive leadership in the organizational development literature. Its popularity and accessibility make it preferable to Chung et al.'s (2020) measure of Work Group Inclusion Scale selected by Al-Atwi and Al-Hassani (2021) as the mediator in their study.

CAP Tulsa intends to use the results of this study to develop a leadership development model and training program based on Al-Atwi and Al-Hassani's (2021) New Inclusive Leadership Scale. The five components of their measure, along with creating psychological safety, will form the foundation of the training program which will be implemented across the leadership system, beginning with the agency's 16-member Leadership Team. Their feedback will then be incorporated to refine the training program before it is offered to other levels of management. NELS will be incorporated into the program, though the frequency of its use is yet to be determined. Assessing a leadership development program based on NELS opens another avenue for further research.

Limitations and future research

Notwithstanding these favorable results, there are a number of limitations of this study to highlight for further research. First, outcomes tested in this study centered on the three components of Griffin's (2007) Role Performance Model: proficiency, adaptivity, and proactivity. There is an opportunity to test additional outcomes from the literature beyond those stipulated in the Al-Atwi and Al-Hassani (2021) study, including employee retention, job satisfaction, and creativity (Shore et al., 2011; Randel et al., 2018; Choi et al., 2017); employee well-being, including positive emotional states and quality of relationships with others (Choi et al., 2017); and learning from errors and failures (Hirak et al., 2018).

Second, an important limitation of this study is that the sample was collected in a single non-profit organization with a majority female population (93% per the organization's Affirmative Action Plan filed with the EEOC in October 2024; 87% of the sample). Replication of the findings in a more heterogeneous population, and in other sectors, would provide further confidence in the generalizability of the measure.

Third, while the racial and ethnic diversity in the sample reflects the employee population of CAP Tulsa, it differs from that of the U.S. population. For instance, whites made up 77% of the U.S. labor force in 2022, vs. only 57% in the sample, while Blacks constituted 13% vs. 15%, respectively (U.S. Bureau of Labor Statistics, 2022). Similarly, people of Hispanic or Latino ethnicity made up 19% of the total U.S. labor force vs. 26% in the sample. These differences could affect the generalizability of the study results to the U.S. population as whole.

Fourth, the results of Exploratory Factor Analysis did not produce the expected results, nor did Principal Component Analysis, with both approaches yielding only one factor. Further research is needed to administer the survey to a larger sample to determine whether NILS is a five-factor or one-factor model. Depending on the outcome, testing the convergent and discriminant validity for the five sub-constructs of NILS (SG, EJ, SD, ED, and HG), and for the main constructs of facilitating belongingness and indicating uniqueness, is needed. Given the five factors are a core feature of both Al-Atwi and Al-Hassani's measure and Randel et al.'s (2018) theoretical model, it is imperative to settle this question.

Finally, to fully test Randel et al.'s (2018) conceptual model, the construct of psychological empowerment as a mediator should be explored. In their paper the researchers reference several studies using Spreitzer's (1995) 12-item measure in which psychological empowerment in a work context embodies four dimensions: meaning, competence, self-determination, and impact. They propose the following: "Member perceptions of inclusion will be positively related to behavioral outcomes (e.g., creativity, job performance, and reduced turnover) indirectly through work psychological empowerment" (p. 198). Thus, it may be useful to investigate how this measure relates to Edmondson's (1999) measure of psychological safety.

Conclusion

As organizations grapple with managing an increasingly diverse workforce, the model of inclusive leadership offers a promising approach. Helping leaders hone their ability to balance employees' desire to feel a sense of belonging with being valued for their uniqueness is necessary to help organizations realize their strategic goals. This

study validates a new measure of inclusive leadership which encompasses a more comprehensive set of behaviors than what previously existed in the literature, paving the way for expanded leadership development. And by validating the measure with a U.S. sample, it also demonstrates that inclusive leadership is applicable in a cross-cultural context.

References

- Abrar, M., Zhang, H., & Jiang, Y. (2024). Suggested guidelines in reporting results from mediation analysis, standardized or unstandardized? *PLOS ONE*, 19(9). <https://doi.org/10.1371/journal.pone.0310429>
- Al-Atwi, A. & Al-Hassani. K. (2021). Inclusive leadership: Scale validation and potential consequences. [Inclusive leadership] *Leadership & Organization Development Journal*, 42(8), 1222-1240. <https://doi.org/10.1108/LODJ-08-2020-0327>
- Booyesen, L. (2014). The development of inclusive leadership practice and processes. In B. M. Ferdman & B. R. Deane (Eds.), *Diversity at work: The practice of inclusion* (pp. 296–329). Jossey-Bass/Wiley. <https://doi.org/10.1002/9781118764282.ch10>
- Brewer, M. (1991). The social self: On being the same and different at the same time. *Personality & Social Psychology Bulletin*, 17(5), 475-482. <https://doi.org/10.1177/0146167291175001>
- Byrd, M.Y., & Scott, C.L. (Eds.). (2018). *Diversity in the Workforce: Current Issues and Emerging Trends* (2nd ed.). Routledge. <https://doi.org/10.4324/9781315188980>
- Carmeli, A., Reiter-Palmon, R., & Ziv, E. (2010). Inclusive leadership and employee involvement in creative tasks in the workplace: The mediating role of psychological safety. *Creativity Research Journal*, 22(3), 250-260. <https://psycnet.apa.org/doi/10.1080/10400419.2010.504654>
- Choi, S., Tran, T., & Park, B. (2015). Inclusive leadership and work engagement: Mediating roles of affective organizational commitment and creativity. *Social Behavior and Personality*, 43(6), 931-943. <https://psycnet.apa.org/doi/10.2224/sbp.2015.43.6.931>
- Choi, S., Tran, T., & Kang, S. (2017). Inclusive leadership and employee well-being: The mediating role of person-job fit. *Journal of Happiness Studies*, 18(6):1877-1901. <https://doi.org/10.1007/s10902-016-9801-6>
- Chrobot-Mason, D., & Aramovich, N. (2013). The psychological benefits of creating an affirming climate for workplace diversity. *Group & Organization Management*, 38(6), 659-689. <https://doi-org.ezproxy.lib.ou.edu/10.1177/1059601113509835>
- Chrobot-Mason, D., & Roberson, Q. (2022). Inclusive leadership. In P. G. Northouse (Ed.). *Leadership: Theory and Practice* (9th ed., pp. 322 – 351). Los Angeles, California: Sage Publications.

