

Shared Leadership Emergence:  
The Role of Leader Identity and Leadership Structure Schema

by

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## Abstract

Title: Shared Leadership Emergence: The Role of Leader Identity and Leadership

Structure Schema

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The increasing popularity of self-managing teams has sparked interest in the impact of shared leadership structures on team outcomes. Yet, it is unclear how shared leadership structures form or why they vary across teams. While research suggests that leadership claiming *and* granting are essential to the social construction of shared leadership in teams, the latter has received little attention. Therefore, this study aimed to address the fundamental questions “what factors determine *who* is granted leadership by individuals in a team?” and “what factors determine *how many* others are granted leadership by individuals in a team?” I proposed that leader identity level influences granting behaviors such that those with a collective-level leader identity perceive team members who display warmth as leaders and those with an individual-level leader identity perceive team members who display competence as leaders. Further, I proposed that leadership structure schema (LSS) influences granting behaviors such that those with a more hierarchical LSS grant to one or few others and those with a more egalitarian LSS grant to many others. These hypotheses were tested with an experimental vignette design using a sample of MTurk participants and the results were found to be nonsignificant. Limitations and future research are discussed.

## Table of Contents

Abstract .....	iii
List of Figures and Tables.....	v
Chapter 1: Introduction .....	1
Chapter 2: Theory and Hypothesis Development.....	5
Leadership Perceptions in Shared Leadership .....	5
Interpersonal Judgements and Leadership Perceptions .....	6
Leader Identity .....	7
Leader Identity Level .....	9
Leader Identity Level and Leadership Perceptions.....	10
Leadership Structure Schema .....	13
Chapter 3: Methods.....	15
Sample.....	15
Measures .....	15
Control Variables .....	15
Leadership Structure Schema .....	16
Leader Identity Level.....	16
Competence and Warmth Perceptions.....	17
Leadership Perceptions and Number of Grants .....	17
Attention Check .....	17
Design and Procedure .....	17
Chapter 4: Analyses and Results.....	21
Leader Identity Level Manipulation Check .....	21
Descriptive Statistics.....	21
Hypothesis Testing.....	22
Chapter 5: Discussion .....	27
Limitations and Future Directions .....	29
Conclusion .....	33
References.....	34
Appendix.....	42
Leadership Structure Schema Scale (Wellman, 2014) .....	42
Trusting Intentions (Mayer & Davis, 1999) .....	43
The Levels of Self-Concept Scale (Selenta & Lord, 2005) .....	44

## **List of Figures**

Figure 1: Proposed model reflecting Hypotheses 1 and 2 .....	12
Figure 2: Proposed model reflecting Hypothesis 3 .....	14

## List of Tables

Table 1: Descriptive Statistics and Intercorrelations .....	22
Table 2: Results of Cross-Level Analyses for Competence and Individual-Level Leader Identity on Leadership Perceptions.....	25
Table 3: Results of Cross-Level Analyses for Warmth and Collective-Level Leader Identity on Leadership Perceptions.....	26

## Chapter 1: Introduction

Organizations increasingly rely on self-managing teams as vehicles of creativity and innovation. Leadership in these teams is often informal, emergent, and collective. Notably, researchers have emphasized the collective aspect of leadership. This emphasis may be attributed to the finding that collective leadership, where multiple individuals engage in leadership behaviors, has been shown to impact team effectiveness in self-managing teams (Carson et al., 2007; D’Innocenzo et al, 2016; Nicolaides et al., 2014, Wang et al., 2014). Further, because individuals in self-managing teams often dynamically change their roles as leaders and followers, researchers have given particular attention to the form of collective leadership known as shared leadership. Shared leadership refers to the process of influence among team members where individuals work together to pursue team goals (Pearce & Conger, 2003). While scholars recognize that various shared leadership structures exist and likely lead to different team outcomes (e.g., Contractor et al., 2012; Feng et al., 2017; Spillane, 2006; Zander & Butler, 2010), there has been little effort to understand how those shared leadership structures form or why they vary from team to team. There is limited use in knowing which shared leadership structures are most beneficial without understanding how to develop said structures.

Importantly, the lack of clarity concerning the construction of shared leadership structures may be leading to uninformed training and leadership development. Currently, there seems to be a disconnect between how institutions and universities are developing leadership and what leadership skills employees need to effectively engage in shared leadership. For example, leadership development overemphasizes the value of advancing

specific abilities and an individual identity as a leader, overshadowing the importance of encouraging a collective view of leadership. This may prove problematic, as research suggests that collectivistic leadership requires a collective identity (Venus et al., 2012). To better inform leadership development in self-managing teams, an understanding of which individual characteristics influence shared leadership structures must be acquired. This understanding will then allow organizations to promote desired shared leadership structures.

As such, two key behaviors have been identified as crucial to the social construction of shared leadership: leadership claiming and leadership granting (DeRue et al., 2010). Individuals claim leadership by engaging in leadership behaviors; however, these behaviors are insufficient for developing shared leadership, as individuals must also acknowledge others' influence by granting leadership to them (DeRue et al., 2010). Unfortunately, much of the research conducted on the social construction of shared leadership has ignored the individual characteristics of those granting leadership. Therefore, I identified two fundamental questions that should be addressed to advance the literature: "what factors determine *who* is granted leadership by individuals in a team?" and "what factors determine *how many* others are granted leadership by individuals in a team?" Together, these questions are likely to inform the degree to which leadership is shared (e.g., number of members with authority or average weight of authority) and the nature in which it is shared (e.g., how many people can perform each leadership role at one time). Answers to these questions will promote a better understanding of shared leadership development practices for self-managing teams by identifying individual characteristics of granters which may lead to favorable shared leadership structures.

I propose the above questions can be addressed with two individual-level characteristics which are believed to shape leadership granting behaviors in self-managing teams. First, the question “what factors determine *who* is granted leadership by individuals in a team,” can be addressed by exploring how an individual’s leader identity level (i.e., how an individual defines themselves as a leader in relation to others) moderates the relationship between warmth/competence and whom they perceive as a leader. Specifically, I propose that leader identity level will influence leadership perceptions such that those with a collective-level leader identity will perceive those who display warmth as leaders and those with an individual-level leader identity will perceive those who display competence as leaders. Second, the question “what factors determine *how many* others are granted leadership by individuals in a team?,” can be addressed by exploring the relationship between individuals’ leadership structure schema (i.e., an individual’s expected or ideal number of leaders in a team; LSS; Wellman et al., 2014) and how many people they grant leadership to in a team. Specifically, I propose LSS will influence granting behaviors such that those with a more egalitarian LSS will grant to many others, while those with a more hierarchical LSS will grant to fewer others.

This paper contributes to the literature on shared leadership in several ways. First, it identifies two individual-level constructs that may influence leadership granting behaviors. Understanding to whom and how many others individuals are likely to grant leadership will offer new insight into how shared leadership develops. Second, the present study will be the first to empirically explore Venus et al.’s (2012) proposition that collectivistic leadership requires a collective leader identity, verifying the importance of leader identity to shared leadership. Finally, the present study may provide initial

evidence for a multilevel perspective on how individual differences and behaviors shape the emergence of shared leadership structures in teams.

