

RESEARCH ARTICLE

Fulfilled Expectations about Leaders Predict Engagement through LMX

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Abstract

Drawing on the bandwidth-fidelity principle (Cronbach & Glaser, 1957), this paper challenges the use of broad Implicit Leadership Theories (ILTs) domains in predicting organizational outcomes (i.e., prototypic ILTs and anti-prototypic ILTs) and provides preliminary arguments for examining ILTs narrow traits (e.g., sensitivity, intelligence) effects on LMX and consequently on work engagement. Specifically, using polynomial regression and response surface methodology, I examined the effects of followers' ideal-actual ILTs congruence on LMX. Additionally, using the block variable approach, I tested the mediation effects of LMX on the relationship between ideal-actual ILTs congruence and work engagement, on a sample of 68 employees. The results showed that followers' fulfilled expectations about sensitivity and tyranny had linear effects on LMX, indicating the generalized benefits for leaders to be high on sensitivity and low on tyranny to enhance followers' LMX. Intelligence, dedication, dynamism, and masculinity had non-linear effects, revealing that fulfilling followers' expectations are the best option for leaders to develop high-quality relationships with their followers. The mediation hypothesis received partly support, suggesting that additional mechanisms can explain the relationship between followers' ideal-actual ILTs congruence and work engagement.

Keywords

Implicit Leadership Theories; narrow traits; polynomial regression; bandwidth

The human mind is hardwired to make sense of the world. To cope with the complexities of our lives, we rely on simplifying cognitive mechanisms, such as conceptual categories or mental models to map and navigate the world (Fiske & Taylor, 1991). Implicit Leadership Theories (ILTs) are an example of such mental models that incorporate desired attributes of leaders in professional settings (Eden & Leviatan, 1975; Lord, Foti, & de Vader, 1984; Lord & Maher, 1991). Their practical utility stems from their role during leader-follower interactions when they are used by their holders as benchmarks to predict and interpret leaders' behaviors and attitudes and to respond in an adaptive manner (Lord & Maher, 1991).

ILTs have been proven to have considerable significance in predicting employees' organizational attitudes and their performance (e.g., Ayman & Chemers, 1983; Biermeier-Hanson & Coyle, 2019; Epitropaki & Martin, 2005; Junker, Schyns, van Dick, & Scheurer, 2011; Khorakian & Sharifirad, 2018; Riggs & Porter, 2016). Building upon initial theoretical assumptions, most of the research conducted on ILTs has focused on how ILTs impact various organizational outcomes through the relationship between leaders and followers (leader-member exchange, LMX; Junker & van Dick, 2014). Specifically, when leaders live up to their followers' expectations, there is a high likelihood for followers to have

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positive affective reactions towards their leaders and to develop high-quality relationships with them, whereas when leaders fall short of their followers' expectations, followers tend to develop negative affective responses and low-quality relationship with their leaders (Lord & Maher, 1991). Consequently, followers behave in a manner aligned with their feelings and the perceived quality of the dyadic relationship which eventually will lead to different outcomes, such as counterproductive work behaviors (CWB) in case of low LMX (Biermeier-Hanson & Coyle, 2019) or organizational commitment in case of high LMX (Epitropaki & Martin, 2005).

Many authors have tried to determine the content of ILTs. The best empirically tested and most extensively used factor structure is the one developed by Offerman, Kennedy, and Wirtz (1994) and revised by Epitropaki and Martin (2004). It consists of 21 attributes of leaders, grouped into 4 prototypic or positive factors (Sensitivity, Intelligence, Dedication, and Dynamism) and 2 anti-prototypic or negative factors (Tyranny and Masculinity). Lately, a growing body of research has tested the impact of the congruence between followers' preferences regarding ILTs traits of ideal leaders and the recognition of those ILTs traits in their actual leaders on various outcomes, such as perceived leadership, work attitudes, turnover intentions, performance or development (e.g., Rahn, Jawahar, Scrimshire, & Stone, 2016; Riggs & Porter, 2017; Rupperecht, Kueny, Shoss, & Metzger, 2016; Wang & Peng, 2016). With the exception of the study conducted by Rupperecht and her colleagues (2016), which focused on the impact of a single ILTs trait, namely Sensitivity, on CWB, all the other empirical studies tested the impact of the broad dimensions of ILTs traits, either prototypical or anti-prototypical, on organizational outcomes. The two broad ILTs dimensions comprise subsets of related (i.e., highly correlated), yet distinct traits. While their combined effects have proven to have predictive utility, their criterion validity can be maximized when they work separately. Some positive ILTs traits, like Sensitivity, might be more important for affective loaded outcomes, such as job attitudes, whereas others, such as

Intelligence, might be more important for performance outcomes. The concept of bandwidth fidelity (Cronbach & Gleser, 1957; Salgado, 2017) indicates that there should be compatibility between the nature and breadth of the predictor and those of the outcome variable. In the domain of personality literature, using narrow personality measures (i.e., facets) instead of broad dimensions, not only that narrow criteria could be better predicted, but narrow personality measures explained supplementary variance of broad outcomes over broad dimensions (Ashton, 1998; Jenkins & Griffith, 2004; Tett & Burnett, 2003). Despite the theoretical provision of the bandwidth fidelity framework, no research has empirically tested it for narrow ILTs traits. Given the heterogeneous content of ILTs, it might have practical relevance to explore their effects individually, not on a global level. Therefore, the main purpose of this study was to address this gap and explore whether the congruence between employees' narrow ILTs traits and recognition of those traits in their actual leaders had different associations with LMX, which in turn, had different implications for engagement.

This study contributes to the social-cognitive perspective of leadership literature by examining how congruence between each ILTs trait and recognition of that trait in leaders impact LMX and engagement in a nuanced manner, by using polynomial regression analysis and graphing the three-dimensional response surface generated for the combination of two predictor variables, namely ideal ILTs trait and recognition of that trait in leaders, and follower-rated LMX. Additionally, this study challenges the conventional expectations that all positive ILTs traits always have a positive impact on LMX, by showing that even inherently good attributes might have negative consequences on LMX when they are above holders' preference. Furthermore, except for the study conducted by Epitropaki and Martin (2005), no empirical research has addressed the relationship between anti-prototypical ILTs traits and LMX or other outcome variables.

Theoretical background and hypotheses

Implicit Leadership Theories: a brief overview

ILTs are focal concepts of the leadership categorization theory (Eden & Leviatan, 1975; Lord, Foti, & de Vader, 1984). The central assumption of this theory is that people form and hold in their long-term memory mental models of leaders which they use as benchmarks to automatically judge organizational actors and make spontaneous decisions if they are (ideal) leaders or not. ILTs are structured in memory from early childhood, during socialization with authority figures, such as parents and teachers (Keller, 1999; Keller, 2003) and restructured continuously in an adaptive manner to integrate new experiences with leaders (Shondrick & Lord, 2010). According to Lord and Maher (1991), ILTs are encoded in a hierarchical structure that includes attributes for various types of leaders in different contexts. As such, ILTs contain three different levels of abstraction: a superordinate level, where the most abstract attributions that differentiate leaders from non-leaders are held (e.g., domineering versus compliant), a basic level, where representations contain information about leaders in specific contexts (e.g., business leaders versus political leaders) and a subordinate level, where more situational and exclusive attributes about leaders are encoded (e.g., top-level versus middle-level business leaders). During interactions with others in professional settings, people use their hierarchically structured ILTs attributes to compare the target person with a category of leaders. Once the match is produced, ILTs holder labels the other person according to the category and assigns him or her all the other attributes of that specific category, irrespective if they are characteristics or not of the target person. Despite the ILTs structure developed by Offerman, Kennedy, and Wirtz (1994) and revised by Epitropaki and Martin (2004) was the most frequently used in business settings, according to the systematic review conducted by Junker and van Dick (2014), researchers have conceptualized it differently, either as a

set of attributes of ideal leaders (i.e., exceptionally positive leaders) or as a set of attributes of prototypic leaders (i.e., average leaders). The study conducted by Van Quaquebeke, Graf and Eckloff (2014) showed that the two conceptualizations had considerable overlap, but only the ideal one was predictive for affective commitment towards the leader, respect for the leader, satisfaction with leadership, LMX and intention to leave. Therefore, for the purpose of this study, the ideal conceptualization of ILTs was used.

