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# Title

LEADER'S PERCEPTIONS OF THEMSELVES AND THEIR RELATIONSHIP TO THEIR PERCEPTION OF FOLLOWERS Connor

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Author Schofield, Connor C

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# LEADER'S PERCEPTIONS OF THEMSELVES AND THEIR RELATIONSHIP TO THEIR PERCEPTION OF FOLLOWERS

By

Connor Chen-An Schofield

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APPROVED

Dr. Thomas Sy

Department of Psychology

Dr. Richard Cardullo, Howard H Hays Jr. Chair

University Honors

#### Abstract

Implicit Leadership Theories (ILTs) and Implicit Followership Theories (IFTs) are positive and negative traits that we typically associate with leaders and followers. Additionally, current research suggests that even in modern day, women still face stigma against their leadership. In some cases, this stigma has been found to negatively impact female leaders' performance and legitimacy as leaders. Further, women leaders tend to be associated with traits that are not associated with the typically masculine construals of desirable leadership traits. To further examine how ILTs and IFTs inform one another, this study addressed the dearth of research on whether individuals' ILTs of themselves are related to their perceptions of typical followers IFTs. Additionally, this study examined the role of gender by comparing individuals identifying as male and female on their ILT prototypes and antiprototypes. A sample of 103 leaders were recruited to examine their ILT's and their perception of typical follower IFT. Correlational analyses revealed significant relationships of moderate strength between self-ILT prototypes and typical IFT prototypes, as well as self-ILT antiprototypes and IFT antiprototypes. This implies that, to an extent, one's belief in themselves as leaders is related to how they perceive typical followers. Additionally, results revealed that there are significant differences between men and women in antiprototypical traits but not prototypical traits. The implications of this study suggest that gender plays a role in how leaders perceive themselves and can inform future research on the effects of gender on leadership as well as the relationship between ILTs and IFTs in general.

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## Introduction

The brain needs to process an immense amount of information daily for our functioning. Senses, cognition, motor movements; these are but a fraction of the many bits of information that the brain processes at any given moment. Processing all of this unfiltered information would be too much for it to handle. In order for the brain to simplify this processing and use energy more efficiently, we use cognitive constructs to condense information into more simple, yet meaningful and easy to access ideas (Rosch, 1978). These ideas are often accessed unconsciously when we are placed in contexts that would activate them, and these ideas can be extended to many different areas of cognition and context (Shondrick & Lord, 2010). In the realm of leadership and followership, there are Implicit Leadership Theories (ILTs) and Implicit Followership Theories (IFTs) , both of which define a set of traits that we associate with leaders and followers respectively (Epitropaki & Martin, 2004; Sy, 2010).

#### Implicit Leadership Theories (ILTs)

ILTS are sets of dimensions or traits that we typically associate with leaders (Epitropaki & Martin, 2004). These can either be positive or negative, and they are separated based on this valence. Dimensions in the positive category, also called *prototypes*, include Sensitivity, Dynamism, Dedication, and Intelligence. First, Sensitivity can be thought of as a leader's ability to sympathize, empathize, and work to address the needs and wants of their followers. Other words that describe this prototype include terms such as Sincere, Compassionate and Understanding. Next, Dynamism refers to a leader's ability to adapt to situations in order to lead effectively, as well as resilience in the face of unexpected change. Other words that describe this prototype include terms to a leader's commitment to a project or cause. Other words that describe this prototype include this prototype include Motivated and Hard-working.

Finally, Intelligence refers to a leader's knowledge and their ability to effectively apply it in situations that call for it. Other words that describe this prototype include Clever, Knowledgeable, and Educated (Epitropaki & Martin, 2004). There have been other traits described as being prototypic traits of ILTs, such as Strength and Charisma, but for the sake of simplicity, the present work will focus on the four ILT prototypes described above, following the work of Epitropaki & Martin (2004).

Additionally, there are two negative dimensions, or *antiprototypes*, that are used to describe leaders: Tyranny and Masculinity. Tyranny refers to a leader's tendency to express tyrannical behaviors and actions. Other words that describe the dimension of Tyranny include Domineering, Loud, and Pushy. Masculinity refers to a leader's tendency to express stereotypically masculine behaviors, such as stubborn or competitive behavior, and is associated with words like Male and Masculine (Epitropaki & Martin, 2004). Figure 1 provides a visual guide as to how ILT dimensions are described and grouped.