## Chapter 2: Theory and Hypothesis Development

Because people dynamically change their roles as leaders and followers in self-managing teams, engagement in leadership behaviors alone is not sufficient for shared leadership. Team members must also accept others' leadership behaviors by granting them leadership identities. Shared leadership only emerges due to individuals claiming *and* granting leadership. Further, shared leadership is a co-constructed process where team members actively make decisions on how they interact with others and whom they grant leadership to (whether the team member is a leader or a follower). Therefore, it is important to understand which individual characteristics of granters affect granting behaviors, which has been largely ignored in the extant literature. Fundamental questions that should be addressed then include “what factors determine *who* is granted leadership by individuals in a team?” and “what factors determine *how many* others are granted leadership by individuals in a team?” I believe leader identity levels and leadership structure schemes will bring insight to these questions.

### Leadership Perceptions in Shared Leadership

Much of the research surrounding leadership perceptions has focused on follower characteristics, where Implicit Leadership Theories (ILTs; i.e., prototypes that individuals possess of what a leader should look like; Epitropaki et al., 2013; Ehrhart, 2012; van Quaquebeke et al., 2011) have garnered the most attention. Eight factors have been identified that contribute to ILTs—sensitivity, intelligence, dedication, tyranny, charisma, attractiveness, strength, and masculinity (Lord et al., 1984; Offerman et al., 1994), which seem to overlap with the concepts of warmth (such as sensitivity and charisma) and competence (such as intelligence and dedication), discussed later. However, the bulk of

ILT research has focused on more formal leadership and has conceptualized granters as followers, discounting the idea that these granters may also contribute to leadership themselves. Therefore, these studies may not be as relevant when studying granting behaviors in the context of shared leadership.

DeRue and Ashford (2010) emphasized the importance of viewing team leadership as constructed by the process of social interactions where team members claim and grant leader and follower identities. The authors highlighted that the claiming and granting of leadership identities may lead to the co-construction of shared leadership structures. For example, if all team members grant and claim leadership identities, a shared leadership structure may emerge. Marchiondo et al. (2015) investigated the importance of these interactions in a recent study. The authors found that women who observed the claiming and granting interactions varied more widely in their leadership perceptions. While the study provided initial evidence that claiming and granting leadership identities may affect how other team members grant leadership, it did not consider the leader identities of the observers themselves. Therefore, there is still little known about leadership perceptions in shared leadership conceptualized as the process of claiming and granting leadership identities. To further investigate how leadership perceptions may form in the shared leadership context, I will first consider how interpersonal judgements influence these perceptions.

### **Interpersonal Judgements and Leadership Perceptions**

The stereotype content model (Fiske et al., 2002) argues that interpersonal judgements vary along two dimensions: competence (i.e., agency) and warmth (i.e., communality). The competence dimension includes perceptions revolving around ability,

skill, and efficacy, while the warmth dimension includes perceptions of another revolving around concepts such as sociability, trustworthiness, and benevolence (Fiske et al., 2007). Judgements based on these two dimensions influence individuals' attitudes, behaviors, and social interactions (Fiske et al., 2007). As such, the interpersonal judgments of competence and warmth have been recognized as key antecedents of leadership perceptions in teams (Burke et al., 2006; Loughhead et al., 2016). For example, Fransen (2018) followed 33 student teams working on a 24-week long project and explored the relationship between competence, warmth, and leadership perceptions. The author found that the more that team members were perceived as warm or competent, the higher their perceived influence.

The relationship between interpersonal judgments and leadership perceptions has not only been shown to be important for leadership perceptions themselves but has also been shown to impact shared leadership structures, as a longitudinal study by DeRue et al. (2015) found that warmth and competence network patterns impacted shared leadership structure density and centralization for 255 consulting teams composed of MBA students. Therefore, to further our knowledge on how shared leadership structures may form, the focus is shifted toward an individual characteristic that may moderate the relationship between warmth/competence perceptions and leadership perceptions—leader identity, as claiming and granting leader identities has been recognized as integral to the shared leadership process (DeRue et al., 2015).

### **Leader Identity**

Identities are components of the self-concept that revolve around an individual's roles and relationships with others (DeRue & Ashford, 2010; Johnson et al., 2012) and

categorize self-related information through patterns of values (Lord & Brown, 2001). A leader identity is then the part of the self-concept that “relates to being a leader or how one thinks of oneself as a leader” (Day & Harrison, 2007, p. 365). Researchers have established that leader identities are important in understanding the social construction of shared leadership (DeRue et al., 2015; Ibarra et al., 2014), as they direct individuals’ actions by facilitating their understanding of who they are as a leader, what their goals should be in each situation, and their strong and weak points as a leader (Day & Harrison, 2007).

There are four dimensions of leader identity: integration, strength, meaning, and level of inclusiveness. The first dimension, leader identity integration, reflects the degree to which the leader identity is incorporated into their overall self-concept (fully integrated, integrated across some domains, domain-specific). The integration of leader identity into the global self-concept is thought to be a motivating factor in engaging in leadership behaviors and leadership development (Hammond et al., 2017). The second dimension, leader identity strength, refers to the degree to which an individual thinks of themselves as a leader. Strengthening leader identity is also thought to motivate engagement in leadership behaviors and leadership development. However, scholars have theorized that those with stronger leader identities may be less likely to grant leadership due to their desire to claim leadership, as the granting of a leadership identity may be viewed as inherently claiming a follower identity (DeRue & Ashford, 2010). Thus, individuals with strong leader identities may hinder shared leadership development. The third dimension of leader identity is leader identity meaning, which refers to how an individual conceptualizes leadership (as an individual experience, process of influence, or

team effort). Though leader identity meaning has not been well explored, research suggests that higher levels of this dimension may lead to enacting a wider range of leadership behaviors (Hammond et al., 2017). The final dimension of leadership identity is the level of inclusiveness (leader identity level; Hammond et al., 2017) and encompasses how an individual sees themselves as a leader in relation to others. A high level of inclusiveness is thought to encourage a shared identity, indicating high relevance to shared leadership development (Lord & Hall, 2005). Therefore, I shift focus to exploring how leader identity level may influence the social construction of shared leadership through granting behaviors.

### **Leader Identity Level**

The leader identity level of inclusiveness reflects how others are included in an individual's cognitive representation of leadership (Lord & Hall, 2005). The lowest level of inclusiveness is referred to as the individual-level leader identity and can be exemplified by an individual who believes their role as a leader stems from their individual traits and abilities. They do not include relationships with others in their cognitive framework and view a leader as someone who differentiates themselves from others. Moreover, Hammond et al. (2017) argued that those with an individual-level leader identity view themselves as a leader due to their *possession* of leadership abilities, talents, and skills.

Conversely, the highest level of inclusiveness of the leader identity is the collective-level leader identity, where individuals understand their role as a function of group membership and view leadership as value-based. Relationships to others and the formation of a group identity are important aspects of leadership for these individuals. As

an individual's understanding of leadership becomes more inclusive, the individual is more likely to consider others in their definition of leadership. Therefore, different information about others (e.g., capabilities, characteristics, and intentions) may be more relevant depending on leader identity level. Those with an individual-level leader identity may be more likely to attend to information about others regarding individual leadership abilities and skills, whereas those with a collective-level leader identity may be more likely to attend to information about others regarding relationship-oriented behaviors.

### **Leader Identity Level and Leadership Perceptions**

Insight for how leader identity level affects an individuals' leadership perceptions may be gained by revisiting the stereotype content model (Fiske et al., 2002). The competence dimension includes perceptions revolving around ability, skill, and efficacy (Fiske et al., 2007), which aligns with the way in which those with an individual-level leader identity view leadership (i.e., leadership stems from individual characteristics). Therefore, I believe that those with individual-level leader identity are more likely to attend to and attribute traits reflecting competence to leadership. Conversely, because individuals with a collective-level leader identity view themselves as a leader strictly for the good of the group and perceive the origin of leadership as from team contributions and a relational orientation, it stands to reason that these individuals are more likely to base leadership perceptions on warmth perceptions.