Even though prior studies have investigated ideal-actual ILTs congruence at a higher level of aggregation, by linking the cumulative effect of either positive ILTs congruence or negative ILTs congruence on LMX, of practical relevance is the congruence at the level of narrow ILTs traits. One thing supporting this view is the fact that people endorse different ILTs traits in specific contexts. For example, in educational settings, leaders' capacities to build positive relationships with the students and teachers and their ability to develop an effective curriculum are key drivers to academic achievement (Hallinger, 2001; Robinson, Lloyd, & Rowe, 2008). These two aspects can translate into sensitivity and intelligence, two positive traits that add to the positive ILTs aggregate score. On the other hand, sensitivity can fall behind in other types of settings, such as the military one, where dominance takes precedence (Rueb, Erskine, & Foti, 2008). Thus, investigating the consequences of each ILTs trait may be more informative both from a theoretical and practical point of view.

Ideal-actual ILTs congruence

When ILTs were used in applied settings to determine their impact on various organizational outcomes, researchers measured them either directly, by asking participants about the degree to which their leaders possess specific ILTs traits (e.g., Khorakian & Sharifirad, 2019) or indirectly, by measuring two sets of ILTs traits, one representing participants' expectations from ideal leaders and a parallel one, assessing recognition of those ILTs traits in their actual

leaders (e.g., Biermeier-Hanson & Coyle, 2019). In the second case, researchers computed a congruence score, underpinning the ideal-actual match, which they used to predict various outcomes. In most of the studies, congruence scores were computed as difference scores, either absolute or squared difference, but Edwards (2002) encouraged the use of polynomial regression instead. The most important advantage of the polynomial regression is its potential to extract more practical information, such as the differential impact of the direction of the congruence (i.e., ideal > actual or ideal < actual) or of the degree of congruence (i.e., congruence at high levels or congruence at low levels). Based on Edwards' recommendations and given that recent studies have started to utilize polynomial regression, for this study, I measured two sets of scores (i.e., preferences for ideal leaders' ILTs and recognition of those ILTs in actual leaders) and use them to deploy regression analysis with response surface.

Ideal-actual ILTs congruence and LMX

LMX represents another significant leadership framework that emphasizes the dyadic relationship between leaders and followers (Gerstner & Day, 1997; Graen & Uhl-Bien, 1995). Drawing on the principles of social exchange theory (Blau, 1964), the core assumption of LMX stipulates that leaders and followers alike develop mutual relationships that differ in quality, depending on the bidirectional exchanges between partners. High-quality relationships are characterized by mutual trust, respect, and exchanges that go beyond regular job requirements, whereas low-quality relationships are based on reciprocal exchanges that are limited to formal job requirements (Graen & Uhl-Bien, 1995).

Previous studies have proven the impact of ideal-actual ILTs congruence on LMX (e.g., Epitropaki & Martin 2005; Rupperecht, Kueny, & Shoss, 2016). As mentioned previously, ILTs have an important role in guiding employees' perceptions and making attributions about their leaders, both perceptions and attribution modulating the dynamic of the leader-follower relationship. When followers' positive

perceptions of actual leaders' behaviors match their expectations, an automatic recognition process is generated (Lord & Maher, 1991). This process predisposes followers to make positive initial impressions about their leaders, which, in turn, color subsequent perceptions, following a perception-behavior sequence: initial positive judgments bias followers to behave in a desirable way during interactions with leaders. These behaviors attract positive reactions from leaders, which sequentially reinforce the initial positive perceptions. Thus, leaders are perceived to be trustful and relationships are perceived as highly qualitative. Moreover, followers' desirable behaviors and attitudes stimulate equivalent behaviors and attitudes from leaders, such as providing additional attention, support, and resources. It is a mutual influence process that feeds back to the followers' perception of a high-quality LMX with leaders (Lord & Maher, 1991). Edward and Cable (2009) tested a conceptual theoretical model with 4 explanatory mechanisms that linked value congruence (i.e., employees' perceptions that the organization shares their values) to organizational outcomes. The mechanisms were: enhanced communication, predictability, interpersonal attraction, and trust. The same underlying mechanisms can explain the link between ILTs congruence and LMX, given that both the leader and the organization are contextual elements and operate in a similar fashion in the relationship with the employees. Another explanatory mechanism linking positive ILTs congruence to LMX is the Pygmalion effect (Rosenthal, 1993). Whiteley, Sy and Johnson (2012) proved that fulfilled positive expectations about the dyadic partner give rise to a "naturally occurring Pygmalion effect" (p. 822), a self-fulfilling prophecy which creates a propensity for the holders of the expectations to make other positive inferences about the dyadic partner, which eventually impacts LMX positively following the above-mentioned perception-behavior sequence. In addition to test whether fulfilled positive expectations predict high LMX, results of previous studies suggest that the level at which fulfillment is achieved matters too (e.g., Rupperecht et al., 2016). Having a high need satisfied brings more benefits than having a moderate or even low one. In the first case a

significant positive affective reaction can be triggered, whereas, in the second, the affective effects might be negligible. Because there is no specific information in the literature on how each ILTs trait relates to LMX, but relying on the results of previous research that revealed a positive association between the cumulative effect of all positive ILTs traits and LMX, I hypothesized the following:

Hypothesis 1: Followers' intra-personal congruence at higher levels of positive ILTs traits will be associated with higher ratings of follower-rated LMX, as compared at lower levels of positive ILTs traits. This hypothesis was tested separately for each positive ILTs trait, as follows: H1a – Sensitivity, H1b – Intelligence, H1c – Dedication and H1d – Dynamism. (*Fulfilled positive expectations hypothesis*)

When positive expectations are not fulfilled, low-quality LMX is developed, in which dyadic exchanges are within the limits of formal roles. Based on the needs-supplies fit theoretical assumption formulated by Edwards, Caplan and Harrison (1998) who asserted that both under and oversupply can be detrimental, it was expected that there was an optimum level of positive ILTs traits manifested by leaders for LMX to be maximized. Getting even more from leaders than what they expected, might have been tricky for followers because receiving more of a kind impede other job-related needs to be satisfied (Edwards et al, 1998). Another explanation was offered by Harris and Kacmar's study (2006) which revealed, contrary to the obvious intuition, that having a high LMX with their leaders led to a higher level of stress for followers, because of the high obligations felt by followers to reciprocate for the advantages obtained from their leaders. Nevertheless, not receiving enough when the requirement for a specific ILTs trait is high can be more damaging than getting more of a good thing because the underlying unfulfilled need is felt more intense and urgent. The idea is captured in the loss aversion concept introduced by Kahneman and Tversky (1979). They stated that the suffering of losing is felt extremely

powerful so that people take risks to avoid it. Given all this, I proposed the following hypothesis:

Hypothesis 2: When the direction of the followers' intra-personal incongruence is such that the scores of the followers' ideal positive ILTs traits (i.e., preferences) are below the scores of actual positive ILTs traits of their leaders (i.e., recognition), the level of follower-rated LMX will be lower, as compared to the situation when ideal positive ILTs traits are above the scores of actual positive ILTs traits of the leaders. This hypothesis was tested separately for each positive ILTs trait, as follows: H2a – Sensitivity, H2b – Intelligence, H2c – Dedication and H2d – Dynamism. (*Direction of unfulfilled positive expectations hypothesis*)

Regarding the negative ILTs traits, to the best of my knowledge, only one previous empirical study investigated the relationship between ideal-actual congruence and LMX and it revealed no significant association between them (Epitropaki & Martin, 2005). Nevertheless, the mentioned study used absolute difference scores to approximate the congruence and therefore the results might have been hampered by the methodological problems associated with difference scores (Edwards & Parry, 1993). Moreover, the authors used the broad negative dimension which encompasses two ILTs traits, specifically Tyranny and Masculinity. In case the ideal-actual congruence scores for the two traits had different associations with LMX, their aggregation might end up canceling each other out. While ideal-actual congruence for positive ILTs promotes better LMX, it is expected that, on the flip side, ideal-actual congruence for negative ILTs to hinder LMX. Leung and Sy (2018) found that when negative Implicit Followership Theories (i.e., attributes of ideal followers) were fulfilled at a group level, Golem effect, a dark self-fulfilling process, was triggered, having negative effects on performance. Therefore, the following hypotheses were proposed, paralleling the hypothesis suggested for the positive ILTs, but making the necessary logical changes for the dark side of ILTs traits:

Hypothesis 3: Followers' intra-personal congruence at lower levels of negative ILTs traits will be associated with higher ratings of follower-rated LMX, as compared at higher levels of negative ILTs traits. This hypothesis was tested separately for each negative ILTs trait, as follows: H4e – Tyranny and H4f – Masculinity. (*Fulfilled negative expectations hypothesis*)

Hypothesis 4: When the direction of the followers' intra-personal incongruence is such that the scores of the followers' ideal negative ILTs (i.e., preferences) are above the scores of actual negative ILTs of their leaders (i.e., recognition), the level of follower-rated LMX will be higher, as compared to the situation when ideal negative ILTs traits are below the scores of actual negative ILTs traits of the leaders. This hypothesis was tested separately for each negative ILTs trait, as follows: H5e – Tyranny and H6f – Masculinity (*Direction of unfulfilled negative expectations hypothesis*)

LMX as a mediator between ILTs congruence and engagement

Work engagement is a positive affective and highly motivational state that can be experienced by employees who perceive that their job resources are plentiful for handling their demands (Bakker & Demerouti, 2014). High-quality LMX with leaders has been proven to lead to the perception of a resourceful work environment because it comes with enriched jobs, empowerment, and social support for followers (Breevaart, Bakker, Demerouti, & van den Heuvel, 2015). Huel and his colleagues (2017) found a meta-analytical moderate association between LMX and engagement. Epitropaki and Martin (2004) showed that LMX mediated the relationship between ILTs congruence and well-being. Additionally, consistent with leader categorization theory (Lord & Maher, 1991) that asserts that once a person is labeled as a good leader many direct and indirect effects on organizational outcomes are triggered and also the abundance of prior research that supports that the effect of fulfilled expectations about leaders impacts various outcomes through LMX (Junker and van Dick, 2014), it is further expected to find

an indirect effect of ideal-actual ILTs congruence on engagement through LMX. By contrast, followers perceiving low-quality LMX with their leaders can feel deprived of some resources such as leaders' support and are more strongly constrained to formal job tasks, so that they may not be as motivated and engaged as their colleagues in high-quality relationships with leaders. Consequently:

Hypothesis 5: Followers' intra-personal congruence between ideal and actual ILTs has an indirect effect on engagement through LMX. This hypothesis was tested separately for each positive ILTs trait, as follows: H5a – Sensitivity, H5b – Intelligence, H5c – Dedication, H5d – Dynamism, H5e – Tyranny and H5f – Masculinity.

Method

Participants and procedure

Participants were recruited through snowball sampling. The sample included 68 working adults who were willing to participate voluntarily in the study. Their ages ranged from 22 to 55 years old ($M = 35.04$, $SD = 7.78$). Male respondents accounted for 27% of the sample. About their educational level, 8.8% graduated high school, 42.6% had undergraduate studies, 36.8% graduate studies and 11.8% had postgraduate education. In terms of tenure, 8.8% had between one and three years of work experience, 14.7% between three to five, 25% between 6 to 10, 35.3% between 10 to 20 and 16.2% more than 20 years of experience. Regarding their leadership experience, 60.2%, 20.6% had less than three years of leadership experience, 7.4% between three and five, 4.4% between 5 to 10 and 7.4% more than 10 years of leadership experience.

Measures

Ideal ILTs traits were measured with the scale developed by Offermann, Kennedy, and Wirtz (1994) and revised by Epitropaki and Martin (2004). On a 9-point scale, participants were asked to rate to what degree each item included in the scale was characteristic for an ideal leader. The scale consists of 21 items that load onto four prototypic factors, namely

Sensitivity (three items, e.g., understanding; $\alpha = .72$), Intelligence (four items, e.g., knowledgeable; $\alpha = .79$), Dedication (three items, e.g., hard-working; $\alpha = .82$) and Dynamism (three items, e.g., energetic; $\alpha = .79$) and two anti-prototypic factors, namely Tyranny (six items, e.g., domineering; $\alpha = .82$) and Masculinity (two items, e.g., masculine; $\alpha = .92$).

Actual ILTs traits were measured with the same scale developed by Offermann, Kennedy, and Wirtz (1994) and revised by Epitropaki and Martin (2004). This time, on a 9-point scale, participants were asked to rate to what degree each item was characteristic for their actual leader. The Cronbach alpha coefficients were the following: Sensitivity ($\alpha = .87$), Intelligence ($\alpha = .97$), Dedication ($\alpha = .98$), Dynamism ($\alpha = .89$), Tyranny ($\alpha = .76$) and Masculinity ($\alpha = .94$).

LMX was measured with the 7 items leader-member exchange scale developed by Graen and Uhl-Bien (1995). On a 5-point scale, participants were asked to rate the quality of their relationship with the leader. Sample items include: "How well does your manager understand your job problems and needs?" and "I know where I stand with my manager."

Work engagement was measured with the 9 items scale included in the Job Demands-Resources Questionnaire developed by Baker (2014). Participants were asked to rate how characteristic each of the affirmations was characteristic for them. Each item was rated on a 7-point scale, with response ranging from never to always. Sample items include: "At my work, I feel bursting with energy" and "I am proud of the work that I do".

Analytical strategy

Polynomial regression analysis with surface modeling (Edwards & Parry, 1993) was used to test the hypotheses. Most of the research addressing ILTs congruence has used the difference scores (e.g., Coyle & Foti, 2014; Epitropaki & Martin, 2005). This methodological approach was criticized for having numerous disadvantages such as the fact that it reduces a three-dimensional relationship to a two-dimensional one and that

meaningful congruence hypotheses cannot be tested with difference scores (Edwards, 2002; Edwards, 2007). Polynomial regression is a more robust and informative analytical tool because it allows not only to test the extent the which congruence between two variables is related to an outcome, but also how the direction of the (in)congruence (i.e., Ideal ILTs trait > Actual ILTs trait or Ideal ILTs trait < Actual ILTs trait) and the level of congruence (i.e., when both ideal ILTs trait and actual ILTs trait are high or both are low) are related to the outcome (Rupprecht, Reynolds Kueny, and Shoss, 2016; Shanock, Baran, Gentry, Pattison, and Heggstad, 2010). As an example, for predicting LMX from the congruence between ideal Sensitivity and actual Sensitivity recognized in leaders, one of the positive ILTs traits, the regression equation was the following:

$$LMX = b_0 + b_1 * Sensitivity_I + b_2 * Sensitivity_A + b_{11} * Sensitivity_I * Sensitivity_A + b_{22} * Sensitivity_I^2 + b_{12} * Sensitivity_A^2 + e,$$

where b is the regression coefficient for each variable, I stands for the ideal Sensitivity (i.e., preference), and A stands for actual Sensitivity (i.e., recognition of Sensitivity in actual leader).

Prior to testing the models, scores for ideal and actual ILTs were centered to their midpoints, by subtracting 5 from each score, because both ideal ILTs and actual ILTs were measured on a 9-point Likert scale. This procedure was recommended because it reduces multicollinearity and facilitates the interpretation of the results (Aiken & West, 1991; Edwards & Parry, 1993). Thus, the coefficients for ideal ILTs traits and actual ILTs traits represent the slope of the surface at the center of the X-Y plane, namely the plane defined by the ideal ILTs traits and actual ILTs traits. For each trait, I computed three new variables necessary for the quadratic equation, namely: the square of the centered ideal ILTs trait, the square of the centered actual ILTs trait and the product between the centered ideal ILTs trait and centered actual ILTs trait. In total, 6 quadratic regressions were run for

all ILTs traits. Based on the coefficients from the quadratic equation, the response surface pattern was determined for each combination of variables. Subsequently, I deployed polynomial regressions in SPSS for each of the ILTs traits, regressing LMX on the centered predictor variables, the squares of their centered values and the product of their centered values.