#### Implicit Followership Theories (IFTs)

Conversely, Implicit Followership Theories (IFTs) are a set of cognitive constructs and traits that are typically associated with followers (Sy, 2010). Similar to ILTs, these can either be positive or negative and are sorted into categories based on that valence. There are three main dimensions that fall into the prototype category: Enthusiasm, Industry, and Good Citizen. Enthusiasm refers to a follower's willingness to do tasks as instructed or be led. Other words or phrases that may describe this trait include Excited, Outgoing, and Happy. Next, Industry refers to a follower's ability to complete their designated tasks in an efficient and productive manner, and its synonyms include traits such as Hardworking, Productive, and Goes above and beyond.

Finally, Good Citizen refers to a follower's ability to cooperate with others. This includes words such as Loyal, Team Player, and Reliable.

Much like ILTs, IFTs have antiprototypes that describe a set of negative traits that are associated with followers (Sy, 2010). There are three primary traits associated with follower antiprototypes: Incompetence, Insubordination, and Conformity. Incompetence refers to a follower's inability to perform a task, and includes similar terms such as Slow, Uneducated, or Inexperienced. Insubordination, on the other hand, refers to a follower's tendency to work against others, both leaders and followers. Other words that describe this trait include Arrogant, Rude, and Bad Temper. Finally, Conformity refers to a follower's tendency to stick to social norms and conform to the beliefs and ideas of leaders or other followers, and other words and phrases that describe this trait include Easily Influenced, Soft-spoken, and Follows Trends. Figure 2 provides a visual representation of how IFT dimensions are described and grouped.

#### ILTs and IFTs in Context

One notable quality about ILTs and IFTs is that they are context-dependent (Shondrick & Lord, 2010). People may hold ILTs in reference to themselves, their coworkers, ideal leaders, or typical leaders, just to name a few. Other contextual cues that can influence these schemas include demographic factors like gender, ethnicity, and age, among others. Any number of descriptors can be used to describe leaders and leadership, or followers and followership in the context of IFTs. For example, in a cultural context, it was found that Chinese individuals valued different traits in leaders compared to American individuals, and therefore held different ILTs about their ideal leaders as a result (Ling et al., 2000). Similarly, within American culture, leadership perceptions of Asian-Americans were perceived to be associated with competence such as intelligence in leaders, while leadership perceptions of Caucasian-Americans were found

to be more associated with agentic behavior like dedication in leaders, and this difference in association may cause difficulties for Asian-Americans attempting to gain leadership positions within Caucasian-American organizations (Festekjian et al., 2014; Sy, 2010). This example helps to illustrate the variability in ILTs, and while there have not been many studies comparing the exact differences between cultures in IFTs, one could assume a similar variability can be seen in IFTs as well.

Though ILTs and IFTs may exist in many contexts, there has been little research on the connection between ILTs and IFTs. Shondrick & Lord (2010) note how leadership is "an ongoing, dynamic, two-way exchange between leaders and followers that is structured by both parties' implicit theories" (p. 1). Additionally, this paper states that perceiving a leader or leadership actions could cause a subsequent activation of follower schema in observers. The opposite can also occur. By this logic, self-observation of oneself as a leader and their ILTs may be able to activate follower schema and IFTs. Furthermore, it was shown by Smith & Foti (1998) and Foti & Hauenstein (2007) that activation of a prototype causes activation of a network of related prototypes. While both of these studies focused on leadership prototypes, it could be possible that this activation of prototypes may cause activation of other sets of related prototypes i.e. follower prototypes. The same may be said of antiprototypes activating a network of antiprototypes, though there has been no experimental data proving this as of yet. Thus, it was hypothesized that:

*Hypothesis 1a: ILT prototypes of oneself are positively correlated with IFT prototypes of typical followers, as leadership prototypes are likely to activate followership prototypes.* 

Hypothesis 1b: ILT antiprototypes of oneself are positively correlated with IFT antiprototypes of typical followers, as leadership antiprototypes are more likely to activate followership antiprototypes.

### **Gender and ILTs**

In terms of context, gender is a prominent descriptor used when classifying someone as a leader, and stereotypes pertaining to gender are often easily and automatically activated (Eagly & Karau, 2002; Shondrick & Lord, 2010). Furthermore, the very definition of leadership is thought to be biased towards males, as men are typically thought to embody agentic and self-reliant behaviors characteristic of leaders, while women are thought to embody the more communal behaviors that usually belong to followers (Braun et al., 2017). This has manifested primarily in stigma against women as leaders in the workforce. The 2021 Reykjavik Index, a measurement tool used to determine the bias against women in leadership positions, showed that, even in very progressive countries such as the United States and the United Kingdom, negative views and stigma against women generally remain present, though there is some positive change occurring in many countries as we move towards an understanding of both men and women as equally capable leaders ("Reykjavik Index," 2021).