Though these propositions have not been empirically tested, a recent study found differences in ILTs between individuals with interdependent and independent identities (Shen, 2019). Results showed that individuals with stronger independent identities viewed anti-prototypical factors (tyranny and masculinity) as characteristic of both

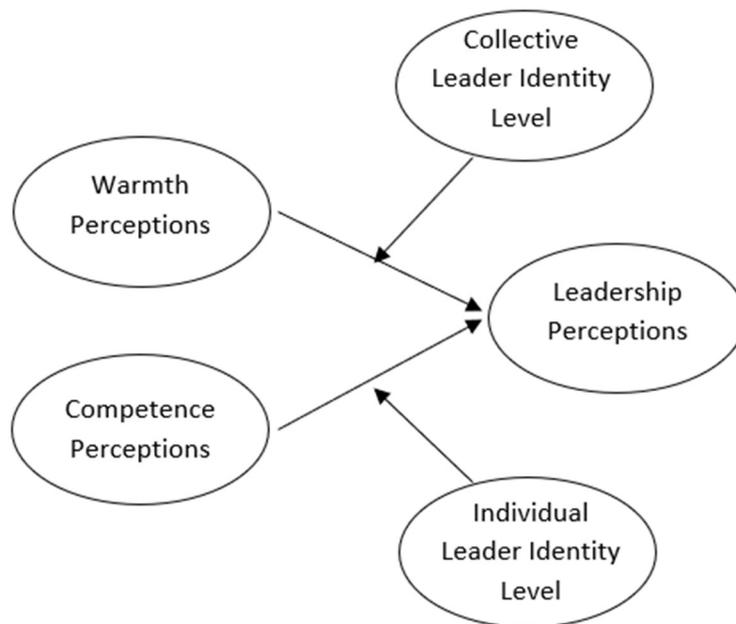
typical and ideal leaders and prototypical factors as characteristic of ideal leaders, but not typical leaders. Further, individuals with stronger interdependent identities felt prototypical factors (sensitivity, intelligence, dedication, and dynamism) were characteristic of both typical and ideal leaders. Because research suggests that individuals categorize others based on the match between the ILTs included in the individual's pre-existing prototype and the perceived characteristics of others (Epitropaki et al., 2013), these results suggest that identity may influence the relationship between prototypes and granting behaviors. While the focus of this study was formal leadership and did not explicitly measure warmth, competence, or leader identity level, the results do provide valuable initial evidence of the proposed relationships.

Further supporting this line of reasoning, Ehrhart (2012) explored how students' self-construal (whether an individual sees oneself independent from or interdependent with others) related to their leadership style preferences. Results indicated that individuals who see themselves as independent from others endorsed charismatic leaders, who were described mainly based on individual traits and abilities reflecting competence (i.e., leaders high in achievement, self-esteem, and risk-taking). Further, the author found that individuals who saw themselves as interdependent with others endorsed relationship-oriented leaders, who were described based on warm behaviors (i.e., leaders who are kind, show appreciation to subordinates, and value interpersonal relationships). Once again, while the study explored formal leadership and did not explicitly measure the variables of interest in the current study, the findings suggest that independence from (interdependence with) others may be related to preferring competent (warm) leaders based on individual traits and abilities (relationship-orientation). These findings are

important because the concept of leader identity level includes an individual's understanding of leadership as it relates to independence from or interdependence with others. Based on this literature, I hypothesize that leader identity will moderate the relationship between perceived warmth and competence with leadership perceptions (see Figure 1).

*H1: Individuals with an individual-level leader identity are more likely to attribute leadership to those they perceive as competent.*

*H2: Individuals with a collective-level leader identity are more likely to attribute leadership to those they perceive as warm.*



*Figure 1.* Proposed model reflecting Hypotheses 1 and 2.

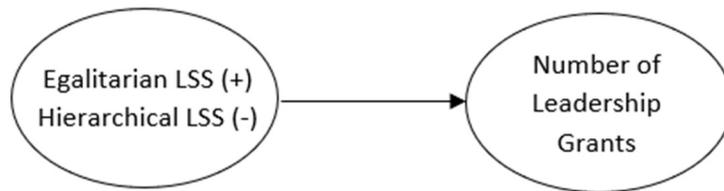
## Leadership Structure Schema

Individuals utilize schemas, or generalized cognitive frameworks, by applying structure to situations with limited information (Gioia & Poole, 1984). Individuals can then effectively develop impressions and respond with appropriate behaviors by comparing a given situation to that of their cognitive framework (Gioia & Poole, 1984). Leadership structure schemas (LSS; Wellman et al., 2014) refer to an individual's cognitive representation of how leadership should be structured; they can range from hierarchical, where there is one leader who exerts influence over the team, to egalitarian, where leadership influence is equally shared between members (DeRue & Ashford, 2010; Scott et al., 2018).

Exploring how LSS impacts granting behaviors is crucial to understanding how shared leadership structures develop, as leader identity level is not sufficient in explaining *how many* grants an individual is likely to award. Findings by DeRue et al. (2015) support this, as the authors concluded that individuals in teams with an egalitarian LSS saw leadership as a collective process where all members were expected to engage in leadership, while individuals in teams with a hierarchical LSS saw leadership as an individual endeavor, even if the team was perceived as warm. While leader identity level may influence *who* is granted leadership, it is unlikely to influence *how many* will be granted leadership, as an individual will be looking to grant leadership to only as many leaders as they feel is appropriate (influenced by their LSS), regardless of how many team members fit into their representation of what a leader is. For example, an individual with a collective-level leader identity and a more hierarchical LSS may believe that all

team members should be proactive and warm but will only attribute leadership to one individual (such as the individual that is perceived as the warmest), and thus only award one leadership grant. The idea behind the hypothesized relationship between LSS and granting is that those who believe that there can only be one leader, or those with a more hierarchical LSS, will be less likely to grant leadership to multiple people, as they would not be likely to attribute leadership to multiple people. On the other hand, those who believe there can be multiple leaders, or those with a more egalitarian LSS, will grant to multiple individuals, as they will see it as normative for all members to engage in leadership.

*H3: Individuals with higher LSS scores (more egalitarian) are more likely to grant leadership to many others in the team, while individuals with lower LSS scores (more hierarchical) are more likely to grant leadership to fewer others in the team.*



*Figure 2.* Proposed model reflecting Hypothesis 3.

## Chapter 3: Methods

### Sample

A total of 170 participants were recruited via Amazon Mechanical Turk. The only requirement for participation was that respondents were over the age of 18. Participants were informed they were participating in a study about team interactions and that they were expected to correctly answer an attention check to complete the survey. Data from five participants were excluded due to failing the attention check twice (described below), leaving a final sample of 165 participants. The final sample included 78 females, 86 males, and one non-binary participant. Further, the ethnicity of the participants was 72% Caucasian, 12% African American, 6% Asian, 3% Latino or Hispanic, 3% both Caucasian and Latino or Hispanic, 2% both Caucasian and African American, 1% both Caucasian and Asian, and less than 1% both Caucasian and Native American. Finally, the mean age was 40 years old ( $SD = 12.56$ ).