- Cohen, J. (1988). Set correlation and contingency tables. *Applied Psychological Measurement*, 12(4), 425-434. <https://doi.org/10.1177/014662168801200410>
- Edmondson, A. (2004). Psychological safety, trust, and learning in organizations: A group-level lens. In R. M. Kramer & K. S. Cook (Eds.), *Trust and Distrust in Organizations: Dilemmas and Approaches* (pp. 239–272). New York: Russell Sage Foundation.
- Edmondson, A. (1999). Psychological safety and learning behavior in work teams. *Administrative Science Quarterly*, 44(2), 350–383. <https://doi.org/10.2307/2666999>
- Fang, Y., Chen, J., Wang, M., & Chen, C. (2019). The impact of inclusive leadership on employees' innovative behaviors: The mediation of psychological capital. *Frontiers in Psychology*, 10, 1803. <https://doi.org/10.3389/fpsyg.2019.01803>
- Griffin, M., Neal, A., & Parker, S. (2007). A New Model of Work Role Performance: Positive Behavior in Uncertain and Interdependent Contexts. *The Academy of Management Journal*, 50(2), 327–347. <https://psycnet.apa.org/doi/10.5465/AMJ.2007.24634438>
- Hinkin, T. (1998). A brief tutorial on the development of measures for use in survey questionnaires. *Organizational Research Methods*, 1(1), 104-121. <https://doi.org/10.1177/109442819800100106>
- Hirak, R., Peng, A., Carmeli, A., & Schaubroeck, J. (2012). Linking leader inclusiveness to work unit performance: The importance of psychological safety and learning from failures. *The Leadership Quarterly*, 23(1), 107-117. <https://doi.org/10.1016/j.leaqua.2011.11.009>
- Hofstede, G. (1984). *Culture's consequences: International differences in work-related values* (Vol. 5). Sage Publications.
- Hollander, E. (2009). *Inclusive leadership: The essential leader-follower relationship*. New York: Routledge. ISBN: 978-0-8058-6439-7
- Nembhard, I., & Edmondson, A. (2006). Making it safe: The effects of leader inclusiveness and professional status on psychological safety and improvement efforts in health care teams. *Journal of Organizational Behavior*, 27(7), 941-966. <https://psycnet.apa.org/doi/10.1002/job.413>
- Nishii, L. (2013). The benefits of climate for inclusion for gender-diverse groups. *Academy of Management Journal*, 56(6), 1754-1774. <https://doi.org/10.5465/amj.2009.0823>
- Parker, K., & Igielnik, R. (2020, May 14). *On the cusp of adulthood and facing an uncertain future: What we know about Gen Z so far*. Pew Research Center; Pew

Research Center. <https://www.pewresearch.org/social-trends/2020/05/14/on-the-cusp-of-adulthood-and-facing-an-uncertain-future-what-we-know-about-gen-z-so-far-2/>

- Randel, A., Galvin, B., Shore, L., Chung, B., Dean, M., & Kedharnath, U. (2018). Inclusive leadership: Realizing positive outcomes through belongingness and being valued for uniqueness. *Human Resource Management Review*, 28, 190-203. <https://doi.org/10.1016/j.hrmr.2017.07.002>
- Shore, L., Randel, A., Chung, B., Dean, M., Holcombe Ehrhart, K., & Singh, G. (2011). Inclusion and diversity in work groups: A review and model for future research. *Journal of Management*, 37(4), 1262-1289. <https://doi.org/10.1177/0149206310385943>
- Shore, L., Cleveland, J., & Sanchez, D. (2018). Inclusive workplaces: A review and model. *Human Resource Management Review*, 28(2), 176-189. <https://psycnet.apa.org/doi/10.1016/j.hrmr.2017.07.003>
- Spreitzer, G. (1995). Psychological empowerment in the workplace: Dimensions, measurement, and validation. *The Academy of Management Journal*, 38(5), 1442–1465. <https://psycnet.apa.org/doi/10.2307/256865>
- Toossi, M. (2002). A century of change: the U.S. labor force, 1950–2050. <https://www.bls.gov/opub/mlr/2002/05/art2full.pdf>
- U.S. Bureau of Labor Statistics. (2024, August 29). Civilian labor force, by age, sex, race, and ethnicity. U.S. Bureau of Labor Statistics. <https://www.bls.gov/emp/tables/civilian-labor-force-summary.htm>

Appendix A

New Inclusive Leadership Scale (Al-Atwi & Al-Hassani, 2021)

- SG1 Really cares about my wellbeing
- SG2 Care about my general satisfaction at work
- SG3 Stays in touch within my workgroup
- SG4 Shows concern for my needs and feelings
- SG6 Is a good role model for care and acceptance in group interactions
- SG7 Asks me to verbalize what I have appreciated about being part of the group
- EJ1 Treats me as equally as he/she treats others, without discrimination
- EJ2 Gives me honest and fair answers
- EJ3 Is able to suppress personal biases against me
- EJ4 Enacts policies to provide fairness for group members and ensure a lack of bias
- EJ5 Demonstrates that different group members (e.g. physical disability, ethnic minority) are not stereotyped but treated like others in group
- SD1 Use my workgroup's suggestions to make decisions that affect us
- SD2 Makes decisions that are based only on his/her own ideas (R)
- SD3 Encourages me to engage in productive debates in an effort to improve decision-making
- SD6 Gives me opportunities to discuss how to integrate the perspectives offered
- SD7 Ensures that team members' participation in decision-making has been truly shared within or across tasks
- ED1 Is open to hearing new ideas
- ED2 Asks for the input of all team members
- ED3 Values my personal competence
- ED5 Appreciates my unique attributes (e.g. abilities, intelligence, or talent)
- ED6 Pays special attention to soliciting different points of view and approaches
- ED8 Makes me feel that he/she desires to interact and maintain a diverse workforce
- HG1 Is always ready to support me if I introduce an unpopular idea or solution at work
- HG3 Supports team members who sometimes may need to complete tasks in non-traditional ways
- HG4 Provides the encouragement and emotional support necessary to ensure I continue presenting new ideas

Appendix B

Work Group Inclusion Scale (Chung et al., 2020)

I am treated as a valued member of my work group. (B)

I belong in my work group. (B)

I am connected to my work group. (B)

I believe that my work group is where I am meant to be. (B)

I feel that people really care about me in my work group. (B)

I can bring aspects of myself to this work group that others in the group don't have in common with me. (U)

People in my work group listen to me even when my views are dissimilar. (U)

While at work, I am comfortable expressing opinions that diverge from my group. (U)

I can share a perspective on work issues that is different from my group members. (U)

When my group's perspective becomes too narrow, I am able to bring up a new point of view. (U)

Appendix C

Role Performance Model (Griffin, 2007)

Team member proficiency

Coordinated your work with coworkers

Communicated effectively with your coworkers

Provided help to coworkers when asked, or needed

Team member adaptivity

Dealt effectively with changes affecting your work unit (e.g., new members)

Communicated effectively with your coworkers

Provided help to coworkers when asked, or needed

Team member proactivity

Suggested ways to make your work unit more effective

Developed new and improved methods to help your work unit perform better

Improved the way your work unit does things

Appendix D

Inclusive Leadership Measure (Carmeli et al., 2010)

The manager is open to hearing new ideas (openness)

The manager is attentive to new opportunities to improve work processes (openness)

The manager is open to discuss the desired goals and new ways to achieve them (openness)

The manager is available for consultation on problems (availability)

The manager is an ongoing ‘presence’ in this team—someone who is readily available (availability)

The manager is available for professional questions I would like to consult with him/her (availability)

The manager is ready to listen to my requests (availability)

The manager encourages me to access him/her on emerging issues (accessibility)

The manager is accessible for discussing emerging problems (accessibility)

Appendix E

Team Psychological Safety (Edmondson, 1999)

If you make a mistake on this team, it is often held against you.

Members of this team are able to bring up problems and tough issues.

People on this team sometimes reject others for being different.

It is safe to take a risk on this team.