The current stigma against women in leadership affects how women operate in leadership positions. This is reinforced by a theory known as *role-congruity theory*, which states that men and women, along with other demographic groups, are expected to adhere to these ascribed social roles as much as possible, and any deviation is met with social disapproval and general disdain (Eagly & Karau, 2002). In the workplace, this disdain is displayed by way of challenges to a leader's legitimacy. Vial and colleagues (2016) and Herbst (2020) describe how female leaders experience more negative behaviors towards their leadership while experiencing less

cooperation and extra-role cooperative behaviors, such as working overtime to complete a project or actively working with coworkers to go above and beyond. Female leaders will then attempt to act to remedy this challenge by either becoming more aggressive and masculine in their leadership styles or more submissive and less forceful. Male leaders typically do not experience these challenges to their authority and legitimacy, highlighting a discrepancy between the treatment of male and female leaders. Thus, it was hypothesized that:

Hypothesis 2: Given the stigma against female leaders as well as the stereotype attributed to males as being better leaders, male self-reported ILTs will be higher in prototypes and antiprototypes when compared to female self-reported ILTs.

### **Purpose of the Present Study**

This study has significant implications for understanding the relationships between ILTs, IFTs, and gender in leadership. Firstly, as leadership is often thought of as a relationship between leader(s) and follower(s), being aware of these traits and how different people express them can be a way to examine and possibly improve these relationships. Mayer et al. (2008) show that leaders can have direct effects on improving the job satisfaction of followers by attending to their followers' needs, while both Heaphy & Dutton (2008) and Bono et al. (2007) show that positive workplace relationships can improve both physical and mental health. Additionally, Stein (2021) also indicates how having positive IFTs as a leader can help to improve follower job satisfaction. On the other hand, negative relationships can decrease wellbeing, job satisfaction, and can even play a part in the development of mental disorders such as depression (Pino & Rossini, 2012; Stoetzer et al., 2009). Understanding the interplay between ILTs and IFTs can help to enlighten both leaders and followers about their possible biases towards themselves and towards members

of both opposite and similar roles. This could allow for the development of programs to remedy these biases as well as encourage development of prototypical traits.

In addition to this, there has been a dearth of literature referring to the interplay between ILTs and IFTs. Leadership is an ongoing exchange between leaders and followers. Despite this description, however, there has been little to no research investigating the possible links between ILTs, IFTs, and the effects their interplay may have on workplace and group interactions. Thus, investigating the relationship between ILTs and IFTs should add to the literature and provide some small basis for further investigation into the nature of ILT and IFT relationships, both in general as well as in specific contexts.

Finally, elucidating the relationship between gender and one's self-perception of themself as a leader could help determine what traits should be promoted and/or supported in order to encourage more women to be comfortable with acting as leaders, as well as to decrease stigma and other negative behaviors towards women overall. Conversely, men can also benefit from understanding their own ILTs and how they are affected by their gender and the stereotypes surrounding them. Powell & Butterfield (2017) supports this, calling for further research on gender stereotypes in relation to ILTs and the traits of a good or bad leader to be performed. In addition, Powell and Butterfield (2017) note how femininity plays more of a role in our ILTs than previously thought, and suggests how a leader high in both masculine and feminine traits may experience advantageous effects based on their high scores.

The purpose of this study was to explore the relationships between leaders' ILT traits about themselves as well as their IFTs about their followers. If the aforementioned hypotheses are found to be correct, this study will add to a library of knowledge about interpersonal and intrapersonal implicit theory relationships as they relate to one another. This information may be

of particular help to individuals whose constant switching between leader and follower roles will cause repeated activation of their ILTs and IFTs, such as middle managers (Geer, 2014). In addition, the significant discovery of a link between gender and ILTs may help to create future solutions or programs for leaders that can help address inequalities and biases towards women as leaders, which could help to decrease stigma overall and improve workplace cohesion.

## Methods

### **Participants**

A team of trained undergraduate research assistants recruited leaders from their existing range of contacts. Research assistants were instructed to recruit leaders that were over 18 years old, English speaking, worked over 20 hours, and were in contact with followers on a daily basis. The research assistants did not participate in the survey themselves; their roles were complete after they recruited leaders for the study.