### Measures

#### *Control Variables*

Age, gender, and trusting intentions were controlled for at the individual level, as these individual characteristics have been shown to significantly relate to leadership perceptions (e.g., Ensari et al., 2011; Judge & Bono, 2000; Marchiondo et al., 2015). Participants' trusting intentions towards team members was assessed using Mayer and Davis's (1999) four-item measure (e.g., "Most people can be counted on to do what they say they will do;  $\alpha = .83$ ), which uses a Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree).

### ***Leadership Structure Schema***

Participants' LSS was assessed using a scale by Wellman et al. (2014). The scale measures whether participants possess an egalitarian or hierarchical LSS, where higher scores represent a more egalitarian LSS. Participants responded on a five-point Likert-type scale indicating the extent to which they disagree or agree on the following items (1 = Strongly disagree, 5 = Strongly agree): "Groups work best when leadership is shared among multiple group members," "groups work best when there is a single leader in the group," "leadership in groups is most effective when one person takes charge of the group," "groups are often led by multiple individuals," and "groups perform best when all members of the group take responsibility for leading the group." Cronbach's alpha was 0.86.

### ***Leader Identity Level***

The Levels of Self-Concept Scale (LSCS; Selenta & Lord, 2005) was utilized to measure leader identity level. While the Comparative Identity subscale measures individual-level leader identity with five items, an error resulted in one item not being displayed. Therefore, the participants responded to four items from the subscale adapted to the leadership context (e.g., "I thrive on opportunities to demonstrate that my leadership abilities or talents are better than those of other people";  $\alpha = .84$ ). Collective-level leader identity was measured with the five-item Group Achievement Focus subscale, adapted to the leadership context (e.g., "As a leader, I feel great pride when my work team does well, even if I'm not the main reason for its success";  $\alpha = .79$ ). Participants responded to these items using a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree).

### ***Competence and Warmth Perceptions.***

Competence and warmth perceptions were assessed with the following question: “As viewed by you, how competent (warm) is this team member?”, where a Likert scale ranging from 1 (not at all) to 5 (extremely) was listed next to labeled pictures of each team member.

### ***Leadership Perceptions and Number of Grants***

Leadership perceptions were assessed with the following question: “To what extent would you rely on this team member for leadership?”, where a Likert scale ranging from 1 (not at all) to 5 (extreme amount) was listed next to labeled pictures of each team member. This item was similar to those from the General Leadership Impression questionnaire (GLI; Cronshaw & Lord, 1987).

The number of leadership grants was obtained by the following question: “If you were a part of the team, which team member(s) would you rely on for leadership?”, where multiple nominations were allowed. Once again, labeled pictures were provided for each choice.

### ***Attention Check***

To ensure that participants were attending to the stimuli video, they were asked to identify which person was a member of the team. One member of the team was presented with four distractors. This procedure is described in more detail below.

### ***Design and Procedure***

The study was conducted using adult participants recruited via Amazon Mechanical Turk. All study materials, including a description of the study and its purpose, were provided online through a Qualtrics survey. Before participating in the

study, individuals were asked to read and sign an informed consent form. Participants then completed two scales, participated in an experimental priming procedure, viewed a recording of team interactions, and responded to remaining measures.

The participants first completed the Leadership Structure Schema scale (LSS; Wellman et al., 2014) and a trust propensity scale (Mayer & Davis, 1999). To test the hypotheses and determine results, the study implemented an experimental vignette method, where participants were randomly assigned to a leader identity manipulation (leader identity level: individual-level leader identity vs collective-level leader identity). To manipulate leader identity level, participants were instructed to complete an experiential priming procedure (Oyserman & Lee, 2008; Wisse & Rus, 2012). In the individual-level leader identity condition, participants responded to the following prompt: “Describe how you, as an individual, function when completing tasks. Recall a time when you worked on a task independently. Think about your personal goals, skills, and qualities that were relevant for accomplishing the task.” For the collective-level leader identity condition, participants were asked to respond to the following prompt: “Describe how you, as a group member, function when completing tasks. Recall a time when you worked on a task collectively. Think about the group’s goals and your skills and qualities as a member of the group that were relevant for accomplishing the task.” In both conditions, participants had to write at least 150 characters.

After the priming procedure was completed, the participants completed The Levels of Self-Concept Scale (LSCS; Selenta & Lord, 2005) and then read a scenario description detailing that they were to imagine they were a new employee who had traveled to their new office to fill out paperwork. They were further told to imagine that

they were observing an interaction between their future team members while waiting for an HR personnel. At this point, the participants were instructed to view a 7-minute video clip of six individuals participating in the NASA moon survival exercise. The participants were informed the NASA moon exercise required the team to envision they were members of a space crew whose ship was forced to make an unexpected landing before reaching their destination due to mechanical issues. Further, the team had to rank the 15 items that survived the landing in order of importance for completing the trip. The participants were then told they must pay particular attention to the characters, as subsequent questions would ask about their perceptions of the characters. The video was the same across participants, as this study was primarily interested in manipulating the leader identity level of the participant. In constructing the video, three actors were given a description of characteristics representative of warmth and three others were given a description of characteristics representative of competence. The full video was coded by three subject matter experts to identify moments that displayed warmth and competence without knowledge of which actor received which description. In this way, clips where the actors were rated highly on their assigned characteristics were selected. The final video was edited so that all actors received equal video time.

Participants were not able to advance past the video until the full length of the video had been played, at which point the participants were met with the attention check. The attention check was comprised of the following question: “Which of the following is not a team member from the video?” Participants who failed to answer correctly were directed to watch the video again and presented with the attention check once more. Data

from participants who failed the attention check twice were excluded from the study ( $n = 5$ ).

Finally, participants responded to measures of warmth and competence perceptions, leadership perceptions, and number of grants, then completed demographic questions. Presentation of leadership perceptions and warmth and competence perceptions were counterbalanced across participants. Notably, participants were only shown one series of questions at a time, except in the case of warmth and competence perceptions. For example, participants were not able to view their responses to leadership perceptions while indicating their number of grants or their responses to warmth and competence perceptions while indicating their leadership perceptions.

## Chapter 4: Analyses and Results

### Leader Identity Level Manipulation Check

The success of the leader identity level manipulation was assessed by scores on the LSCS. The manipulation check was determined not to be successful, as participants' scores on the LSCS did not reflect the primed leader identity level conditions. For the collective-level leader identity condition,  $t(161) = 0.10, p = 0.922$ . For the individual-level leader identity condition,  $t(159) = -0.99, p = 0.324$ . While the manipulation did not work, there was still considerable variability within scores so I proceeded with the proposed analyses.

### Descriptive Statistics

The descriptive statistics and Cronbach alphas are provided in Table 1. It should be noted that individual-level and collective-level leader identity were grand mean centered, while warmth and competence perceptions were group mean centered due to the multilevel nature of the analyses. While not shown in the table, an interesting spread of leadership grants was found while inspecting the data further. Each actor received the following number of grants from the participants: 111 (male displaying competence), 63 (female displaying warmth), 50 (male displaying competence), 47 (female displaying warmth), 32 (male displaying warmth), and 33 (female displaying competence). While not part of the hypothesis, these findings may indicate further complexity of leadership perceptions, which will be discussed later.