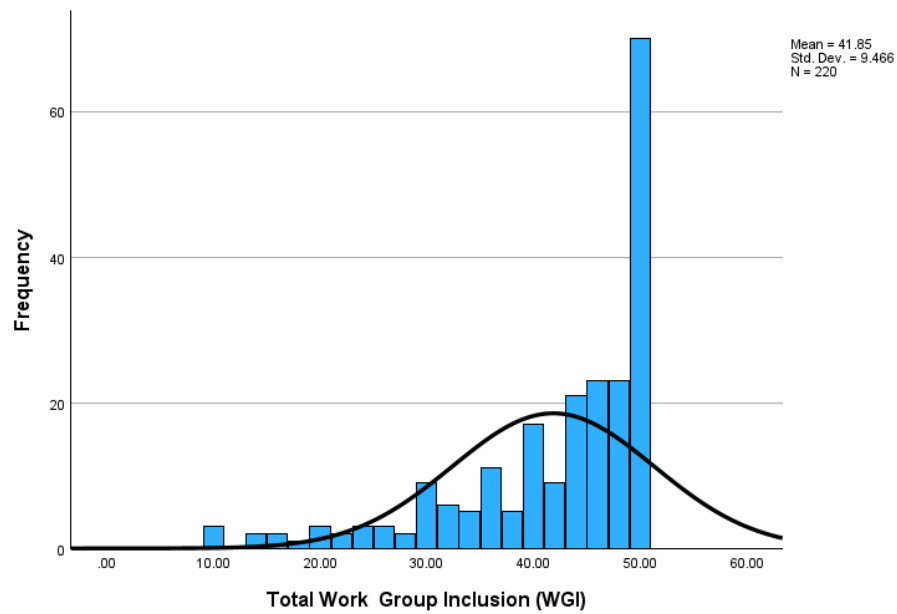
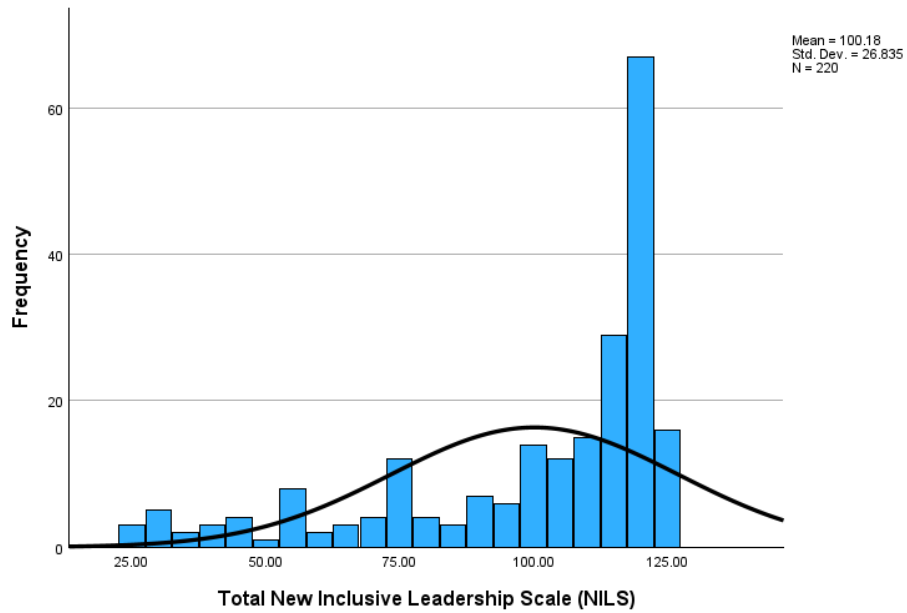
It is difficult to ask other members of this team for help.

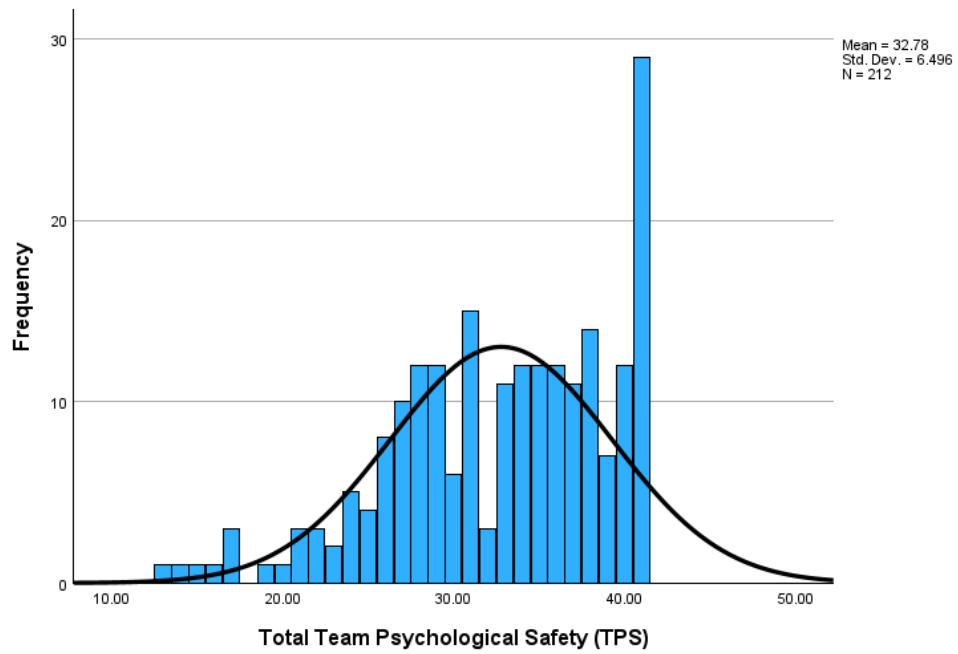
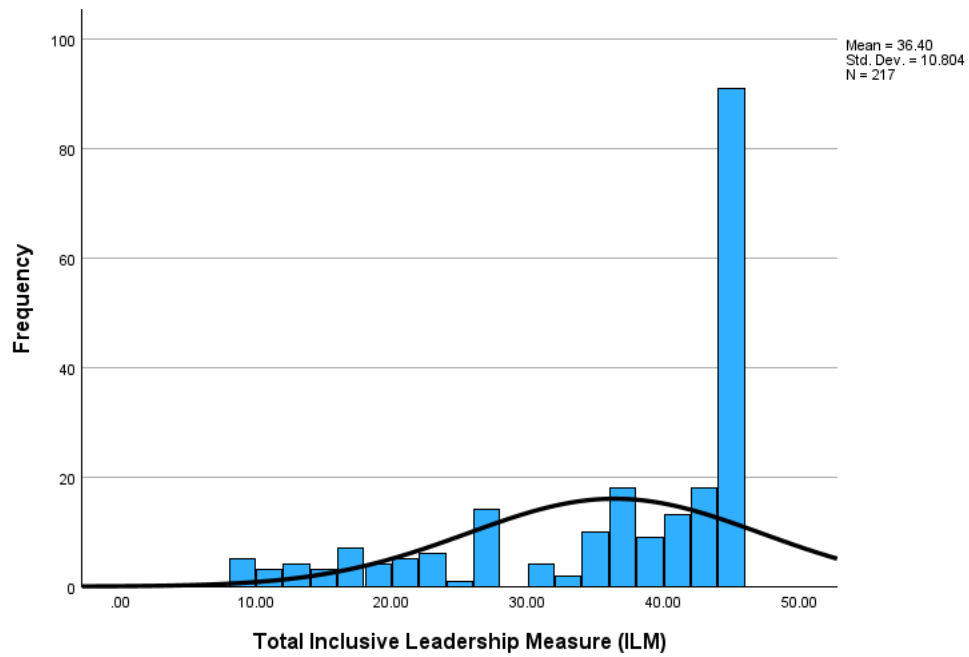
No one on this team would deliberately act in a way that undermines my efforts.