In total, a sample of 103 leaders was recruited. Of these leaders, 54% identified as female, while 46% identified as male. The racial and ethnic breakdown of this sample was: 32% Hispanic/Latino, 25% Asian, 17% Caucasian, 9.0% African-American, 1.0% Pacific Islander, and 17% identifying as "Other". The specified ethnic identities mentioned in the "Other" category included 3.0% Middle Eastern, 1.0% Egyptian, 1.0% Persian/Iranian, 1.0% Native American, 1.0% Chicano, 1.0% Asian Indian, and 1.0% Armenian, with 8.0% of respondents not listing their ethnicity at all.

In terms of managerial levels, 5.0% described themselves as non-managerial, 40% identified themselves as first-line management, 35% of participants identified themselves as middle management, and 20% of participants identified themselves as upper/senior management. These leaders had a variety of educational levels, and most participants identified as possessing a

high school diploma (38%) or Bachelor's degree (25%; Associate's degree 11%, Master's degree: 18%, Doctorate degree: 3.0%, not given: 3.0%).

These leaders had an average employee count of 15.52 employees reporting directly to them (SD=19.93), with a maximum of 150 employees and a minimum of 0 employees. On average, they spent 41.21 hours at work per week (SD=16.64 hours), with a maximum of 95 hours worked and a minimum of 8 hours worked. In terms of employee interaction, participants spent an average of 4.08 days per week (SD=1.44) interacting with their employees, with a maximum of 7 days per week and a minimum of 0 days per week. Days were used instead of hours, as it would be very difficult to track exactly how many hours one spends with their followers at any given time at work. Additionally, it should be noted that seven responses for this particular demographic were removed as the number of days they reported far exceeded the seven-day week commonly used. Most likely, days were misread as hours, and these responses were removed before calculations were performed.

The leaders worked in a variety of industries and gatherings. Of these, 18% identified as working in the food industry, 13% as part of the retail industry, 11% as part of the education industry, 8.0% as part of the healthcare industry, 5.0% as part of the real estate industry, 4.0% as part of the administration industry, 4.0% as part of academia, 3.0% as part of the wholesale industry, 3.0% as part of a religious organization, 3.0% as part of the financial industry, 3.0% as part of a nonprofit organization, 2.0% as part of the fitness industry, 2.0% as part of the gaming/recreation industry, 2.0% as part of the hospitality industry, 2.0% as part of the parking industry, and 17% as part of another industry. See Table 1 for a full breakdown of industry demographics. Though not a full representation of the population at large, this diverse sample should increase the generalizability of the results.

#### **Measures and Materials**

In order to measure ILTs, participants were asked to indicate the degree to which they thought they embodied descriptor words of ILTs sourced from Epitropaki & Martin (2004). There were a total of 21 ILT items based on a 10-point Likert scale, with 1 = Not at all *characteristic* and 10 = Extremely *characteristic*. The 21 questions were divided and ordered as follows: three asked about descriptors related to Sensitivity, four asked about descriptors related to Intelligence, three asked about descriptors related to Dedication, three asked about descriptors related to Tyranny, and two asked about descriptors related to Masculinity. The traits of Sensitivity, Intelligence, Dedication, and Dynamism were grouped together as prototypes for analysis, while the Tyranny and Masculinity traits were grouped as antiprototypes (see Appendix B).

The measurement of IFTs followed a similar format to ILTs, except asking about how the participants rated typical followers in terms of IFT descriptors instead. There were 18 IFT items total rated on a 10-point Likert scale, with 1 = Not at all characteristic and 10 = Extremely characteristic. IFT items were divided and ordered as follows: three asked about descriptors related to Industry, three asked about descriptors related to Incompetence, three asked about descriptors related to Good Citizen, three asked about descriptors related to Conformity, three asked about descriptors related to Enthusiasm, and three asked about descriptors related to Insubordination. The traits of Industry, Good Citizen, and Enthusiasm were grouped together as prototypes for analysis, while the traits of Incompetence, Conformity, and Insubordination were grouped together as antiprototypes (see Appendix B).

At the end of the survey, participants were asked to share demographic information including gender, ethnic/racial background, and information about their employment. Gender

identities were determined based on their answers in the questionnaire, with a "0" denoting a female-identifying individual and a "1" denoting a male-identifying individual.

## **Design and Data Collection**

After providing their informed consent, participants were asked to complete the survey on an electronic device. This survey was completed using the online surveying platform Qualtrics (Qualtrics, Provo, UT, 2019). In total, the survey took about 10-15 minutes to complete. Participants were not compensated for their time in this survey.