**Table 1***Descriptive Statistics and Intercorrelations*

Variable	M	SD	1	2	3	4	5	6	7	8	9	10	11
1. Age	40.5	12.6	-										
2. Gender	.54	.54	-.14	-									
3. Race	.72	.45	.16*	-.02	-								
4. Trust	3.14	.73	-.12	.11	-.10	.87							
5. Individual	2.89	1.00	-.14	.20**	-.03	.06	.84						
6. Collective	4.12	.68	.16*	-.14	.00	.28***	.08	.79					
7. LSS	2.88	.95	-.04	-.04	-.15	.19*	-.20*	-.05	.86				
8. Competence	3.58	.96	.03	-.04	-.00	.17***	.04*	.13***	.08*	-			
9. Warmth	3.20	1.08	-.00	.03	-.04	.12***	.06	.09**	-.02	.29***	-		
10. Leadership	3.24	1.08	.06	-.06	-.03	.18***	.08**	.16***	.07*	.71***	.26***	-	
11. Grants	2.01	1.04	-.05	-.00	.10**	.06	-.15	-.09	.08	.07	.00	.11***	-

*Note.* Correlations in italics are based on within-subject perceptions of targets ( $N = 925$ ) while correlations not in italics are based on single scores from each participant ( $n = 165$ ). Correlations in italics are based on within-subject perceptions of targets and violate the assumption of independence and are provided for illustrative purposes only. Cronbach alphas are presented on diagonals. Leadership = Leadership perceptions; Grants = Number of leadership grants. \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$ .

**Hypothesis Testing**

Hypothesis 1 proposed that individuals with an individual-level leader identity are more likely to attribute leadership to those they perceive as competent, and Hypothesis 2 proposed that individuals with a collective-level leader identity are more likely to attribute leadership to those they perceive as warm. Because data was nested within participants, multilevel regression was used to examine the proposed relationships. Specifically, multilevel regression was utilized to test Hypothesis 1 and 2, as the sequential addition of predictors allowed direct effects and moderating effects to be tested. Two identical regressions were conducted, apart from whether warmth or

competence perceptions and individual-level or collective-level leader identity were included.

As an initial step before testing hypotheses, the intraclass correlation (ICC) were examined for leadership ratings. The ICC for leadership ratings was .192, indicating that 19.2% of the variance in leadership ratings was accounted for at the individual level. This provides further justification for the use of multilevel regression. All multilevel regressions were conducted in R using the multilevel package (Bliese, 2016). Next, the intercepts for leadership ratings were tested to check if they should be allowed to vary or if they should be fixed across participants. Results indicated that the intercept for leadership ratings varied across individuals, likelihood ratio (1) = 58.41,  $p < .001$ . Finally, the slopes for warmth and competence predicting leadership were tested to evaluate if they varied across participants or were fixed. The slope of warmth varied across participants, likelihood ratio (2) = 11.12,  $p = .004$ ; the slope of competence varied across participants, likelihood ratio (2) = 18.77,  $p < .001$ . As a result of these analyses, both the intercept and slopes were allowed to vary when testing the hypotheses.

The hypothesis tests are summarized in Table 2 and Table 3. The controls (age, gender, and trusting intentions) were entered in step 1 to account for the effect of these variables on leadership perceptions. To examine the direct effect of competence (warmth) perceptions on leadership perceptions, leadership perceptions were regressed on competence (warmth) scores in step 2. To examine if leader identity level moderates this relationship, individual-level (collective-level) leader identity was added as a predictor in step 3 and then the interaction between competence (warmth) perceptions and individual-level (collective-level) leader identity level was added at step 4.

As can be seen in Table 2 and 3, both competence ( $\beta = .81, p < .001$ ) and warmth ( $\beta = .16, p < .001$ ) had a significant effect on leadership perceptions, with increased perceptions of both being positively related to increased leadership perceptions. Additionally, individuals with higher collective-level leader identity tended to provide increased ratings of leadership perceptions ( $\beta = .17, p = .018$ ) while individual-level leader identity was not related to leadership perceptions ( $\beta = .09, p = .060$ ). However, the moderating effect that collective-level leader identity had with warmth perceptions on leadership perceptions was nonsignificant ( $\beta = .06, p = .332$ ). Additionally, the moderating effect that individual-level leader identity had with competence perceptions on leadership perceptions was nonsignificant ( $\beta = -.04, p = .190$ ). Thus, Hypotheses 1 and 2 were not supported. Further, alternate moderation paths were tested to ensure that each leader identity level was not significant for the other perceptions.

**Table 2**

*Results of Cross-Level Analyses for Competence and Individual-Level Leader Identity on Leadership Perceptions*

Variable	Step 1		Step 2		Step 3		Step 4	
	$\beta$	SE	$\beta$	SE	$\beta$	SE	$\beta$	SE
Intercept	2.35***	.26	2.40***	2.41	2.40***	.24	2.39***	.24
Age	.00	.00	.00	.00	.00	.00	.00	.00
Gender	-.10	.09	-.11	.09	-.14	.09	-.14	.09
Trust	.26***	.06	.25***	.06	.24***	.06	.24***	.06
Competence			.80***	.03	.81***	.03	.81***	.03
IND					.09	.05	.11*	.05
Competence X IND							-.04	.03

*Note.*  $N = 925$ .  $n = 165$ . IND = Individual Leader Identity. \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$ .

**Table 3**

*Results of Cross-Level Analyses for Warmth and Collective-Level Leader Identity on Leadership Perceptions*

Variable	Step 1		Step 2		Step 3		Step 4	
	$\beta$	SE	$\beta$	SE	$\beta$	SE	$\beta$	SE
Intercept	2.35***	.26	2.35***	.26	2.51***	.26	2.51***	.26
Age	.00	.00	.00	.00	.00	.00	.00	.00
Gender	-.10	.09	-.10	.09	-.07	.09	-.07	.09
Trust	.26***	.06	.26***	.06	.22**	.07	.22***	.07
Warmth			.16***	.04	.16***	.04	.16***	.04
CO					.17*	.07	.18*	.07
Warmth X CO							.06	.06

*Note.*  $N = 925$ .  $n = 165$ . CO = Collective Leader Identity. \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$ .

For Hypothesis 3, I proposed that a higher (more egalitarian) LSS would positively relate to the number of leadership grants, while a lower (more hierarchical) LSS would negatively relate to the number of leadership grants. This hypothesis were tested using a correlation analysis, which tested the linear relationship between leadership structure schema (LSS) and the number of others granted leadership status. Results showed a nonsignificant relationship between LSS and number of grants,  $r = 0.08$ ,  $t(163) = 1.02$ ,  $p = 0.309$ . Thus, Hypotheses 3 was not supported.

## Chapter 5: Discussion

The goal of this study was to investigate individual characteristics that may influence leadership granting behaviors. The study first proposed that individuals with an individual-level (collective-level) leader identity are more likely to attribute leadership to those they perceive as competent (warm). Results indicated that the significant relationship between competence (warmth) perceptions and leadership perceptions was not moderated by an individual's individual-level leader identity (collective-level leader identity). Thus, Hypotheses 1 and 2 were not supported.

While several factors may have contributed to the nonsignificant results for Hypotheses 1 and 2, I highlight three issues for consideration. First, the manipulation check was found to be unsuccessful. Because the participants were not properly primed for either an individual-level or collective-level leader identity, the results may have been impacted, as leader identity levels may have been influenced in unintended ways. Second, leader identity level may be more complex than represented in this study. For instance, because I did not measure leader identity strength, I could not differentiate between those with a strong and weak leader identity. The strength of the leader identity may influence whether leader identity level is linked to the relationship between warmth/competence perceptions and leadership perceptions. Specifically, if an individual has a weak leader identity, they may not have any meaningful level of inclusiveness, as they would likely not view themselves as a leader and, therefore, not consider a level of inclusiveness for their leadership. Further, I did not account for those who responded either low or high on both individual and collective-level leader identity. Leader identity level may affect the relationship between warmth/competence perceptions and leadership

perceptions depending on an individual's score on both individual-level and collective-level leader identity. For example, individuals who score high on both scales may grant leadership based on warmth perceptions, competence perceptions, or both types of perceptions depending on the context. Third, I did not use multiple conditions to manipulate warmth and competence perceptions, where each actor displayed characteristics of warmth, competence, or, perhaps, neither. The manipulation of these perceptions would have limited the likelihood that granting behaviors were due to target characteristics such as gender or race.