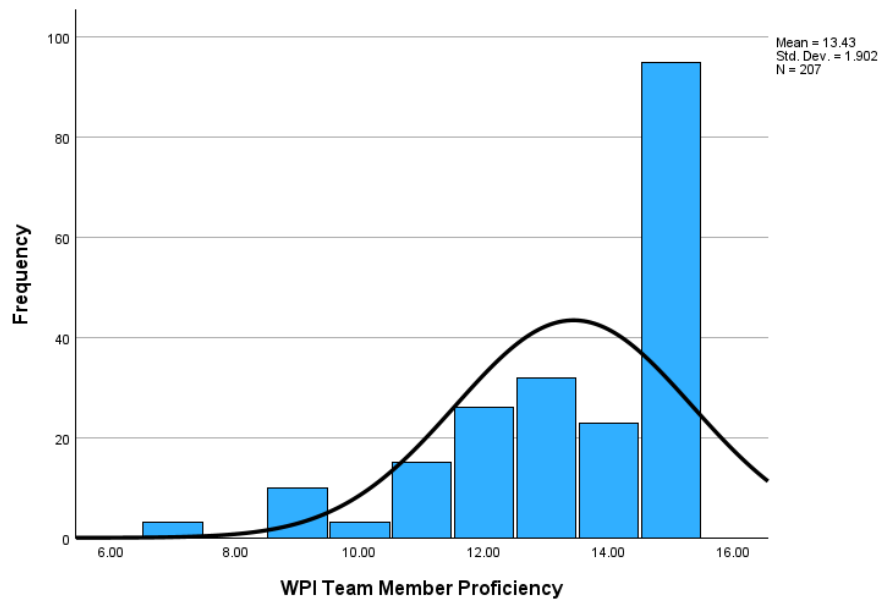
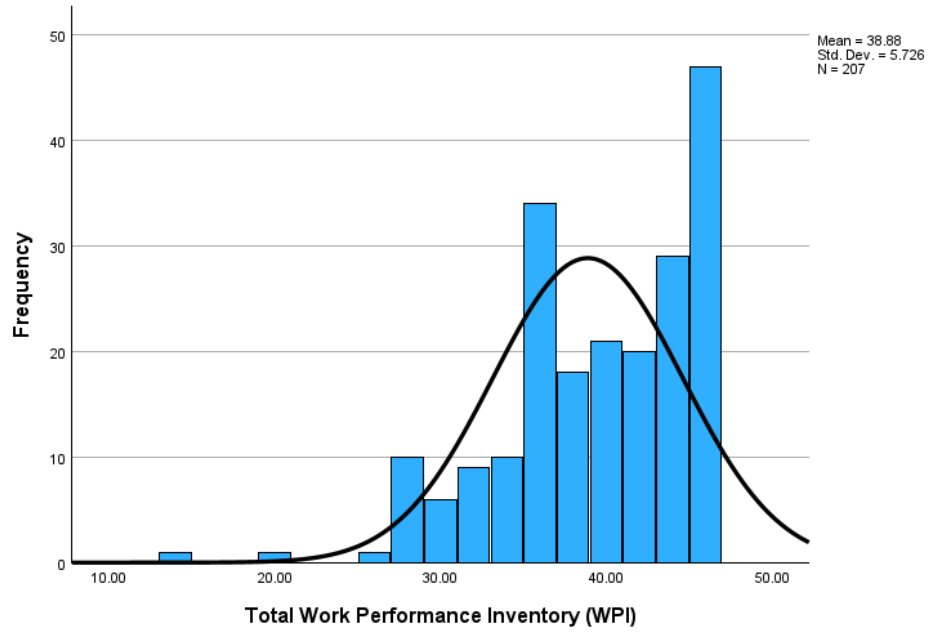
Working with members of this team, my unique skills and talents are valued and utilized.

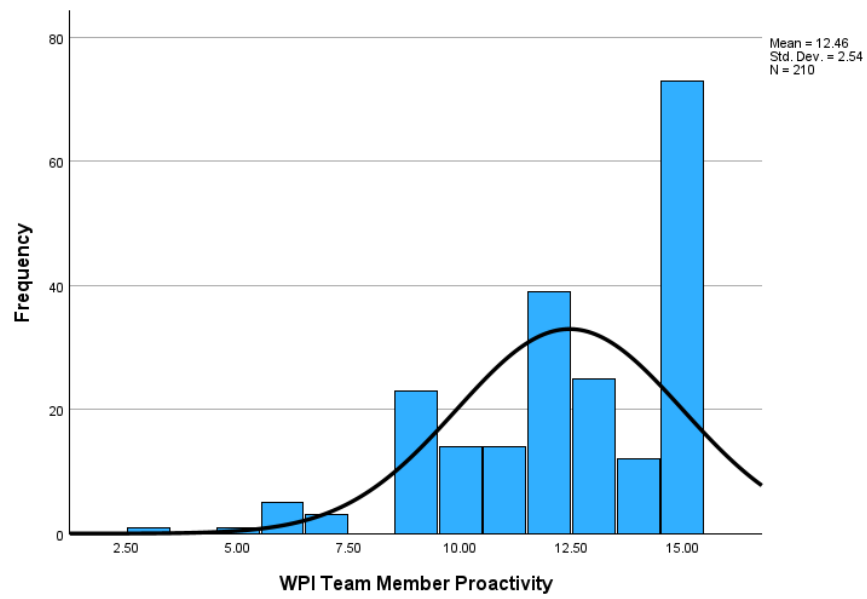
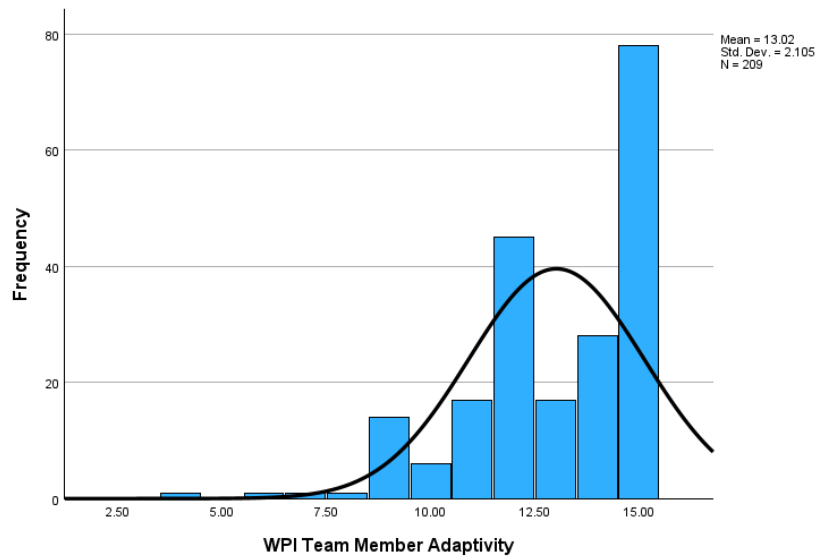
Appendix F