Using polynomial regression coefficients, I computed slopes and curvatures along the line of congruence and line of incongruence for each equation, using the Excel spreadsheet built by Shanock and her colleagues (2010). These parameters provided information about the shape of the surface, whether it was convex, concave or a saddle-shaped surface, which gave information about the overall relationship between variables. The line of congruence represents the line of the perfect fit, where the ideal ILTs trait score is equal to the actual ILTs trait score (e.g., Sensitivity_I = Sensitivity_A). The slope along the line of congruence gives indications on how the congruence predicts the level of outcome (i.e., the height of the outcome), whereas the curvature reveals if the relationship between the congruence and the outcome is linear or nonlinear. The line of incongruence is perpendicular to the line of congruence and reflects the perfect misfit, where ideal ILTs trait score equals minus actual ILTs trait score (e.g., Sensitivity_I = -Sensitivity_A). The slope along the line of incongruence shows whether the direction of the misfit (i.e., Sensitivity_I > Sensitivity_A or vice versa) produces an effect on the level of outcome. A significant curvature along the line of incongruence indicates how the direction of the misfit affects the outcome. A negative curvature means that the outcome is more sharply reduced as the misfit between the ideal and actual ILTs trait increases.

Consequently, I used the same polynomial regression coefficients to plot the three-dimensional response surfaces for each set of three variables, namely ideal ILTs trait, actual ILTs trait depicted in the horizontal plane and LMX depicted on the vertical axis. For that purpose, I used Origin Pro 2020 software.

For testing the mediation hypotheses, I used Edwards and Cable's (2009) block variable method. First, for each ILTs trait, I

computed a block variable, a weighted linear composite consisting of the joint effects of the five quadratic terms (e.g., for Sensitivity: Sensitivity_I, Sensitivity_A, Sensitivity_I_squared, Sensitivity_I X Sensitivity_A, Sensitivity_A_squared), in which the weights were the standardized regression coefficients in the polynomial regression. Then I used Hayes' PROCESS macro for SPSS (2018) to assess the indirect effect for each block variable to Engagement via LMX.

Results

Table 1 presents the means, standard deviations, internal consistencies, and correlations between study variables. Additionally, the table includes correlations with several control variables (i.e., demographics) to have a more comprehensive understanding of the data, but they were not included in the subsequent analysis because there was no theoretical argument to do so. Using Gignac and Szodorai (2016) criteria for assessing the magnitude of the correlations, ILTs traits had moderate to large correlations with LMX and engagement, which was according to the expectations.

Table 2 presents both the first-order models with ideal ILTs traits and actual ILTs traits as predictors and the second-order models which additionally includes second-order components, as specified in the quadratic equation above. As can be seen in the table, second-order models showed increased effects sizes compared to the first ones, indicating that exploring not only ideal ILTs traits and actual ILTs traits, but their simultaneous effect on LMX had practical value.

Based on the response surface results presented in Table 2 and graphs depicted in Figure 1, I examined how (in)congruence between ideal positive ILTs traits and actual positive ILTs traits, their degrees and their directions related to LMX.

Table 1. Descriptive statistics, correlations between variables and reliabilities

Variable	M	SD	1	2	3	4	5	6	7	8	9	10	11	12
Followers' Demographics														
1. Age	35.04	7.78												
2. Gender		.11												
3. Work tenure	4.35	1.18	.88**	.10										
4. Length of the relationship	4.52	1.28	.47**	.20	.57**									
Followers' Ideal ILTs														
5. Sensitivity_FI	7.70	0.87	.17	.12	.18	.15	(.72)							
6. Intelligence_FI	8.57	0.50	.11	.26*	.02	.13	.34**	(.79)						
7. Dedication_FI	8.49	0.61	.04	.15	-.01	.26*	.20	.48**	(.82)					
8. Dynamism_FI	7.92	0.87	.14	.11	.03	.02	.27*	.54**	.40**	(.79)				
9. Tyranny_FI	4.54	1.64	-.18	-.25*	-.15	.02	-.08	.09	.04	.19	(.82)			
10. Masculinity_FI	3.86	2.62	-.19	-.29*	-.26*	-.30*	.10	.06	-.03	.04	.36**	(.92)		
Followers' Actual ILTs														
11. Sensitivity_FA	7.60	1.19	-.06	.20	-.05	-.17	.33**	.17	.03	.12	-.08	-.03	(.87)	
12. Intelligence_FA	8.38	0.90	.05	.16	.04	.01	.12	.21	.08	.08	.15	-.01	.52**	(.97)
13. Dedication_FA	7.87	1.50	-.04	.11	.02	-.06	.23	.17	.14	.13	.01	-.16	.57**	.58** (.98)
14. Dynamism_FA	7.58	1.29	-.17	.09	-.21	-.23	-.01	.17	.09	.23	.23	-.06	.58**	.48** (.89)
15. Tyranny_FA	5.31	1.81	-.14	-.08	-.17	.06	-.17	-.01	-.04	.1	.56**	.37**	-.32**	-.09 (.76)
16. Masculinity_FA	3.79	3.08	-.24*	-.19	-.17	-.17	-.05	.06	-.14	-.14	.18	.50**	-.16	-.09
Mediating variable														
17. LMX	3.93	0.53	.01	.17	.05	-.06	.09	.01	-.06	-.16	-.22	-.24*	.64**	.44** (.85)
Outcome variables														
18. Engagement	3.96	1.02	.06	.27*	.03	.06	-.02	.15	.32**	.01	-.02	.08	.31**	.45** (.92)

Note. ** $p < .01$; * $p < .05$. Reliability estimates (Alpha Cronbach) are reported in parenthesis along the diagonal. ILTs traits marked with I are ideal, and ILTs traits marked with A are perceptions regarding the traits of the actual leaders.

Table 2. Polynomial Regression Results predicting LMX from the Congruence Between Followers' Ideal ILTs Traits and Recognition of ILTs Traits in Their Leaders

Followers' intra-personal congruence (ideal versus actual) N = 68	First Order Model	Polynomial Model	Inter-personal congruence (followers' ideal versus leaders' ideal) N = 34	First Order Model	Polynomial Model
Sensitivity					
Intercept	2.15**	3.90**	Intercept	3.93**	3.89**
Sensitivity_FI	-.07	-.04	Dedication_FI	-.09	-.14
Sensitivity_FA	.31**	.31**	Dedication_FA	.13*	.20*
Sensitivity_FI ²		.01	Dedication_FI ²		-.07
Sensitivity_FI * Sensitivity_FA		.03	Dedication_FI * Dedication_FA		.11
Sensitivity_FA ²		.01	Dedication_FA ²		.03
R ²	.43**	.44**	R ²	.14*	.20*
Congruence (Sensitivity_FI = Sensitivity_FA)					
Slope		.27**	Congruence (Dedication_FI = Dedication_FA)		.06
Curvature		.05	Slope		.07
Incongruence (Sensitivity_FI = - Sensitivity_FA)					
Slope		-.35*	Incongruence (Dedication_FI = - Sensitivity_FA)		-.34
Curvature		-.01	Slope		-.15
Intelligence					
Intercept	3.93*	3.84**	Dynamism	3.93**	3.76**
Intelligence_FI	-.09	-.11	Intercept	-.15*	-.02
Intelligence_FA	.27**	.41*	Dynamism_FI	.18**	.18*
Intelligence_FI ²		.03	Dynamism_FA		.16*
Intelligence_FI * Intelligence_FA		.18	Dynamism_FI * Dynamism_FA		.05
Intelligence_FA ²		.08	Dynamism_FA ²		.01
R ²	.20*	.23*	R ²	.21*	.37**
Congruence (Intelligence_FI = Intelligence_FA)					
Slope		.30	Congruence (Dynamism_FI = Dynamism_FA)		.18**
Curvature		.29	Slope		.22**
Incongruence (Intelligence_FI = - Intelligence_FA)					
Slope		-.52*	Incongruence (Dynamism_FI = - Dynamism_FA)		-.22
Curvature		-.07	Slope		.12
			Curvature		

Table 2. (continued)