The present study also proposed that individuals with higher LSS scores (more egalitarian) are more likely to grant leadership to many others in the team, while individuals with lower LSS scores (more hierarchical) are more likely to grant leadership to fewer others in the team. Again, the results did not support the hypothesis. While several factors may have contributed to the nonsignificant results for Hypotheses 3, I highlight two that are worth consideration. First, the number of grants indicated by the participant may not have reflected their *ideal* leadership structure. For example, some participants may have believed that all individuals should participate in leadership but may not have viewed any of the targets as viable leadership candidates. Conversely, some participants may have believed only one person should be a leader but may have viewed multiple team members as potential leadership candidates. Because of the short length of the team interaction, the participant may not have had enough exposure to choose which individual was the best candidate and, therefore, marked all potential candidates. Moreover, I previously mentioned that one team member received significantly more leadership grants than the others. This suggests that there may be perceived

characteristics that overshadow the granter's individual characteristics. Second, the present study did not consider how individuals with a moderate LSS scores would grant leadership. Moderate LSS scores represent a distributed LSS, which may reflect the belief that multiple individuals can lead simultaneously as long as they have different responsibilities or the belief that multiple individuals can lead as long as only one individual is leading at a time (Scott et al., 2018). By not considering the effect of a distributed LSS on leadership granting, the present study may have oversimplified the proposed relationship.

While the proposed hypotheses were not supported, the results still provide valuable information about the effects of individual characteristics on leadership perceptions and granting. Specifically, the current results indicated individuals with higher trusting intentions towards team members and higher collective-level leader identity tended to have higher leadership perceptions of team members than individuals less trusting and lower levels of collective-level leader identity. Additionally, both perceptions of warmth and competence were related to the level of perceived leadership, with team members perceived as more warm and competent receiving higher ratings than those perceived as less warm and competent.

### **Limitations and Future Directions**

There were several limitations for this study that should be noted. First, the study used self-report measures for all variables, which may have resulted in common method bias. Common method bias may have artificially increased relationships between variables. However, because the hypothesized relationships were nonsignificant, the conclusions were not affected.

Second, the use of vignettes may not accurately represent team interactions. Because the participants were not actually working with the team, they may have been influenced by different factors than if they *were* working with the team. For instance, the participants could not form perceptions based on how the other team members interacted with them personally. Perceptions formed as an observer may differ in important ways from perceptions formed from interaction. Further, there was little risk in granting leadership to the team members due to a lack of interdependence of outcomes. The participants may have granted leadership differently if personal outcomes were tied to leadership effectiveness (where participants grant leadership based on how likely they felt the team member would be effective as a leader). As such, future research could explore the proposed relationships with all participants engaging in the team exercise. By increasing the fidelity of the design, stronger conclusions could be made about the proposed relationships, whether the results support them or not. Moreover, having full teams of participants allows social network analysis to be utilized, which is valuable for exploring leadership structures in-depth.

Third, the study used a cross-sectional design, rather than a longitudinal one. The use of a cross-sectional design does not consider how perceptions may change over time and may not properly capture leadership as an influence process. Future research may consider the proposed relationships in a longitudinal setting to better capture interpersonal judgements, as research has shown that different attributes become more salient over time as more interactions occur (Kalish & Luria, 2016). Importantly, these salient characteristics likely reflect individual abilities and attributes, as relationship-oriented characteristics are generally more covert, requiring greater time and more

interactions to recognize (Kalish & Luria, 2016). Without proper time to recognize more covert characteristics, those with collective-level leader identities may not have been able to form perceptions based on their preferred leadership qualities. This may be reflected in the finding that competence perceptions are more likely to lead to initial leadership perceptions, while warmth perceptions are more likely to take time to form and thus more time to impact leadership perceptions (Harrison et al., 1998; Mohan & Carter, 2019). Once again, social network analysis should be considered for future research, using a full team of participants, to understand how leadership structures are affected by individual characteristics and perceptions over time.

Fourth, warmth and competence perceptions were measured with a single item each. This limitation is related to the second and third limitations, as the lack of interaction with the other team members and the limited time viewing interactions likely resulted in participants forming perceptions based on more salient characteristics. By using only single-item measures, I may not have been able to appropriately capture the intended constructs, as I cannot be sure of which characteristics of warmth or competence the participants attributed to the targets. For example, a participant may have labeled someone as warm because they perceived them as sociable, though they did not perceive them as trustworthy. Likewise, a participant may have labeled someone as competent because they perceived them as knowledgeable, not because they perceived them as intelligent. Future research should use reliable and valid scales which use multiple items to capture the constructs more effectively.

Fifth, the study may be limited in generalizability. The participant pool was limited to US citizens and may not be representative of other populations. This is

particularly likely due to the demographics of the sample (72% of the participants identified as Caucasian). Future research could investigate a more representative sample to promote generalizability. Further, the data collection occurred during the COVID-19 pandemic. While data collection occurred entirely online, participants may have been impacted in unknown ways due to the context. Results may not be indicative of populations unaffected by the pandemic.

Additionally, future research could further investigate the proposed moderating effect of leader identity level in the relationship between warmth/competence perceptions and leadership perceptions. Specifically, potential limitations that were previously discussed could be addressed by choosing not to prime leader identity level, by further manipulating warmth and competence across participants, and by considering the effect of both dimension's leader identity level scores on leadership perceptions. Further, future research could address the highlighted potential issues concerning the proposed relationship between LSS and leadership granting by exploring boundary conditions and considering moderate LSS scores. Finally, future research could fully explore all four components of leader identity along with LSS. Examining the four dimensions of leader identity along with all three levels of development may be key to understanding why individuals grant leadership. Leader identity meaning may help to explain the relationship between LSS and number of grants, as there is overlap between the concept of the highest level of leader identity meaning (shared leadership) and an egalitarian LSS, as well as the lowest level of level identity meaning (dominance) and a hierarchical LSS.

The literature would also benefit from investigation into alternate individual characteristics that may impact leadership granting behaviors, including follower identity.

While the concept of follower identity has recently been regarded as important in the construction of shared leadership (e.g., Cook et al., 2019; DeRue & Ashford, 2010; Kwok et al., 2020), it has not been well-conceptualized like leader identity. Insight into the dimensions of a follower identity as well as its relationship with leader identity are needed to better understand shared leadership as a co-constructed process of interactions.

### **Conclusion**

The present study investigated whether the leader identity level (individual vs. collective) of those granting leadership influenced the relationship between their interpersonal judgements (warmth and competence) and leadership perceptions. Further, I explored whether the LSS of those granting leadership influenced the number of people they granted leadership to. While results did not support the above propositions, future directions for research were discussed to help offer further insight into how individual level characteristics affect leadership granting behaviors in informal leadership settings.