Histograms



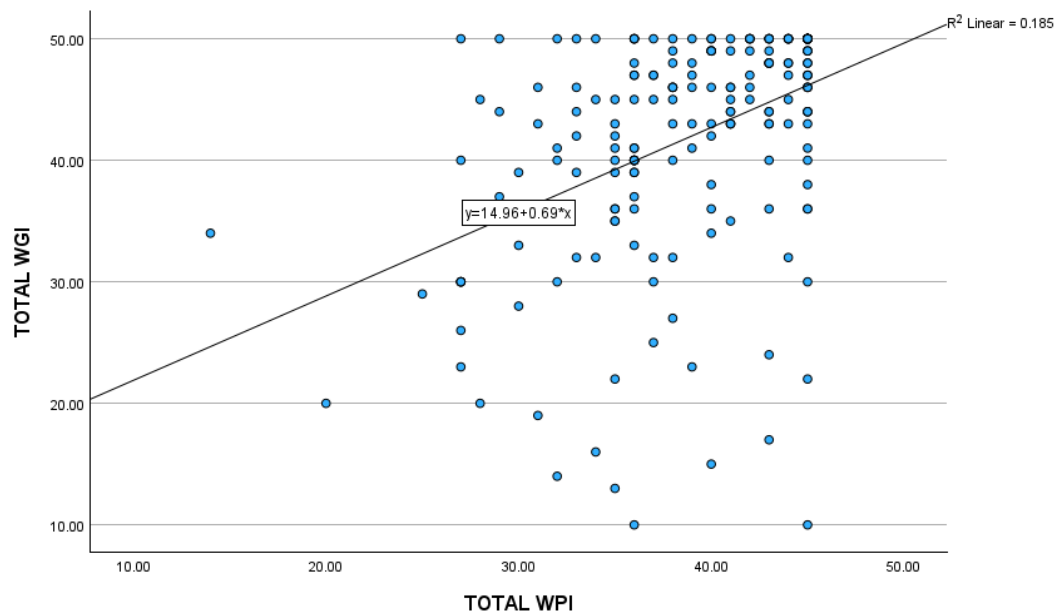
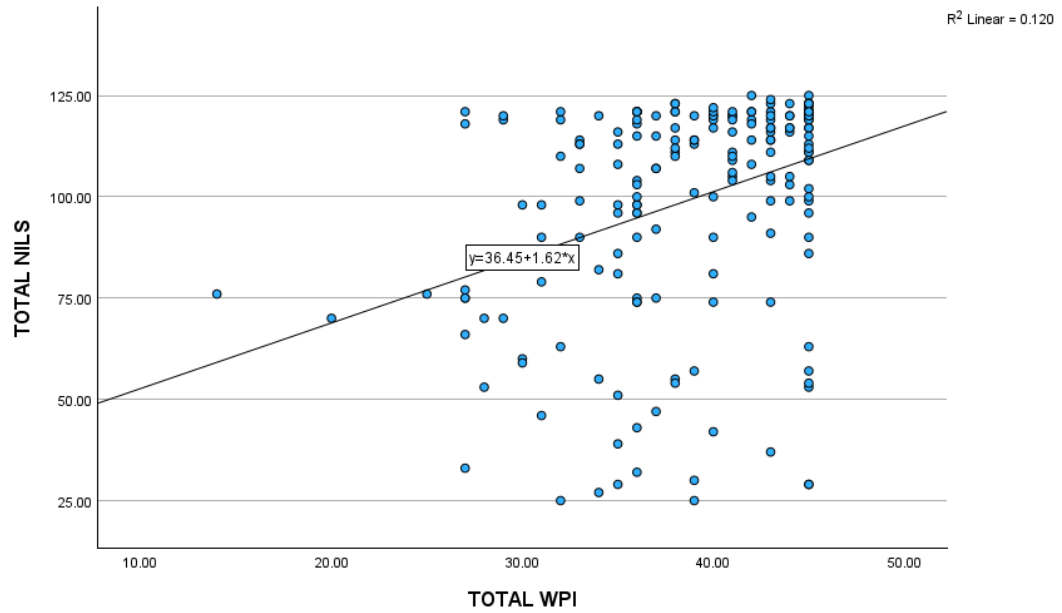


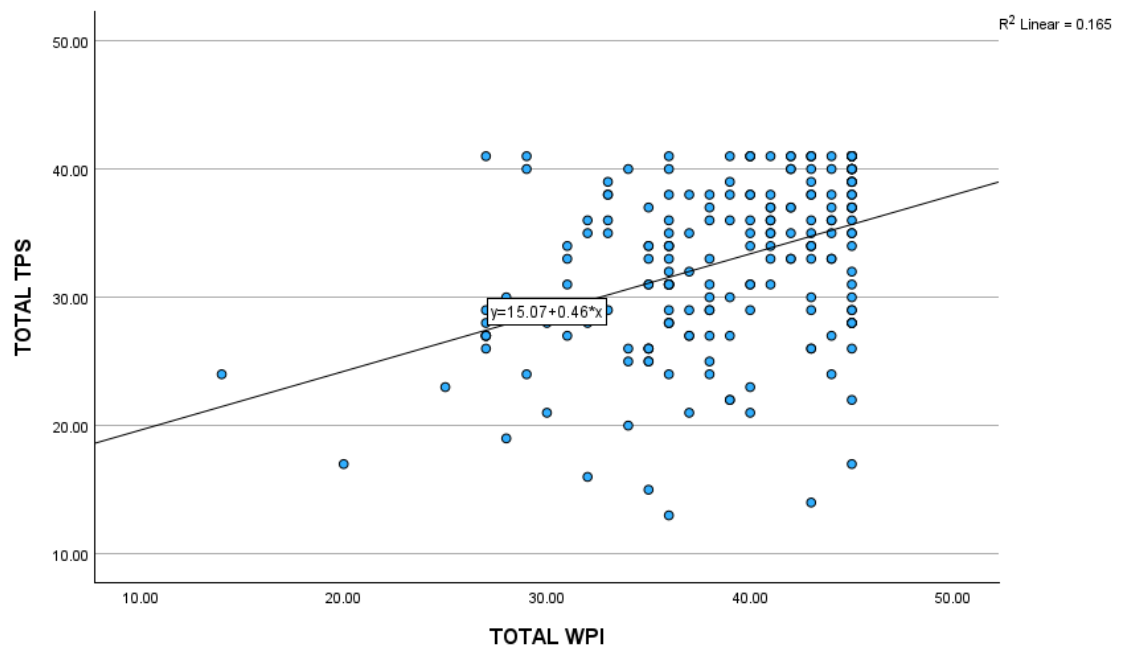
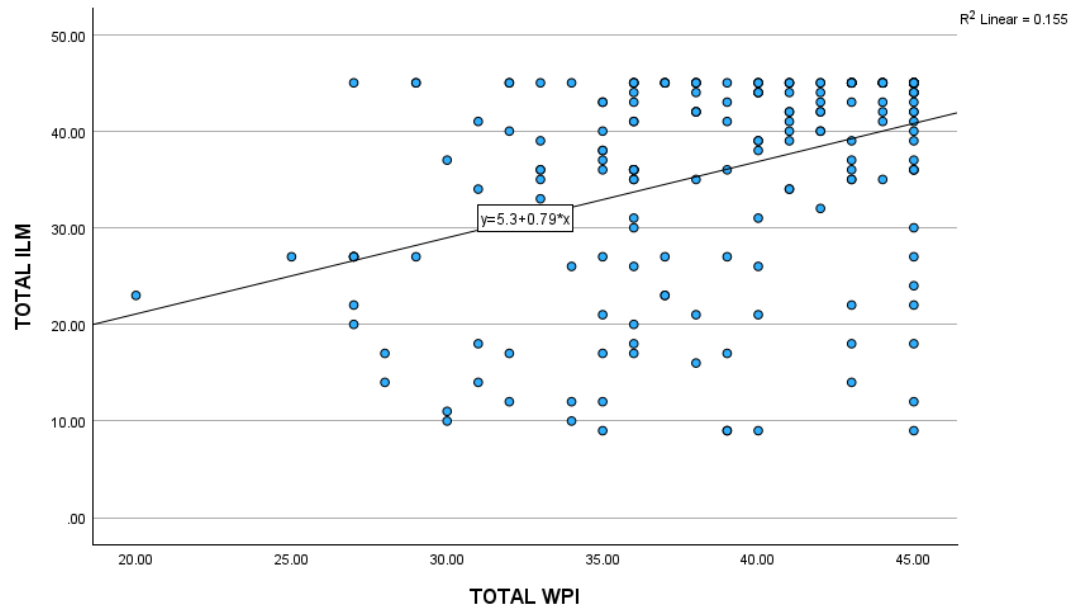