	Followers' intra-personal congruence (ideal versus actual) <i>N</i> = 68	Inter-personal congruence (followers' ideal versus leaders' ideal) <i>N</i> = 34	Polynomial Model	First Order Model	Polynomial Model	First Order Model	Polynomial Model
Tyranny							
Intercept	3.93**		3.92**				
Tyranny_FI	.01		.02				
Tyranny_FA	-.15*		-.16*				
Tyranny_FI ²			.01				
Tyranny_FI * Tyranny_FA			-.02				
Tyranny_FA ²			.01				
R ²	.20*		.20*				
Congruence (Tyranny_FI = Tyranny_FA)							
Slope			-.14*				
Curvature			0				
Incongruence (Tyranny_FI = - Tyranny_FA)							
Slope			-.18*				
Curvature			.01				
Masculinity							
Intercept	3.94**		3.86**				
Masculinity_FI	-.04		-.01				
Masculinity_FA	-.02		-.08*				
Masculinity_FI ²			-.02				
Masculinity_FI * Tyranny_FA			.03*				
Masculinity_FA ²			.01				
R ²	.07		.24*				
Congruence (Masculinity_FI = Masculinity_FA)							
Slope			-.09*				
Curvature			.02				
Incongruence (Masculinity_FI = - Masculinity_FA)							
Slope			.07				
Curvature			-.04				

Note. *N* = 68, ** *p* < .01; * *p* < .05. Unstandardized regression coefficients are reported. Slope along the line of congruence: *b*₁ + *b*₂. Curvature along the line of congruence: *b*₃ + *b*₄ + *b*₅. Slope along the line of incongruence: *b*₁ - *b*₂. Curvature along the line of incongruence: *b*₃ - *b*₄ + *b*₅.

For *Sensitivity*, the surface analysis revealed a significant positive slope along the line of congruence (.27**). This indicates that when ideal Sensitivity and actual Sensitivity were congruent, LMX increased as both increased. In Figure 1a, the highest level of LMX was reached at the right corner of the graph, where both ideal Sensitivity and actual Sensitivity were high. The curvature along the line of congruence was insignificant (.05), which meant that the relationship between variables was linear. These results were in support of H1a. The slope along the line of incongruence was negative and significant (-.35*), which meant that LMX was lower when the incongruence was such that the level of ideal Sensitivity was above the level of actual Sensitivity. Indeed, the graph depicted in Figure 1 shows that LMX decreased toward the front corner of the graph, as ideal Sensitivity increased, and actual Sensitivity decreased.

The curvature along the line of incongruence was negative and insignificant (-.01), which indicated a linear relationship. Thus, H2a was supported. For *Intelligence*, the surface analysis showed an insignificant positive slope (.30) and an insignificant positive curvature (.29) along the line of congruence. Thus, H1b did not receive support. Nevertheless, the values of the parameters were moderate, which meant that in the case of a higher power, it could have been significant. Indeed, as seen in the response surface graph presented in Figure 1, the relationship between the three variables generated a convex surface. In the case the results would have been significant, they could have been interpreted as following: LMX was higher when ideal and actual Intelligence were congruent at lower levels and at higher levels (right and left corner of the figure) and that LMX was lower when the two predictors were congruent at middle levels. With respect to the line of incongruence, the results revealed a significant negative slope. This meant that LMX was lower when the incongruence was such that actual Intelligence was below ideal Intelligence, compared to when actual Intelligence was above ideal Intelligence. Thus, there was support for H2b. The curvature along the line of incongruence

was negative but insignificant, indicating a linear relationship between variables along the line of incongruence. Regarding *Dedication*, the response surface analysis revealed an insignificant positive slope (.06) and an insignificant positive curvature (.07) along the line of congruence. Thus, H1c did not receive support. Nevertheless, visual inspection of the graph depicted in Figure 1 indicated a convex response surface and therefore a tendency for LMX to increase as the congruence between ideal and actual Dedication increased. Additionally, the results showed an insignificant negative slope (-.34) and an insignificant negative curvature (-.15) along the line of incongruence. Therefore, H2c was not supported. However, the magnitude of the slope along the line of incongruence was moderate. Corroborating this information with the negative value reached for the curvature along the line of incongruence, meant that the relationship between variables had a concave shape along the line of incongruence. If statistical significance would have been achieved, we could have interpreted as following: LMX decreased more sharply as the level of incongruence between ideal Dedication and actual Dedication increased and reached its minimum level when ideal Dedication was above actual Dedication. Indeed, the same conclusion can be drawn by visually inspecting the 3D graph in Figure 1, where the lowest level for LMX is achieved in the front corner of the graph, where ideal Dedication is high and actual Dedication is low. For *Dynamism*, the results showed a significant positive slope (.18**) and a significant positive curvature (.22**) along the line of congruence. These results indicate that LMX increased in a non-linear manner, when both ideal Dynamism and actual Dynamism were congruent either at higher levels or at lower levels, but not at average levels. Thus, H1d was not supported since the relationship was not linear. Visual inspection of the graph depicted in Figure 1 reveals higher levels of LMX in the left corner, where both ideal Dynamism and actual Dynamism were at their minimum. The slope along the line of incongruence was negative and insignificant (-.22) and the curvature was positive and insignificant (.12), which meant

that H2d was not supported. However, the rather moderate value of slope and the visual information revealed in Figure 1 indicated a tendency for LMX to decrease as the incongruence increased, reaching a minimum when ideal Dynamism was low and actual Dynamism was high. In the case of *Tyranny*, the response surface results showed a negative significant slope (-.14*) and a null curvature along the line of congruence. These indicated a linear relationship between the variables in the sense that LMX decreased as both ideal and actual Tyranny increased simultaneously. In Figure 1, the lowest level of LMX along the line of congruence is observed in the right corner, where both ideal and actual Tyranny reached their maximum levels. Thus, H3e was supported. The slope along the line of incongruence was negative and significant (-.18*), revealing that LMX was lower when the direction of the incongruence was such that ideal Tyranny was below actual Tyranny. The same conclusion is revealed by inspecting the graph depicted in Figure 1, where the minimum value for LMX along the line of incongruence was achieved in the back corner of the graph where ideal Tyranny was above actual Tyranny. The curvature along the line

of incongruence was positive and insignificant (.01), revealing a linear relationship between variables. Thus, H4e received support. Regarding *Masculinity*, the response surface analysis showed a significant negative slope along the line of congruence (-.09*) and an insignificant positive curvature (.02). These results revealed that LMX was higher when both ideal and actual Masculinity were higher. Thus, H2f did not receive support. Visual inspection of the graph in Figure 1 revealed rather a saddle-shaped response surface, indicating a non-linear relationship between the variables. That indicated a tendency for LMX to increase when ideal and actual Masculinity tended to increase or decrease simultaneously. The slope along the line of incongruence was positive but insignificant (.07) and the curvature along the line of incongruence was negative but insignificant (-.04). Therefore, H4f was not supported. Nevertheless, the graph depicted in Figure 1 revealed a concave surface along the line of incongruence, indicating a tendency for LMX to decrease as the incongruence between ideal and actual Masculinity increased. Table 3 presents the summary of the results.

Table 3. *Congruence and Incongruence Hypotheses testing*

Hypothesis	Trait	Sensitivity (a)	Intelligence (b)	Dedication (c)	Dynamism (d)	Tyranny (e)	Masculinity (f)
Congruence (H1, H3)		✓ LMX increased in a linear way as both ideal and actual Sensitivity increased. (H1a)	X LMX showed a tendency to increase in a non-linear way (convex surface along the line of congruence), such that it was higher when both ideal and actual Intelligence were either high or low. (H1b)	X LMX showed a tendency to increase in a non-linear way (convex surface along the line of congruence), such that it was higher when both ideal and actual Dedication were either high or low. (H1c)	X LMX showed a tendency to increase in a non-linear way (convex surface along the line of congruence), such that it was higher when both ideal and actual Dynamism were either high or low. (H1d)	✓ LMX decreased in a linear way as both ideal and actual Tyranny increased. (H3e)	X LMX showed a tendency to increase in a non-linear way (saddle-shaped surface along the line of congruence), such that it was higher as both ideal and actual Masculinity were either high or low. (H3f)
Incongruence (H2, H4)		✓ LMX decreased in a linear way as the incongruence increased and it reached its minimum when ideal Sensitivity was high and actual Sensitivity was low. (H2a)	✓ LMX decreased in a linear way as the incongruence increased and it reached its minimum when ideal Intelligence and actual Intelligence was low. (H2b)	X LMX showed a tendency to decrease in a non-linear way as the incongruence increased (concave shape along the line of incongruence), reaching its minimum when ideal Dedication was maximum and actual Dedication was minimum. (H2c)	X LMX showed a tendency to decrease in a linear way as the incongruence increased, reaching a minimum when ideal and actual Dynamism was high. (H2d)	✓ LMX decreased in a linear way as the incongruence increased and reached its minimum when ideal Tyranny was high and actual Tyranny was low. (H4e)	X LMX showed a tendency to decrease in a non-linear way (concave shape along the line of incongruence), indicating a tendency for LMX to decrease as the incongruence between ideal and actual Masculinity increased. (H4f)