## References

- Burke, C. S., Stagl, K. C., Klein, C., Goodwin, G. F., Salas, E., & Halpin, S. M. (2006). What type of leadership behaviors are functional in teams? A meta-analysis. *The Leadership Quarterly*, *17*(3), 288-307.  
doi:<http://dx.doi.org.portal.lib.fit.edu/10.1016/j.leaqua.2006.02.007>
- Carson, J. B., Tesluk, P. E., & Marrone, J. A. (2007). Shared leadership in teams: An investigation of antecedent conditions and performance. *Academy of Management Journal*, *50*(5), 1217–1234.  
<http://dx.doi.org.portal.lib.fit.edu/10.2307/20159921>
- Contractor, N. S., DeChurch, L. A., Carson, J., Carter, D. R., & Keegan, B. (2012). The topology of collective leadership. *The Leadership Quarterly*, *23*(6), 994–1011.
- Cook, A. (.), Meyer, B., Gockel, C., & Zill, A. (2019). Adapting leadership perceptions across tasks: Micro-origins of informal leadership transitions. *Small Group Research*, *50*(2), 227-265.  
doi:<http://dx.doi.org.portal.lib.fit.edu/10.1177/1046496418810437>
- Cronshaw, S. F., & Lord, R. G. (1987). Effects of categorization, attribution, and encoding Processes on leadership perceptions. *Journal of Applied Psychology*, *72*(1), 97–106. doi:<https://doi.org/10.1037/0021-9010.72.1.97>
- Day, D. V., & Harrison, M. M. (2007). A multilevel, identity-based approach to leadership development. *Human Resource Management Review*, *17*(4), 360–373. <http://dx.doi.org.portal.lib.fit.edu/10.1016/j.hrnr.2007.08.007>

- DeRue, D. S., & Ashford, S. J. (2010). Who Will Lead and Who Will Follow? A Social Process of Leadership Identity Construction in Organizations. *Academy of Management Review*, 35(4), 627–647. <https://doi.org/10.5465/amr.35.4.zok627>
- DeRue, D. S., Nahrgang, J. D., & Ashford, S. J. (2015). Interpersonal perceptions and the emergence of leadership structures in groups: A network perspective. *Organization Science*, 26(4), 1192–1209. <https://doi.org/10.1287/orsc.2014.0963>
- D’Innocenzo, L., Mathieu, J. E., & Kukenberger, M. R. (2016). A Meta-Analysis of Different Forms of Shared Leadership–Team Performance Relations. *Journal of Management*, 42(7), 1964–1991. <https://doi.org/10.1177/0149206314525205>
- Ehrhart, M. G. (2012). Self-concept, implicit leadership theories, and follower preferences for leadership. *Zeitschrift Für Psychologie/Journal of Psychology*, 220(4), 231–240. <http://dx.doi.org.portal.lib.fit.edu/10.1027/2151-2604/a000117>
- Ensari, N., Riggio, R. E., Christian, J., & Carlsaw, G. (2011). Who emerges as a leader? meta-analyses of individual differences as predictors of leadership emergence. *Personality and Individual Differences*, 51(4), 532-536. doi:<http://dx.doi.org.portal.lib.fit.edu/10.1016/j.paid.2011.05.017>
- Epitropaki, O., Sy, T., Martin, R., Tram-Quon, S., & Topakas, A. (2013). Implicit Leadership and Followership Theories “in the wild”: Taking stock of information-processing approaches to leadership and followership in organizational settings. *The Leadership Quarterly*, 24(6), 858–881. <https://doi.org/10.1016/j.leaqua.2013.10.005>

- Feng, Y., Hao, B., Iles, P., & Bown, N. (2017). Rethinking distributed leadership: Dimensions, antecedents and team effectiveness. *Leadership & Organization Development Journal*, 38(2), 284-302.  
[doi:http://dx.doi.org.portal.lib.fit.edu/10.1108/LODJ-07-2015-0147](http://dx.doi.org.portal.lib.fit.edu/10.1108/LODJ-07-2015-0147)
- Fiske, S., Cuddy, A., & Glick, P. (2007). Universal Dimensions of Social Cognition: Warmth and Competence. *Trends in Cognitive Sciences*, 11, 77–83.  
<https://doi.org/10.1016/j.tics.2006.11.005>
- Fiske, S., Cuddy, A., Glick, P., & Xu, J. (2002). A model of (often mixed) stereotype content: Competence and warmth respectively follow from perceived status and competition. *Journal of Personality and Social Psychology*, 82, 878–902.  
<https://doi.org/10.1037//0022-3514.82.6.878>
- Fransen, K., Delvaux, E., Mesquita, B., & Puyenbroeck, S. V. (2018). The Emergence of Shared Leadership in Newly Formed Teams With an Initial Structure of Vertical Leadership: A Longitudinal Analysis. *Journal of Applied Behavioral Science*, 54(2), 140–170. <https://doi.org/10.1177/0021886318756359>
- Gioia, D. A., & Poole, P. P. (1984). Scripts in organizational behavior. *The Academy of Management Review*, 9(3), 449–459.  
<http://dx.doi.org.portal.lib.fit.edu/10.2307/258285>
- Hammond, M., Clapp-Smith, R., & Palanski, M. (2017). Beyond (just) the Workplace: A Theory of Leader Development Across Multiple Domains. *Academy of Management Review*, 42(3), 481–498. <https://doi.org/10.5465/amr.2014.0431>

- Harrison, D. A., Price, K. H., & Bell, M. P. (1998). Beyond relational demography: Time and the effects of surface- and deep-level diversity on work group cohesion. *Academy of Management Journal*, *41*(1), 96-107.  
doi:<http://dx.doi.org.portal.lib.fit.edu/10.2307/256901>
- Ibarra, H., Wittman, S., Petriglieri, G., & Day, D. V. (2014). Leadership and identity: An examination of three theories and new research directions. In D. V. Day (Ed.), *The oxford handbook of leadership and organizations; the oxford handbook of leadership and organizations* (pp. 285-301, Chapter xvii, 892 Pages) Oxford University Press, New York, NY. Retrieved from <https://search-proquest-com.portal.lib.fit.edu/books/leadership-identity-examination-three-theories/docview/1551031635/se-2?accountid=27313>
- Johnson, R. E., Venus, M., Lanaj, K., Mao, C., & Chang, C.-H. (2012). Leader identity as an antecedent of the frequency and consistency of transformational, consideration, and abusive leadership behaviors. *Journal of Applied Psychology*, *97*(6), 1262–1272. <http://dx.doi.org.portal.lib.fit.edu/10.1037/a0029043>
- Judge, T. A., & Bono, J. E. (2000). Five-factor model of personality and transformational leadership. *Journal of Applied Psychology*, *85*(5), 751-765.  
doi:<http://dx.doi.org.portal.lib.fit.edu/10.1037/0021-9010.85.5.751>
- Kalish, Y., & Luria, G. (2016). Leadership emergence over time in short-lived groups: Integrating expectations states theory with temporal person-perception and self-serving bias. *Journal of Applied Psychology*, *101*(10), 1474-1486.  
doi:<http://dx.doi.org.portal.lib.fit.edu/10.1037/apl0000126>