Appendix G

Scatterplots for Four Measures and Outcome Variable





Appendix H

Exploratory Factor Analysis of NILS

KMO and Bartlett's Test

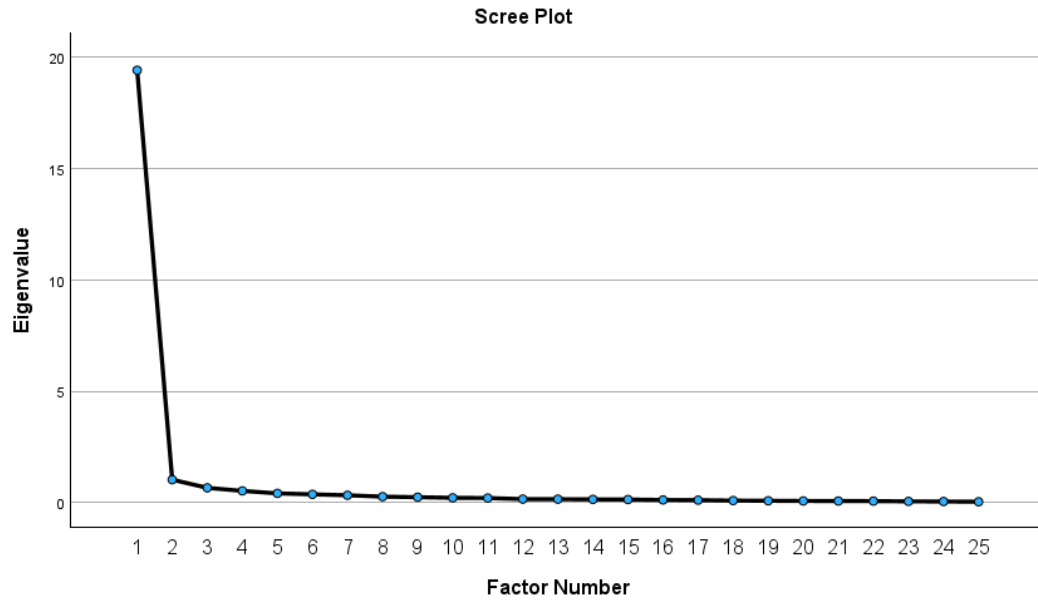
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.971
Bartlett's Test of Sphericity	Approx. Chi-Square	8640.879
	df	300
	Sig.	<.001

Total Variance Explained

Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings ^a
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total
1	19.418	77.673	77.673	19.244	76.975	76.975	19.189
2	1.028	4.112	81.785	.519	2.077	79.053	5.798
3	.662	2.648	84.433				
4	.525	2.100	86.533				
5	.413	1.651	88.184				
6	.370	1.478	89.663				
7	.328	1.311	90.974				
8	.266	1.065	92.038				
9	.242	.967	93.005				
10	.214	.854	93.860				
11	.204	.815	94.675				
12	.156	.625	95.300				
13	.153	.612	95.912				
14	.143	.573	96.485				
15	.136	.545	97.030				
16	.118	.472	97.502				
17	.108	.432	97.934				
18	.090	.361	98.294				
19	.081	.322	98.616				
20	.072	.289	98.906				
21	.070	.279	99.184				
22	.066	.264	99.449				
23	.054	.214	99.663				
24	.047	.190	99.853				
25	.037	.147	100.000				

Extraction Method: Principal Axis Factoring.

a. When factors are correlated, sums of squared loadings cannot be added to obtain a total variance.



Factor Matrix^a

	Factor	
	1	2
My manager really cares about my wellbeing	.888	
My manager cares about my general satisfaction at work	.925	
My manager stays in touch within my team	.870	
My manager shows concern for my needs and feelings	.914	
My manager is a good role model for care and acceptance in group interactions	.916	
My manager asks me to verbalize what I appreciate about being part of the team	.818	
My manager treats me as equally as he/she treats others, without discrimination	.914	
My manager gives me honest and fair answers	.925	
My manager is able to suppress personal biases against me	.865	
My manager enacts policies to provide fairness for team members and ensure a lack of bias	.915	
My manager demonstrates that different group members are not stereotyped but treated like others in the group	.856	

My manager uses my team's suggestions to make decisions that affect us	.875	
My manager encourages me to engage in productive debates in an effort to improve decision-making	.790	
My manager gives me opportunities to discuss how to integrate the perspectives offered	.875	
My manager ensures that team members' participation in decision-making has been truly shared within or across tasks	.874	
My manager is open to hearing new ideas	.913	
My manager asks for input of all team members	.896	
My manager values my personal competence	.945	
My manager appreciates my unique attributes (e.g. abilities, intelligence, or talent)	.935	
My manager pays special attention to soliciting different points of view and approaches	.913	
My manager makes me feel that he/she desires to interact and maintain a diverse workforce	.936	
My manager is always ready to support me if I introduce an unpopular idea or solution at work	.890	
My manager supports team members who sometimes may need to complete tasks in non-traditional ways	.888	
My manager provides the encouragement and emotional support necessary to ensure I continue presenting new ideas	.931	
My manager makes decisions that are based on his/her own ideas (R)		

Extraction Method: Principal Axis Factoring.
a. 2 factors extracted. 5 iterations required.

Appendix I

Principal Component Analysis of NILS

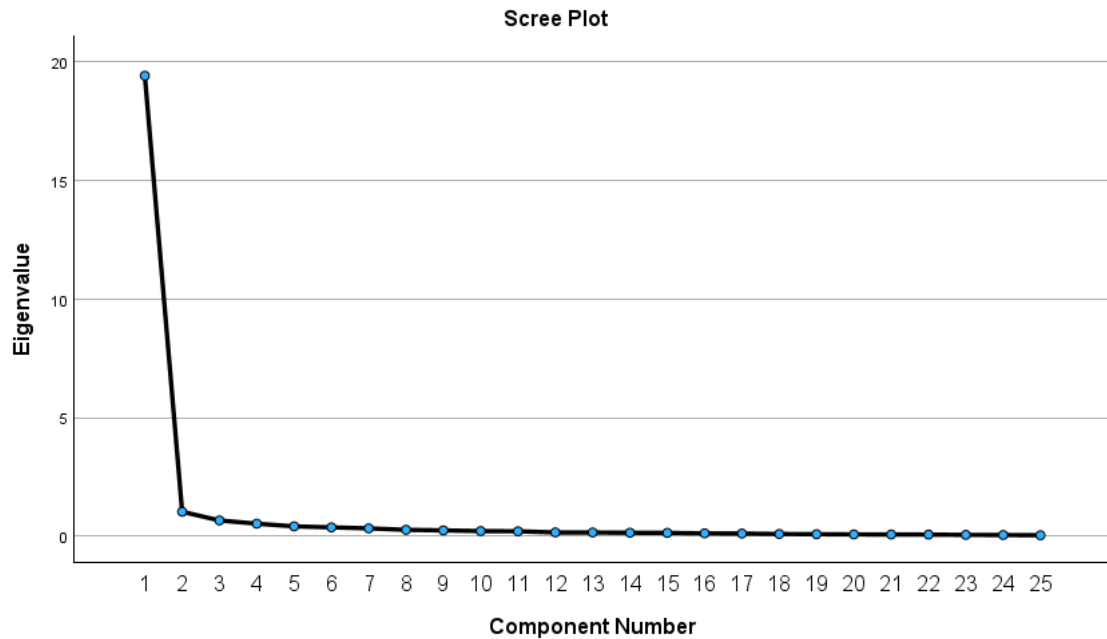
KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.971
Bartlett's Test of Sphericity	Approx. Chi-Square	8640.879
	df	300
	Sig.	<.001