### Procedures

Once all data was collected, descriptor questions were averaged to form scores for the ILT and IFT dimensions. After this, the aggregated averages for the dimensions were combined to form averages for ILT/IFT prototypes and antiprototypes. To test the first hypothesis, Pearson correlations were then calculated using these aggregates at a 95% confidence interval. To test the second hypothesis, multiple Welch t-tests were conducted to compare the differences in ILT prototypes and antiprototypes between the female and male comparison groups. The first t-test compared ILT prototypes of males and females. The second t-test compared ILT antiprototypes of males and females.

## Results

### Correlations

To test Hypothesis 1, correlations were calculated using these aggregates via the Pearson correlation method at a p-value less than .05. Of the 103 participants, one was partially excluded as they had failed to answer a number of questions during the survey. The questions they did answer were included in the data. Using the averages of the prototypes and antiprototypes, significant correlations of moderate strength were discovered for Leader Self-ILT Prototypes x

Typical Follower IFT Prototypes and Leader Self-ILT Antiprototypes x Typical Follower IFT Antiprototypes. For the Leader Prototypes x Follower Prototypes, the correlation was 0.3178 (df = 100, p = .001). For the Leader Antiprototype x Follower Antiprototype correlation, the correlation value was 0.3698 (df = 100, p = .0001). These can be visualized in Table 2.

#### Welch T-Tests

To examine the second hypothesis, multiple independent samples t-tests were conducted to compare the differences in prototypes and antiprototypes between the two comparison groups (male and female). Based on Hypothesis 2, differences between both groups for ILT prototypes and antiprototypes were expected. Prior to conducting the t-tests, F-tests for variance were conducted to check if equal variance assumptions were met. Tests for variance showed that the ratio of variances in both groups was not equal to one, thus equal variance assumptions were not met. Then, the t-tests were conducted using the ILT prototype/antiprototype aggregates mentioned above. The Gender x Leader Prototype t-test suggested that men and women did not differ significantly on ILT prototypes, t(92.88) = 0.78, p = 0.44. The Gender x Leader Antiprototype t-test was considered to have significant differences, t(85.04)=10.97, p = <.001. In terms of means from these data, Male x Prototypes averaged a score of 7.28 (SD=1.65); Male x Antiprototypes averaged a score of 4.84 (SD=1.46); Female x Prototypes averaged a score of 7.04 (SD=1.46); Female x Antiprototypes averaged a score of 2.04 (SD=1.12). These results can be seen in Table 3.

## Discussion

This study sought to elucidate the relationship between ILTs and IFTs. As stated in Shondrick and Lord (2010), leadership is a relationship between leaders and followers. Because ILTs and IFTs are activated upon interacting with both leaders and followers respectively

(Epitropaki & Martin, 2004; Sy, 2010), it was hypothesized that ILTs and IFTs would be related, because our conceptions and approvals/disapprovals of leaders or followers could be dependent on these constructs. The findings of this study suggest that self-ILT prototypes and IFT prototypes of typical followers are positively correlated (see Figure 3) and that self-ILT antiprototypes are positively correlated with IFT antiprototypes of typical followers as well (see Figure 4). These findings support Hypotheses 1a and 1b, suggesting a link between self-conceptions of leadership and conceptions of typical followership. This further supports the correlation between ILTs and IFTs as claimed by Shondrick & Lord (2010).

The implications of this study might not be surprising given the reciprocal relationship between leaders and followers discussed in much of the literature (Lord et al., 2020; Shondrick & Lord, 2010). Based on this kind of dynamic, ILTs and IFTs should also correlate with each other to some extent. If they were too different, it would be difficult for these ideas to cohere with one another, which would contradict with the idea of the reciprocal relationship of leadership. The results of this study indicate that a significant relationship of moderate strength exists between these two variables. One point of interest is the stronger correlation found between ILT and IFT antiprototypes than prototypes. This may simply be due to the calculations found from this particular sample, and more research may be required to further reinforce this idea, as there exists little to no literature that implies antiprototypes should be more strongly connected than prototypes. Similarly, the directionality of these relationships between ILT/IFT prototypes and antiprototypes have yet to be experimentally determined.