- Kwok, N., Hanig, S., Brown, D. J., & Shen, W. (2018). How leader role identity influences the process of leader emergence: A social network analysis. *The Leadership Quarterly*, 29(6), 648–662.  
<https://doi.org/10.1016/j.leaqua.2018.04.003>
- Lord, R. G., & Brown, D. J. (2001). Leadership, values, and subordinate self-concepts. *The Leadership Quarterly*, 12(2), 133–152.  
[https://doi.org/10.1016/S1048-9843\(01\)00072-8](https://doi.org/10.1016/S1048-9843(01)00072-8)
- Lord, R. G., Foti, R. J., & de Vader, C. L. (1984). A test of leadership categorization theory: Internal structure, information processing, and leadership perceptions. *Organizational Behavior & Human Performance*, 34(3), 343-378.  
doi:http://dx.doi.org.portal.lib.fit.edu/10.1016/0030-5073(84)90043-6
- Lord, R. G., & Hall, R. J. (2005). Identity, deep structure and the development of leadership skill. *The Leadership Quarterly*, 16(4), 591-615.  
doi:http://dx.doi.org.portal.lib.fit.edu/10.1016/j.leaqua.2005.06.003
- Loughead, T. M., Fransen, K., Van Puyenbroeck, S., Hoffmann, M. D., De Cuyper, B., Vanbeselaere, N., & Boen, F. (2016). An examination of the relationship between athlete leadership and cohesion using social network analysis. *Journal of Sports Sciences*, 34(21), 2063–2073.
- Marchiondo, L. A., Myers, C. G., & Kopelman, S. (2015). The relational nature of leadership identity construction: How and when it influences perceived leadership and decision-making. *The Leadership Quarterly*, 26(5), 892-908.  
doi:http://dx.doi.org.portal.lib.fit.edu/10.1016/j.leaqua.2015.06.006

- Mayer, R. C., & Davis, J. H. (1999). *The Effect of the Performance Appraisal System on Trust for Management: A Field Quasi-Experiment*. 14.
- Mohan, Gouri & Carter, Dorothy. (2019). Longitudinal Effects of Non-Calculative & Affective Motivation to Lead on Informal Leader Emergence. *Academy of Management Proceedings*. 2019. 19543. 10.5465/AMBPP.2019.19543abstract.
- Nicolaides, V. C., LaPort, K. A., Chen, T. R., Tomassetti, A. J., Weis, E. J., Zaccaro, S. J., & Cortina, J. M. (2014). The shared leadership of teams: A meta-analysis of proximal, distal, and moderating relationships. *The Leadership Quarterly*, 25(5), 923–942. <http://dx.doi.org.portal.lib.fit.edu/10.1016/j.leaqua.2014.06.006>
- Offermann, L. R., Kennedy, J. K., & Wirtz, P. W. (1994). Implicit leadership theories: Content, structure, and generalizability. *The Leadership Quarterly*, 5(1), 43-58. doi:[http://dx.doi.org.portal.lib.fit.edu/10.1016/1048-9843\(94\)90005-1](http://dx.doi.org.portal.lib.fit.edu/10.1016/1048-9843(94)90005-1)
- Oyserman, D., & Lee, S. (2008). Does Culture Influence What and How We Think? Effects of Priming Individualism and Collectivism. *Psychological Bulletin*, 134, 311–342. <https://doi.org/10.1037/0033-2909.134.2.311>
- Paul Bliese (2016). multilevel: Multilevel Functions. R package version 2.6. <https://CRAN.R-project.org/package=multilevel>
- Pearce, C., & Conger, J. (2003). *All those years ago: The historical underpinnings of shared leadership* (pp. 1–18). <https://doi.org/10.4135/9781452229539.n1>
- Scott, C. P. R., Jiang, H., Wildman, J. L., & Griffith, R. (2018). The impact of implicit collective leadership theories on the emergence and effectiveness of leadership networks in teams. *Human Resource Management Review*, 28(4), 464–481. <https://doi.org/10.1016/j.hrmr.2017.03.005>

- Selenta, C., & Lord, R. G. (2005). Development of the levels of self-concept scale: Measuring the individual, relational, and collective levels. Unpublished manuscript.
- Shen, W. (2019). Personal and situational antecedents of workers' implicit leadership theories: A within-person, between-jobs design. *Journal of Leadership & Organizational Studies*, 26(2), 204-216.  
doi:<http://dx.doi.org.portal.lib.fit.edu/10.1177/1548051818784001>
- Spillane, James. (2005). Distributed Leadership. *The Educational Forum*. 69. 143-150.  
<https://doi.org/10.1080/00131720508984678>
- Van Quaquebeke, N., & Van Knippenberg, D. (2012). Second-generation leader categorization research: How subordinates' self- and typical leader perceptions moderate leader categorization effects. *Journal of Applied Social Psychology*, 42(6), 1293-1319. doi:<http://dx.doi.org.portal.lib.fit.edu/10.1111/j.1559-1816.2012.00899.x>
- Venus, M., Mao, C., Lanaj, K., & Johnson, R. E. (2012). Collectivistic leadership requires a collective identity. *Industrial and Organizational Psychology: Perspectives on Science and Practice*, 5(4), 432–436.  
<http://dx.doi.org.portal.lib.fit.edu/10.1111/j.1754-9434.2012.01476.x>
- Wang, D., Waldman, D. A., & Zhang, Z. (2014). A meta-analysis of shared leadership and team effectiveness. *The Journal of Applied Psychology*, 99(2), 181–198.  
<https://doi.org/10.1037/a0034531>

- Wellman, E. M. (2014). Enabling shared leadership in hierarchical groups [ProQuest Information & Learning (US)]. In *Dissertation Abstracts International Section A: Humanities and Social Sciences* (Vol. 75, Issues 1-A(E), p. No Pagination Specified). <http://search.proquest.com/psycinfo/docview/1548790702/4B6A8D27ACFE42E9PQ/1>
- Wisse, B., & Rus, D. (2012). Leader self-concept and self-interested behavior: The moderating role of power. *Journal of Personnel Psychology, 11*(1), 40–48. <http://dx.doi.org.portal.lib.fit.edu/10.1027/1866-5888/a000054>
- Zander, L., & Butler, C. L. (2010). Leadership modes: Success strategies for multicultural teams. *Scandinavian Journal of Management, 26*(3), 258-267. doi:<http://dx.doi.org.portal.lib.fit.edu/10.1016/j.scaman.2010.06.002>

## Appendix

### Leadership Structure Schema Scale (Wellman, 2014)

Please indicate the extent you agree or disagree with the following statements.

	Strongly agree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
Teams work best when leadership is shared among multiple team members.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Teams work best when there is a single leader in the team.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Leadership in teams is most effective when one person takes charge of the team.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Teams are often led by multiple individuals.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Teams perform best when all members of the team take responsibility for leading the team.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

### Trusting Intentions (Mayer & Davis, 1999)

Please indicate the extent you agree or disagree with the following statements.

	Strongly agree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
One should be very cautious with strangers.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Most experts tell the truth about the limits of their knowledge.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Most people can be counted on to do what they say they will do.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
These days, you must be alert or someone is likely to take advantage of you.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Most salespeople are honest in describing their products.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Most repair people will not overcharge people who are ignorant of their specialty.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Most people answer public opinion polls honestly.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Most adults are competent at their jobs.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

### The Levels of Self-Concept Scale (Selenta & Lord, 2005)

Please indicate the extent you agree or disagree with the following statements.

	Strongly agree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
I thrive on opportunities to demonstrate that my abilities or talents are better than those of other people.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have a strong need to know how I stand in comparison to my coworkers.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I often compete with other individuals at work.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel best about myself when I perform better than others.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I often find myself pondering over the ways that I am better or worse off than other individuals at work.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would be honored if I were chosen by an organization or club that I belong to, to represent them at a conference or meeting.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

When I am part of a team, I am concerned about the group as a whole instead of whether individual team members like me or whether I like them.

Making a lasting contribution to groups that I belong to, such as my work organization, is very important to me.

When I become involved in a group project, I do my best to ensure its success.

I feel great pride when my team or group does well, even if I am not the main reason for its success.