Note: N = 68

- ✓ Hypothesis received support (statistical significance was reached)
- X Hypothesis did not received support (statistical significance was not reached), but the tendency was revealed in the graphical representation of the response surface

The results generated for 10,000 bootstrapped samples, by the mediation analysis deployed in SPSS, are presented in Table 4. The only mediation hypothesis which received support was H5a, revealing that the effect of Sensitivity block variable is transferred to engagement partly through

LMX (.30* for the indirect effect, .09 for the direct effect and .39** for the total effect) . Intelligence, Dedication, Tyranny and Masculinity block variables had indirect effects on engagement, but their total effects were insignificant, whereas Dynamism had only a direct effect on engagement.

Table 4. *Direct, Indirect and Total Effects of ILTs traits Congruence on Engagement through LMX*

ILTs trait	Coefficient	SE	95% CI
Sensitivity block			
Indirect effect	.30*	.11	(.04, .49)
Direct effect	.09	.19	(-.27, .45)
Total effect	.39**	.15	(.10, .68)
Intelligence block			
Indirect effect	.04*	.17	(-.22, .42)
Direct effect	-.06	.25	(-.55, .43)
Total effect	-.03	.27	(-.56, .51)
Dedication block			
Indirect effect	.83*	.30	(.23, 1.40)
Direct effect	-.07	.54	(-1.15, 1.02)
Total effect	.75	.52	(-.29, 1.80)
Dynamism block			
Indirect effect	.19	.11	(-.01, .42)
Direct effect	.36*	.18	(.02, .71)
Total effect	.55**	.14	(.27, .83)
Tyranny block			
Indirect effect	.29**	.09	(.13, .50)
Direct effect	-.16	.17	(-.50, .18)
Total effect	.13	.17	(-.21, .46)
Masculinity block			
Indirect effect	.10***	.04	(.04, .19)
Direct effect	-.12*	.05	(-.22, -.02)
Total effect	-.02	.05	(-.12, .08)

Note. * $p < .05$. ** $p < .01$. *** $p < .001$.

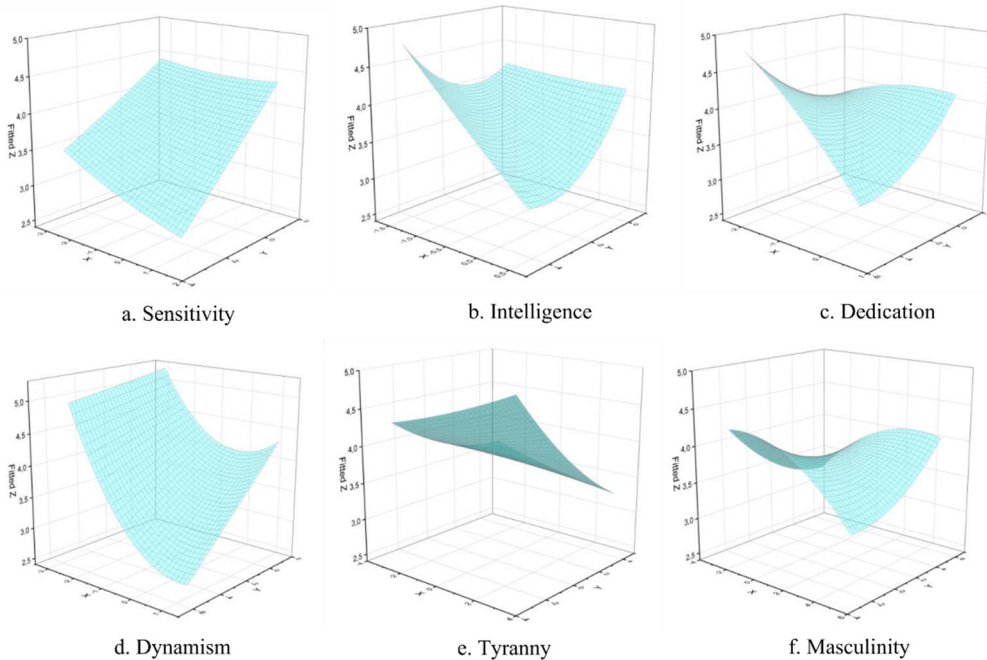


Figure 1. Response Surfaces for the Relationships between Ideal and Actual ILTs Traits and LMX

Discussions

In this study, guided by the bandwidth-fidelity principle, I investigated the relationships between each set of ideal-actual ILTs traits and LMX and subsequently, their indirect effect on work engagement. I used polynomial regression with response surface for testing the relationship between ideal-actual congruence and LMX and block variable approach for testing the mediation hypotheses. The results revealed that among the four positive ILTs traits, only sensitivity seems to be inherently good, as both congruence and incongruence hypotheses were supported. This means that even when the perceived sensitivity of leaders is above the expected level, followers perceive higher LMX than when the perceived sensitivity is below expectations. The results are in line with Rupprecht's and her colleagues' findings on the relationship between ideal-actual sensitivity incongruence and CWB (2016) and meta-analytical correlations found by Judge, Piccolo and Ilies (2004) which revealed that consideration for followers (e.g., concern and

respect) were stronger related to leadership outcomes than the organizational capacities of the leaders to structure the work of their followers. Regarding the other three positive ILTs traits, namely intelligence, dedication and dynamism, the results indicate that meeting followers' expectations, especially when they are extremely high or low, is the best way for leaders to develop a high-quality LMX with their followers. Despite the three ILTs traits being considered intrinsically positive, current results show that when followers' expectations are low and their perceptions are that leaders manifest those traits at higher levels, the perceived quality of their relationship is affected. This is in line with the needs-supply fit concept (Edwards et al., 1998) that explains that on the one hand, receiving too much of a kind inhibits other resources to be obtained and on the other, it creates a liability for the dyadic partner to reciprocate. Nevertheless, results indicate also that it is safer when the unfulfilled expectations are achieved at lower levels of expectations (i.e., when ideal < actual) than when they are achieved at higher levels (i.e.,

when ideal > actual). Concerning negative ILTs traits, current results indicate that tyranny of leaders should be low, irrespective of the level of followers' expectations. Even when followers' expectations are not fulfilled, it is better when the direction is such that expectations are above the actual tyranny of the leader. Regarding masculinity, present results indicate that for having a positive impact on LMX, followers' expectations must be met, irrespective of the level of expectations. In other words, if followers prefer masculine leaders, manifested masculinity enhances LMX, but so does when followers prefer low level of masculinity and leaders are perceived low on masculinity. Considering simultaneously current findings related to Tyranny and Masculinity that indicate effects on LMX and the results obtained by Epitropaki and Martin (2004), that revealed no effect of the composite score of negative ILTs traits on wellbeing, a possible explanation of different results is that when the effects of Tyranny and Masculinity on LMX are combined, as they were in the mentioned study, they could generate a destructive interference so that the cumulative effects of the two was less than either one of them taken individually.

Additionally, I found that ideal-actual sensitivity congruence had an indirect effect on work engagement, in line with the results obtained by Rupperecht and her colleagues (2016) and those found by Epitropaki and Martin (2005). Ideal-actual intelligence congruence had no effect on engagement, neither direct or indirect, revealing that, as expected, it might have predictive validity for other types of outcomes, such as performance. Dedication had only an indirect effect on engagement through LMX, but the total effect was insignificant, suggesting that other mechanisms inhibit the effect transmitted through LMX. Dynamism had a direct effect on engagement, but not an indirect one, again revealing that the impact on engagement is transferred through another mediating variable than LMX. Both tyranny and masculinity had indirect effects on engagement via LMX, but their total effects were insignificant suggesting that other mediating variables masked the effects transmitted through LMX.