Additionally, this study sought to examine the relationship between gender and self-perceived ILTs to determine differences between males and female leaders on ILT prototypes. Figure 5 shows the results of the t-tests, while Figure 6 shows histograms of the

means as divided by gender. The results from the t-tests indicate that, while there were no significant differences found between men and women in the prototypic traits of ILTs, there were significant differences in the antiprototypic traits, thus partially supporting Hypothesis 2 by highlighting a link between gender and ILT antiprototypes (as seen in Figures 3 and 4). The original hypothesis posited that both ILT prototype and antiprototype endorsement would be higher in males compared to females on account of the bias towards males as leaders. However, it was found that only antiprototypes differed between groups. One possible explanation for the difference found in ILT antiprototypes may come from the gender relation to the antiprototype Masculinity. Females, for the most part, would probably not consider themselves to be masculine, while males would most likely consider themselves to be masculine. This is further supported by Figure 6, which shows that, male antiprototype scores followed a normal distribution, but female antiprototype scores followed a left-skewed distribution, suggesting strong disagreement with the idea of being antiprototypical as leaders. To investigate this inference further, a posteriori t-test was conducted comparing only the Tyranny trait, and there were no significant differences found. Thus, it stands to reason that the use of the term "Masculinity" as an antiprototypical trait for leadership may have affected how the antiprototypes were scored.

Despite the aforementioned possibilities , the interesting findings of study remain. While the vast majority of data shows stigma against female leaders exists and affects them greatly (Vial et al., 2016; Herbst, 2020), the literature also seemed to imply that males would be more likely to experience higher ILTs on account of the widespread support for and focus on males as leaders. This goes so far as to claim to the very construction of leadership being stereotypically oriented towards male traits (Eagly & Karau, 2002; Powell & Butterfield, 2017), as well as

gender being one of the strongest categories used to determine who would be a good leader (Eagly & Karau, 2002). However, based on these results, it would seem that, beside the trait of Masculinity, there is little difference between the gender groups in terms of self-rated ILTs. This data seemingly falls in line with Taylor & Hood (2011), who stated that male and female leaders did not differ significantly in terms of how they rated themselves as leaders.

Perhaps this, in turn, could imply that prejudices against leaders on a gendered basis is primarily external (i.e. socially constructed), with little to no internal influence on whether or not one considers themselves to be a certain kind of leader. This could be a possible explanation for reconciling this data while considering past research, because much of the literature on female leadership and pushback against it revolves around how others react to female leaders. For example, both Vial and colleagues (2016) and Herbst (2020) observed that female leaders typically have to establish themselves as legitimate leaders, lest they face negative behaviors and discouragement from their followers. Similarly, Schein (2007) notes how corporate males typically view female leaders as less capable and less qualified than male leaders. Both of these examples are based on external evaluations of female leadership, and not internal. Conversely, Taylor & Hood (2011) mention how, in cases where their belief of themselves as a leader is higher than their beliefs in stereotypes pertaining to female leaders, women typically perform better than those whose valuations of themselves fall more in line with female leadership stereotypes, i.e. if their internal beliefs overwrite external beliefs of themselves as leaders, women tend to perform better in leadership roles. While the results described in this section are compelling, it is important to make note of limitations.

#### Limitations

One limitation to this study was possible sample bias. For example, the majority of the participants (54%) in this study identified as female, thus possibly skewing the results towards females instead of to the general population. Similarly, in terms of ethnicity, the sample was biased towards Hispanic Americans and Asian Americans. To remedy this, in future studies, researchers should seek to acquire more participants from a wider variety of diverse backgrounds, so as to more accurately represent the population.

Another limitation to this study was the rather subjective nature of the study. This study used a self-report questionnaire. While there is nothing wrong with questionnaires inherently, Razavi (2001) notes how their use may be confounding to some degree in performing investigations of this topic, as the act of asking questions about a person and their self-conceptions may cause them to falsify their answers in order to hide aspects of themselves or increase their perceptions of themselves. Similarly, simply implying that one may be asked about leaders or followers may prime them to think about said topics, thus biasing the data to some extent. Further still, Herbst (2020) notes how males tend to overestimate their abilities, which could have caused some level of overreporting in the data, while females have a tendency to underestimate their abilities and attribute successes to external factors, which may have caused some underreporting in the data. Either way, some error in the data may possibly have been introduced because of this.