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	19.418	77.673	77.673	19.418	77.673	77.673	19.324	77.295	77.295
2	1.028	4.112	81.785	1.028	4.112	81.785	1.123	4.490	81.785
3	.662	2.648	84.433						
4	.525	2.100	86.533						
5	.413	1.651	88.184						
6	.370	1.478	89.663						
7	.328	1.311	90.974						
8	.266	1.065	92.038						
9	.242	.967	93.005						
10	.214	.854	93.860						
11	.204	.815	94.675						
12	.156	.625	95.300						
13	.153	.612	95.912						
14	.143	.573	96.485						
15	.136	.545	97.030						
16	.118	.472	97.502						
17	.108	.432	97.934						
18	.090	.361	98.294						
19	.081	.322	98.616						
20	.072	.289	98.906						
21	.070	.279	99.184						
22	.066	.264	99.449						
23	.054	.214	99.663						
24	.047	.190	99.853						
25	.037	.147	100.000						

Extraction Method: Principal Component Analysis.



Component Matrix^a

	Component	
	1	2
My manager really cares about my wellbeing	.892	
My manager cares about my general satisfaction at work	.926	
My manager stays in touch within my team	.877	
My manager shows concern for my needs and feelings	.917	
My manager is a good role model for care and acceptance in group interactions	.919	
My manager asks me to verbalize what I appreciate about being part of the team	.829	
My manager treats me as equally as he/she treats others, without discrimination	.915	
My manager gives me honest and fair answers	.927	
My manager is able to suppress personal biases against me	.872	
My manager enacts policies to provide fairness for team members and ensure a lack of bias	.918	
My manager demonstrates that different group members are not stereotyped but treated like others in the group	.864	

My manager uses my team's suggestions to make decisions that affect us	.881	
My manager encourages me to engage in productive debates in an effort to improve decision-making	.797	
My manager gives me opportunities to discuss how to integrate the perspectives offered	.877	
My manager ensures that team members' participation in decision-making has been truly shared within or across tasks	.879	
My manager is open to hearing new ideas	.917	
My manager asks for input of all team members	.901	
My manager values my personal competence	.945	
My manager appreciates my unique attributes (e.g. abilities, intelligence, or talent)	.937	
My manager pays special attention to soliciting different points of view and approaches	.917	
My manager makes me feel that he/she desires to interact and maintain a diverse workforce	.937	
My manager is always ready to support me if I introduce an unpopular idea or solution at work	.895	
My manager supports team members who sometimes may need to complete tasks in non-traditional ways	.892	
My manager provides the encouragement and emotional support necessary to ensure I continue presenting new ideas	.934	
My manager makes decisions that are based on his/her own ideas (R)		.969

Extraction Method: Principal Component Analysis.

a. 2 components extracted.

Appendix J

Qualtrics Survey

Inclusive Leadership Scale

Start of Block: Consent

Q18

Consent to Participate in Research

University of Oklahoma

Would you like to be involved in research at the University of Oklahoma?

I am Karen Kiely from the Graduate College, and I invite you to participate in my research entitled Validating a New Measure of Inclusive Leadership in a U.S. Context. This research is being conducted at CAP Tulsa, a private non-profit agency located in Tulsa, Oklahoma. You were selected as a possible participant because you are a current employee of the agency. You must be at least 18 years of age to participate in this research. Please read this document and contact me to ask any questions you may have BEFORE agreeing to participate in my research.

What is the purpose of this research? This research aims to test a new measure of Inclusive Leadership that is potentially more helpful to leadership development than existing measures and informative for advancing the field of leadership theory.

How many participants will be in this research? About 630 people will take part in this research, including 75 employees in leadership roles and 555 individual contributors.

What will I be asked to do? If you agree to be in this research, you will complete a 10-minute online survey.

What are the risks and benefits if I participate? There are no benefits nor compensation for participating in this research. Participation in this research involves professional risks.

Collection of demographic or geographic location data that could lead to deductive re-identification: You will be asked to provide demographic information that describes you. We may also gather information about your geographic location in this research. Different combinations of personal and geographic information may make it possible for your identity to be guessed by someone who was given, or gained access, to our research records. To minimize the risk of deductive re-identification, we will not combine identifying variables nor analyze and report results for small groups of people with specific demographic characteristics.

Data collected online: The organization hosting the data collection platform has its own privacy and security policies for keeping your information confidential. There is a risk that the external organization, which is not part of the research team, may gain access to or retain your data or your IP address which could be used to re-identify you. No assurance can be made as to their use of the data you provide for purposes other than this research.

Will I be compensated for participating? You will not be reimbursed for your time and

participation in this research.

Who will see my information? There will be no information in research reports that will make it possible to identify you. Research records will be stored securely, and only approved researchers and the OU Institutional Review Board will have access to the records.

Do I have to participate? No. If you do not participate, you will not be penalized or lose benefits or services unrelated to the research. If you decide to participate, you don't have to answer any questions and can stop participating at any time.

Will my identity be anonymous or confidential? Your name will not be retained or linked with your responses.

What will happen to my data in the future? We might share your de-identified data with other researchers or use it in future research without obtaining additional consent from you.

Who do I contact with questions, concerns, or complaints? If you have questions, concerns, or complaints about the research or have experienced a research-related injury, contact me at 918-381-0958.

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

Please print this document for your records. By providing information to the researcher(s), I am agreeing to participate in this research.

☐ I am 18 years of age or older (4)

☐ I am under 18 years of age (cannot participate) (5)

Skip To: End of Survey If Consent to Participate in Research University of Oklahoma Would you like to be involved in research... = I am under 18 years of age (cannot participate)

End of Block: Consent

Start of Block: New Inclusive Leadership Scale

NILS My manager...

	Strongly disagree (1)	Somewhat disagree (2)	Neither agree nor disagree (3)	Somewhat agree (4)	Strongly agree (5)
really cares about my wellbeing.	☐	☐	☐	☐	☐
cares about my general satisfaction at work.	☐	☐	☐	☐	☐
stays in touch within my team.	☐	☐	☐	☐	☐
shows concern for my needs and feelings.	☐	☐	☐	☐	☐
is a good role model for care and acceptance in group interactions.	☐	☐	☐	☐	☐
asks me to verbalize what I appreciate about being part of the team.	☐	☐	☐	☐	☐
treats me as equally as he/she treats others, without discrimination.	☐	☐	☐	☐	☐
gives me honest and fair answers.	☐	☐	☐	☐	☐
is able to suppress personal biases against me.	☐	☐	☐	☐	☐
enacts policies to provide fairness for team members and ensure a lack of bias.	☐	☐	☐	☐	☐

demonstrates that different group members (e.g. physical disability, racial/ethnic minority) are not stereotyped but treated like others in the group.	☐	☐	☐	☐	☐
uses my team's suggestions to make decisions that affect us.	☐	☐	☐	☐	☐
makes decisions that are based on his/her own idea.	☐	☐	☐	☐	☐
encourages me to engage in productive debates in an effort to improve decision-making.	☐	☐	☐	☐	☐
gives me opportunities to discuss how to integrate the perspectives offered.	☐	☐	☐	☐	☐
ensures that team members' participation in decision-making has been truly shared within or across tasks.	☐	☐	☐	☐	☐
is open to hearing new ideas.	☐	☐	☐	☐	☐
asks for input of all team members.	☐	☐	☐	☐	☐
values my personal competence.	☐	☐	☐	☐	☐

appreciates my unique attributes (e.g. abilities, intelligence, or talent).	☐	☐	☐	☐	☐
pays special attention to soliciting different points of view and approaches.	☐	☐	☐	☐	☐
makes me feel that he/she desires to interact and maintain a diverse workforce.	☐	☐	☐	☐	☐
is always ready to support me if I introduce an unpopular idea or solution at work.	☐	☐	☐	☐	☐
supports team members who sometimes may need to complete tasks in non- traditional ways.	☐	☐	☐	☐	☐
provides the encouragement and emotional support necessary to ensure I continue presenting new ideas.	☐	☐	☐	☐	☐

End of Block: New Inclusive Leadership Scale

Start of Block: Work Group Inclusion Scale

WGI Thinking about your team...