To sum up, mediation results indicate that LMX has a mediating effect only for the relationship between ideal-actual sensitivity congruence and work engagement. The remaining ILTs traits can impact other outcomes than engagement, as I was speculating above that ideal-actual intelligence congruence can have a positive effect on job performance, or their indirect effects via LMX are inhibited by other explanatory mechanisms.

Although not all the hypotheses were supported, current results provide empirical arguments for exploring ILTs traits at the level of narrow traits, instead of broad dimensions.

Future studies should address additional outcomes, but also additional mediating mechanisms linking ideal-actual ILTs congruence to those outcomes. Identifying which ILTs trait may predict each outcome and whether some ILTs traits are more important than others within some specific populations or in specific settings, can help achieve a greater understanding of the impact of fulfilled expectations about leaders in work settings.

There are several limitations in this study. First, the results of this study should be interpreted carefully due to the small sample size. A larger sample would allow more relationships to be significant and higher confidence for the findings. Second, this study is cross-sectional in nature and the data was collected from a single source. Despite the design asks for self-assessment, longitudinal or experimental studies can be conducted in the future or address other variables that might be rated by other sources. Nevertheless, although the common method variance (CMV) may be concerning, Conway and Lance (2010) explained that most of the time CMV is just a perpetuated misconception and that same-source correlations might be closer to true scores than different-source correlations.

This study adds to the literature on ILTs in two important ways. First, it draws on the bandwidth-fidelity principle and revealed that addressing ILTs at the level of narrow traits provides additional theoretical and practical insights. Second, by using polynomial regression with response surface

methodology, it showed nuanced effects of ideal-actual (in)congruence on LMX and engagement. Third, the current study adds to the Occupational Health Psychology (OHP) literature, by showing how the leaders' behaviors can affect the followers' OHP related outcomes.

There are several practical implications of this study, as well. By showing that sensitivity of leaders is beneficial whenever is high and that tyranny of leaders should be low for a high quality LMX to be perceived by followers, I provided valuable information for those in charge with selection and development programs for leaders. Additionally, by revealing non-linear relationships between the ideal-actual congruence for the other ILTs traits, the current study shifts the focus on the idea of matching leaders and followers based on their expectations in order to provide benefits both for followers and for organizations. Finally, training programs might be conducted in organizations aimed to adjust followers' mental models about effective leaders in a way that they are more adapted to organizational settings and less influenced by followers' personal histories.

The results of the current paper pave the way for future studies that address the unique effects of each ideal-actual ILTs trait congruence on other organizational outcomes. Additionally, the CMV limitation calls for future studies with dyadic design, which, on one hand, have the advantage of the multisource and, on the other, can tap into the dyadic effect of intra-personal and inter-personal ILTs and IFTs congruence on work outcomes.

In conclusion, this study expands the existing knowledge on ILTs and their impact on organizational outcomes by showing that to predict specific outcomes narrow ILTs traits should be considered and that, counter-intuitively, some positive ILTs can be detrimental when they are too high and other negative ILTs traits are not always harmful.

References

- Aiken, L. S., & West, S. G. (1991). *Multiple regression: Testing and interpreting interactions*. Newbury Park, CA: Sage.
- Ashton, M. C. (1998). Personality and job performance: the importance of narrow traits. *Journal of Organizational Psychology*, 19(3), 289-303. [https://doi.org/10.1002/\(SICI\)1099-1379\(199805\)19:3<289::AID-JOB841>3.0.CO;2-C](https://doi.org/10.1002/(SICI)1099-1379(199805)19:3<289::AID-JOB841>3.0.CO;2-C)
- Ayman, R., & Chemers, M. M. (1983). Relationship of supervisory behavior ratings to work group effectiveness and subordinate satisfaction among Iranian managers. *Journal of Applied Psychology*, 68(2), 338-341. <https://doi.org/10.1037/0021-9010.68.2.338>
- Bakker, A.B. (2014). The Job Demands-Resources Questionnaire. Rotterdam: Erasmus University.
- Bakker, A. B., & Demerouti, E. (2014). Job Demands-Resources theory. In C. Cooper & P. Chen (Eds.), *Wellbeing: A complete reference guide*. John Wiley & Sons Ltd.
- Bakker, A. B., & Demerouti, E. (2017). Job demands-resources theory: Taking stock and looking forward. *Journal of Occupational Health Psychology*, 22(3), 273-285. <https://doi.org/10.1037/ocp0000056>
- Biermeier-Hanson, B., & Coyle, P. (2019). Investigating leader role congruity and counterproductive work behavior. *The Journal of Psychology*, 153(8), 820-842. <https://doi.org/10.1080/00223980.2019.1627274>
- Blau, P. M. (1964). *Exchange and power in social life*. NY: John Wiley & Sons.
- Breevaart, K., Bakker, A.B., Demerouti, E., & Van den Heuvel, M. (2015). Leader-member exchange, work engagement, and job performance. *Journal of Managerial Psychology*, 30, 754-770. <https://doi.org/10.1108/jmp-03-2013-0088>
- Conway, J. M., & Lance, C. E. (2010). What reviewers should expect from authors regarding common method bias in organizational research. *Journal of Business and Psychology*, 25, 325-334. <http://dx.doi.org/10.1007/s10869-010-9181-6>
- Coyle, P. T., & Foti, R. (2015). If You're not with me, you're . . . ? examining prototypes and cooperation in Leader-Follower relationships. *Journal of Leadership & Organizational Studies*, 22(2), 161-174. <https://doi.org/10.1177/1548051814550830>
- Cronbach, L. J., & Gleser, G. C. (1957). *Psychological tests and personnel decisions*. University of Illinois Press.
- Gerstner, C. R., & Day, D. V. (1997). Meta-analytic review of leader-member exchange theory: Correlates and construct issues. *Journal of Applied Psychology*, 82(6), 827-844. <https://doi.org/10.1037/0021-9010.82.6.827>
- Gignac, G. E., & Szodorai, E. T. (2016). Effect size guidelines for individual differences researchers. *Personality and Individual Differences*, 102, 74-78. <https://doi.org/10.1016/j.paid.2016.06.069>
- Graen, G. B., & Uhl-Bien, M. (1995). Relationship-based approach to leadership: Development of leader-member exchange (LMX) theory of leadership over 25 years: Applying a multi-level multi-domain perspective. *The Leadership Quarterly*, 6(2), 219-247. [https://doi.org/10.1016/1048-9843\(95\)90036-5](https://doi.org/10.1016/1048-9843(95)90036-5)
- Huell, F., Vincent-Höper, S., Bürkner, P. C., Gregersen, S., Holling, H. & Nienhaus, A. (2017). Leader-Member Exchange and Employee Well-Being: A Meta-Analysis. *Academy of Management Journal*. <https://doi.org/10.5465/ambpp.2016.13537abstract>