## **Future Research**

Future research should look to expand upon the contexts in which ILTs and IFTs relate to one another, as literature regarding this particular area of research is scarce. As stated above,

both ILTs and IFTs are context dependent, which can allow for the manipulation of how one views leaders and followers. For example, future studies may look into how leaders' personal relationships with their own followers may affect their self-ILTs as well as their IFTs of their followers. Whether the relationship is a positive, negative, or neutral one, it could provide yet another reason to create a positive work environment for followers by setting an example as a leader. Another possible way is to examine how one's ILTs of different demographic groups may affect their IFTs of said groups as well. While gender was investigated in this study, there are other demographic groups one could use for investigation. For example, if one were to think of Asian-American leaders and the ILTs they have surrounding them, such as in Festekjian and colleagues (2014), one could also investigate how these affect their IFTs of Asian-Americans and if there are any effects on how one group is perceived. There are a number of ways one could examine ILTs and IFTs and a variety of contexts, broad or narrow, that one can examine them through. Cultural contexts, industrial contexts, educational level contexts, all are promising future research avenues for ILT/IFT relationships. Similarly, further research into possible mediators and moderators can be performed to determine what possible effects these have on the ILT/IFT relationship.

Goswami and colleagues (2019) showed that positive leader IFTs affected how they perceived actual followers, which in turn positively affected their relationships with said followers and improved. Perhaps, from this, one could examine how one's self-concepts as followers affect their IFTs of themselves and how that translates into their perceptions of leaders and ILTs surrounding them. The aforementioned contextual changes could also affect how one chooses to go about researching these topics in the future.

### Conclusions

This research sought to provide insight into the interaction between ILTs and IFTs and contributes to the literature through proving that this connection does exist. This link can be possibly explained because leaders and followers must interact in order for leadership to occur. In this relationship, both ILTs and IFTs must be activated in order for both groups to be recognized as leaders and followers respectively. Thus, it would stand to reason that there would be a connection between one's intrapersonal ILTs and interpersonal IFTs. This research showed a relationship between the two, but much information lies yet undiscovered as to what the exact nature of this relationship is, what exactly its mediators and moderators are, as well as what its antecedents and consequences are.

Additionally, this research sought to provide insight into whether gender influenced a person's ILTs or affected them in any way. The results revealed that to be true for antiprototypical traits of ILTs, but not prototypical traits of ILTs. The relationship between ILTs and IFTs could have great implications and effects on how we train leaders and followers for their roles. Similarly, the discovery of gender and its effects on ILT self-scores could reinforce the idea of external social pressures being responsible for stigma against female leaders. Future research should look in this direction to further explore exactly how and why ILTs and IFTs interact in the manner that they do, as well as look into other social influences on ILTs such as culture or ethnicity.

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# **Appendix A: Tables and Figures**

**Table 1.** Demographic breakdown of participants by industry worked. Total n=103

participants.

Industry	n	% of sample	Industry	n	% of sample
Food	19	18.45%	Marketing	1	0.97%
Retail	13	12.62%	Government	1	0.97%
Education	11	10.68%	Design	1	0.97%
Healthcare	8	7.77%	Martial Arts	1	0.97%
Real Estate	5	4.85%	Manufacturing	1	0.97%
Administration	4	3.88%	Construction	1	0.97%
Research/Academia	4	3.88%	Music	1	0.97%
Wholesale	3	2.91%	Casino and Gambling	1	0.97%
Religious Organization	3	2.91%	Heating, Ventilation, and Air Conditioning	1	0.97%
Finance	3	2.91%	Beauty	1	0.97%
Nonprofit Organization	3	2.91%	Residential Life at a University	1	0.97%
Fitness	2	1.94%	Auto	1	0.97%
Gaming/Recreation	2	1.94%	Sports	1	0.97%
Hospitality	2	1.94%	Information	1	0.97%
Parking	2	1.94%	Transportation	1	0.97%
Law Enforcement	1	0.97%	Catering	1	0.97%
Foster Care	1	0.97%			

Variable	М	SD	1	2	3
1. ILT Self Prototypes	7.15	1.54			
2. ILT Self Antiprototypes	3.32	1.90	.18 [02, .36]		
3. IFT Typical Prototypes	5.96	1.56	.32** [.13, .48]	.06 [14, .25]	
4. IFT Typical Antiprototypes	4.28	1.30	.10 [09, .29]	.37** [.19, .53]	.02 [17, .21]

 Table 2. Means, SD's and Correlational Values of ILT Prototypes and Antiprototypes

*Note:* \* indicates p < .05, \*\*indicates p < .01. df = 100.