	Strongly disagree (1)	Somewhat disagree (2)	Neither agree nor disagree (3)	Somewhat agree (4)	Strongly agree (5)
I am treated as a valued member of my team.	☐	☐	☐	☐	☐
I belong in my team.	☐	☐	☐	☐	☐
I am connected to my team.	☐	☐	☐	☐	☐
I believe that my team is where I am meant to be.	☐	☐	☐	☐	☐
I feel that people really care about me in my team.	☐	☐	☐	☐	☐
I can bring aspects of myself to this team that others in the group don't have in common with me.	☐	☐	☐	☐	☐
People in my team listen to me even when my views are dissimilar.	☐	☐	☐	☐	☐
While at work, I am comfortable expressing opinions that diverge from my team.	☐	☐	☐	☐	☐
I can share a perspective on work issues	☐	☐	☐	☐	☐

that is different
from my team
members.

When my
team's
perspective
becomes too
narrow, I am
able to bring up
a new point of
view.



End of Block: Work Group Inclusion Scale

Start of Block: Inclusive Leadership Measure (Carmeli et al., 2010)

ILM My manager is...

	not at all (1)	to a small extent (2)	to some extent (3)	to a large extent (4)	to a very large extent (5)
open to hearing new ideas.	☐	☐	☐	☐	☐
attentive to new opportunities to improve work processes.	☐	☐	☐	☐	☐
open to discuss the desired goals and new ways to achieve them.	☐	☐	☐	☐	☐
available for consultation on problems.	☐	☐	☐	☐	☐
an ongoing 'presence' in this team-- someone who is readily available.	☐	☐	☐	☐	☐
available for professional questions I would like to consult with him/her	☐	☐	☐	☐	☐
ready to listen to my requests.	☐	☐	☐	☐	☐
encourages me to access him/her on emerging issues.	☐	☐	☐	☐	☐
accessible for discussing emerging problems.	☐	☐	☐	☐	☐

End of Block: Inclusive Leadership Measure (Carmeli et al., 2010)

Start of Block: Team Psychological Safety

TPS Thinking about your team...

	1 = Very inaccurate (1)	2 (2)	3 (3)	4 (4)	5 = Very accurate (5)
If you make a mistake on this team, it is often held against you.	☐	☐	☐	☐	☐
Members of this team are able to bring up problems and tough issues.	☐	☐	☐	☐	☐
People on this team sometimes reject others for being different.	☐	☐	☐	☐	☐
It is safe to take a risk on this team.	☐	☐	☐	☐	☐
It is difficult to ask other members of this team for help.	☐	☐	☐	☐	☐
No one on this team would deliberately act in a way that undermines my efforts.	☐	☐	☐	☐	☐
Working with members of this team, my unique skills and talents are valued and utilized.	☐	☐	☐	☐	☐

End of Block: Team Psychological Safety

Start of Block: Work Performance Inventory

WPI To what extent have you...

	1 = Very little (1)	2 (2)	3 (3)	4 (4)	5 = A great deal (5)
coordinated your work with coworkers.	☐	☐	☐	☐	☐
communicated effectively with your coworkers.	☐	☐	☐	☐	☐
provided help to coworkers when asked or needed.	☐	☐	☐	☐	☐
dealt effectively with changes affecting your team (e.g. new members).	☐	☐	☐	☐	☐
learned new skills or taken on new roles to cope with changes in the way your team works.	☐	☐	☐	☐	☐
responded constructively to changes in the way your team works.	☐	☐	☐	☐	☐
suggested ways to make your team more effective.	☐	☐	☐	☐	☐
developed new and improved methods to help your team perform better.	☐	☐	☐	☐	☐
improved the way your team does things.	☐	☐	☐	☐	☐

End of Block: Work Performance Inventory

Start of Block: Demographic Questions

Location: Please indicate your location

- ☐ School (1)
 - ☐ Headquarters/Warehouse (2)
-

Tenure: Please indicate your length of service with CAP Tulsa

- ☐ 0 - 1 Year (1)
 - ☐ 1 - 2 Years (2)
 - ☐ 2 - 3 Years (3)
 - ☐ 3 - 4 Years (4)
 - ☐ 4 - 5 Years (5)
 - ☐ 5 - 7 Years (6)
 - ☐ 7+ Years (7)
-

Age: Please indicate your age group

- ☐ < 25 (1)
 - ☐ 25 - 29 (2)
 - ☐ 30 - 34 (3)
 - ☐ 35 - 39 (4)
 - ☐ 40 - 44 (5)
 - ☐ 45 - 49 (6)
 - ☐ 50 - 54 (7)
 - ☐ 55 - 59 (8)
 - ☐ 60 - 64 (9)
 - ☐ > 64 (10)
-

Ethnicity: Are you Hispanic or Latino?

- ☐ No (1)
 - ☐ Yes (2)
-

Race: Please indicate your race

- ☐ American Indian or Alaskan Native (1)
 - ☐ Asian (2)
 - ☐ Black or African American (3)
 - ☐ Two or more Races (5)
 - ☐ White (6)
 - ☐ Prefer not to say (7)
-

Gender: Please indicate your gender

- ☐ Male (1)
 - ☐ Female (2)
 - ☐ Non-binary / third gender (3)
 - ☐ Prefer not to say (4)
-

Role: Are you in a supervisory position?

☐ No (1)

☐ Yes (2)

End of Block: Demographic Questions

Appendix K

IRB Approval Letter



Institutional Review Board for the Protection of Human Subjects

Approval of Initial Submission – Exempt from IRB Review – AP01

Date: February 21, 2024

IRB#: 16935

Principal Investigator: Karen L Kiely

Approval Date: 02/21/2024

Exempt Category: 2

Study Title: Validating a New Measure of Inclusive Leadership in a U.S. Context

On behalf of the Institutional Review Board (IRB), I have reviewed the above-referenced research study and determined that it meets the criteria for exemption from IRB review. To view the documents approved for this submission, open this study from the *My Studies* option, go to *Submission History*, go to *Completed Submissions* tab and then click the *Details* icon.

As principal investigator of this research study, you are responsible to:

- Conduct the research study in a manner consistent with the requirements of the IRB and federal regulations 45 CFR 46.
- Request approval from the IRB prior to implementing any/all modifications as changes could affect the exempt status determination.
- Maintain accurate and complete study records for evaluation by the HRPP Quality Improvement Program and, if applicable, inspection by regulatory agencies and/or the study sponsor.
- Notify the IRB at the completion of the project.

If you have questions about this notification or using iRIS, contact the IRB @ 405-325-8110 or irb@ou.edu.

Cordially,

Aimee Franklin, Ph.D.
Chair, Institutional Review Board