Table 2.	Results	of	Welch	t-tests.	for	each	gender
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	Group 1 (Female)				Group 2 (Male)						
ILT Dimensions	Μ	SD	n	Μ	SD	n	t	р	CI Lower	CI Upper	df
ILT Self Prototypes	7.04	1.46	53	7.28	1.62	46	0.78	.4482	-0.37	0.85	92.88
ILT Self Antiprototypes	2.04	1.12	53	4.84	1.46	46	10.97	2.2 x 10 <sup>-16</sup> **	2.78	3.31	85.04

*Note:* \* indicates p < .05, \*\* indicates p < .01



*Figure 1.* Concept map depicting the categorization of dimensions that make up ILTs. Based on Epitropaki & Martin (2004). Created using Creately (2022).



*Figure 2.* Concept map depicting the categorization of dimensions that make up IFTs. Based on Sy (2010). Created using Creately (2022).



*Figure 3*. Correlation scatter plot of self perceived ILT Prototypes and typical follower IFT prototypes, r(100) = .32, p = .0011.



*Figure 4*. Correlation scatter plot of self perceived ILT Antiprototypes and typical follower IFT Antiprototypes, r(100) = .37, p = .0001.



*Figure 5.* Graph for t-test comparing self perceived ILT Prototypes across gender groups (top).Graph for t-test comparing self perceived ILT Antiprototypes across gender groups (bottom).

*Note.* 0 = female comparison group; 1 = male comparison group

## Histogram of Male Prototype Scores



*Figure 6*. Histogram depicting Male Prototype aggregate average scores.



## Histogram of Female Prototype Scores

Female Prototype Score Values

Figure 7. Histogram depicting Female Prototype aggregate average scores.



Figure 8. Histogram depicting Male Antiprototype aggregate scores.



Figure 9. Histogram depicting Female Antiprototype aggregate scores.

## **Appendix B: Questionnaire**

**Self Implicit Leadership Theory** 

We would like to ask you about your impressions of yourself as a leader. Below is a list of words that describe leaders. Please use the 10-point rating scale to indicate the extent to which each trait is characteristic of yourself as a leader:

Not at all Characteristic 1----2----3-----4----5-----6-----7----8----9----10 Extremely Characteristic

- 1. Categories of Leaders Helpful You as leader
- 2. Categories of Leaders Understanding You as leader
- 3. Categories of Leaders Sincere You as leader
- 4. Categories of Leaders Intelligent You as leader
- 5. Categories of Leaders Educated You as leader
- 6. Categories of Leaders Clever You as leader
- 7. Categories of Leaders Knowledgeable You as leader
- 8. Categories of Leaders Dedicated You as leader
- 9. Categories of Leaders Motivated You as leader
- 10. Categories of Leaders Hard-working You as leader
- 11. Categories of Leaders Energetic You as leader
- 12. Categories of Leaders Strong You as leader
- 13. Categories of Leaders Dynamic You as leader
- 14. Categories of Leaders Domineering You as leader
- 15. Categories of Leaders Pushy You as leader
- 16. Categories of Leaders Manipulative You as leader
- 17. Categories of Leaders Loud You as leader

- 18. Categories of Leaders Conceited You as leader
- 19. Categories of Leaders Selfish You as leader
- 20. Categories of Leaders Male You as leader
- 21. Categories of Leaders Masculine You as leader

**Typical Implicit Followership Theory** 

We would like to ask you about your impression of the average typical followers in general. Below is a list of words that describe followers. Please use the 10-point rating scale to indicate the extent to which each trait is characteristic of typical followers:

Not at all Characteristic 1----2----3-----5-----5-----9-----10 Extremely Characteristic

- 1. Categories of Followers Hardworking Typical followers
- 2. Categories of Followers Productive Typical followers
- 3. Categories of Followers Goes above and beyond Typical followers
- 4. Categories of Followers Uneducated Typical followers
- 5. Categories of Followers Slow Typical followers
- 6. Categories of Followers Inexperienced Typical followers
- 7. Categories of Followers Loyal Typical followers
- 8. Categories of Followers Reliable Typical followers
- 9. Categories of Followers Team Player Typical followers
- 10. Categories of Followers Easily Influenced Typical followers
- 11. Categories of Followers Follows Trends Typical followers
- 12. Categories of Followers Soft Spoken Typical followers
- 13. Categories of Followers Excited Typical followers
- 14. Categories of Followers Outgoing Typical followers
- 15. Categories of Followers Happy Typical followers
- 16. Categories of Followers Arrogant Typical followers
- 17. Categories of Followers Rude Typical followers
- 18. Categories of Followers Bad Tempered Typical followers