- Eden, D., & Leviatan, U. (1975). Implicit leadership theory as a determinant of the factor structure underlying supervisory behavior scales. *Journal of Applied Psychology*, *60*(6), 736–741. <https://doi.org/10.1037/0021-9010.60.6.736>
- Edwards, J. R. (2002). Alternatives to difference scores: Polynomial regression analysis and response surface methodology. In F. Drasgow & N. W. Schmitt (Eds.), *Advances in measurement and data analysis* (pp. 350–400). San Francisco: Jossey-Bass.
- Edwards, J. R., & Cable, D. M. (2009). The value of value congruence. *Journal of Applied Psychology*, *94*(3), 654–677. <https://doi.org/10.1037/a0014891>
- Edwards, J. R., Caplan, R. D., & Harrison, R. V. (1998). Person environment fit theory: Conceptual foundations, empirical evidence, and directions for future research. In C. L. Cooper (Ed.), *Theories of organizational stress* (pp. 28–67). New York, NY: Oxford University Press.
- Edwards, J. R., & Parry, M. E. (1993). On the use of polynomial regression equations as an alternative to difference scores in organizational research. *Academy of Management Journal*, *36*(6), 1577–1613. <https://doi.org/10.5465/256822>
- Epitropaki, O., & Martin, R. (2004). Implicit leadership theories in applied settings: Factor structure, generalizability, and stability over time. *Journal of Applied Psychology*, *89*(2), 293–310. <https://doi.org/10.1037/0021-9010.89.2.293>
- Epitropaki, O., & Martin, R. (2005). From ideal to real: A longitudinal study of the role of implicit leadership theories on leader-member exchanges and employee outcomes. *Journal of Applied Psychology*, *90*(4), 659–676. <https://doi.org/10.1037/0021-9010.90.4.659>
- Fiske, S. T., & Taylor, S. E. (1984). *Social cognition*. Massachusetts: Addison-Wesley Publishing Company.
- Hallinger, P. (2011). Leadership for learning: Lessons from 40 years of empirical research. *Journal of Educational Administration*, *49*(2), 125–142. <https://doi.org/10.1108/095782311111116699>
- Harris, K. J., & Kacmar, K. M. (2006). Too much of a good thing: The curvilinear effect of leader-member exchange on stress. *The Journal of Social Psychology*, *146*, 65–84. <http://dx.doi.org/10.3200/SOCP.146.1.65-84>
- Jenkins, M., & Griffith, R. (2004). Using personality constructs to predict performance: Narrow or broad bandwidth. *Journal of Business and Psychology*, *19*(2), 255–269. <https://doi.org/10.1007/s10869-004-0551-9>
- Judge, T. A., Piccolo, R. F., & Ilies, R. (2004). The Forgotten Ones? The Validity of Consideration and Initiating Structure in Leadership Research. *Journal of Applied Psychology*, *89*(1), 36–51. <https://doi.org/10.1037/0021-9010.89.1.36>
- Junker, N. M., Schyns, B., van Dick, R., & Scheurer, S. (2011). Die Bedeutung der Führungskräfte-Kategorisierung für Commitment, Arbeitszufriedenheit und Wohlbefinden unter Berücksichtigung der Geschlechterrolletheorie. *Zeitschrift für Arbeits- und Organisationspsychologie*, *55*(4), 171–179. <https://doi.org/10.1026/0932-4089/a000055>
- Junker, N. M., & van Dick, R. (2014). Implicit theories in organizational settings: A systematic review and research agenda of implicit leadership and followership theories. *The Leadership Quarterly*, *25*(6), 1154–1173. <https://doi.org/10.1016/j.leaqua.2014.09.002>
- Kahneman, D., & Tversky, A. (1979). Prospect Theory: An Analysis of Decision under Risk. *Econometrica*, *47*(2), 263–291. <http://www.jstor.org/stable/1914185?origin=JSTOR-pdf>
- Keller, T. (1999). Images of the familiar: Individual differences and implicit leadership theories. *The Leadership Quarterly*, *10*(4), 589–607. [https://doi.org/10.1016/S1048-9843\(99\)00033-8](https://doi.org/10.1016/S1048-9843(99)00033-8)
- Keller, T. (2003). Parental images as a guide to leadership sensemaking: An attachment perspective on implicit leadership theories. *The Leadership Quarterly*, *14*(2), 141–160. [https://doi.org/10.1016/S1048-9843\(03\)00007-9](https://doi.org/10.1016/S1048-9843(03)00007-9)
- Khorakian, A., & Sharifirad, M.S. (2019). Integrating Implicit Leadership Theories, Leader-Member Exchange, Self-Efficacy, and Attachment Theory to Predict Job Performance. *Psychological Reports*, *122*(3), 1117–1144. <https://doi.org/10.1177/0033294118773400>
- Leung, A., & Sy, T. (2018). I am as incompetent as the prototypical group member: An investigation of naturally occurring golem effects in work groups. *Frontiers in Psychology*, *9*, 1581. <https://doi.org/10.3389/fpsyg.2018.01581>
- 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 and Human Performance*, *34*, 343–378. [https://doi.org/10.1016/0030-5073\(84\)90043-6](https://doi.org/10.1016/0030-5073(84)90043-6)
- Lord, R. G., & Maher, K. J. (1991). *Leadership and information processing: Linking perceptions and performance*. Boston: Routledge.
- Offermann, L. R., Kennedy, J. K., & Wirtz, P. W. (1994). Implicit leadership theories: Content, structure, and generalizability. *The Leadership Quarterly*, *5*(1), 43–58. [https://doi.org/10.1016/1048-9843\(94\)90005-1](https://doi.org/10.1016/1048-9843(94)90005-1)
- Quaquebeke, N. V., Graf, M. M., & Eckloff, T. (2014). What do leaders have to live up to? contrasting the effects of central tendency versus ideal-based leader prototypes in leader categorization processes. *Leadership*, *10*(2), 191–217. <https://doi.org/10.1177/1742715013476081>
- Rahn, D. L., Jawahar, I., Scrimshire, A. J., & Stone, T. (2016). Are leaders defined by followers? role of follower's ILT and the mediating influence of LMX on follower outcomes. *Journal of Organizational Effectiveness: People and Performance*, *3*(1), 43–69. <https://doi.org/10.1108/JOEPP-04-2015-0016>
- Riggs, B. S., & Porter, C. O. L. H. (2017). Are there advantages to seeing leadership the same? A test of the mediating effects of LMX on the relationship between ILT congruence and employees' development. *The Leadership Quarterly*, *28*(2), 285–299. <https://doi.org/10.1016/j.leaqua.2016.10.009>
- Robinson, V. M. J., Lloyd, C. A., & Rowe, K. J. (2008). The Impact of Leadership on Student Outcomes: An Analysis of the Differential Effects of Leadership Types. *Educational Administration Quarterly*, *44*(5), 635–674. <https://doi.org/10.1177/0013161X08321509>

- Rosenthal, R. (1993). Interpersonal expectations: Some antecedents and some consequences. In P. D. Blanck (Ed.), *Interpersonal expectations: Theory, research, and applications. Studies in emotion and social interaction* (pp. 3–24). New York, NY, US: Cambridge University Press.
- Rueb, J. D., Erskine, H. J., & Foti, R. J. (2008). Intelligence, dominance, masculinity, and self-monitoring: Predicting leadership emergence in a military setting. *Military Psychology, 20*(4), 237–252. <https://doi.org/10.1080/08995600802345139>
- Rupprecht, E. A., Kueny, C. R., Shoss, M. K., & Metzger, A. J. (2016). Getting what you want: How fit between desired and received leader sensitivity influences emotion and counterproductive work behavior. *Journal of Occupational Health Psychology, 21*(4), 443-454. <https://doi.org/10.1037/a0040074>
- Salgado, J. F. (2017). Bandwidth-Fidelity Dilemma. In V. Zeigler-Hill, & T. K. Shackelford (Eds.). *Encyclopedia of Personality and Individual Differences*. Springer. https://doi.org/10.1007/978-3-319-28099-8_1280-1
- Shanock, L. R., Baran, B. E., Gentry, W. A., Pattison, S. C., & Heggestad, E. D. (2010). Polynomial regression with response surface analysis: A powerful approach for examining moderation and overcoming limitations of difference scores. *Journal of Business and Psychology, 25*(4), 543-554. <https://doi.org/10.1007/s10869-010-9183-4>
- Shondrick, S. J., Dinh, J. E., & Lord, R. G. (2010). Developments in implicit leadership theory and cognitive science: Applications to improving measurement and understanding alternatives to hierarchical leadership. *The Leadership Quarterly, 21*(6), 959-978. <https://doi.org/10.1016/j.leaqua.2010.10.004>
- Tett, R. P., & Burnett, D. D. (2003). A personality trait-based interactionist model of job performance. *Journal of Applied Psychology, 88*(3), 500-517. <https://doi.org/10.1037/0021-9010.88>
- Wang, X., & Peng, J. (2016). The effect of implicit-explicit followership congruence on benevolent leadership: Evidence from Chinese family firms. *Frontiers in Psychology, 7*, 812-812. doi:10.3389/fpsyg.2016.00812
- Whiteley, P., Sy, T., & Johnson, S. K. (2012). Leaders' conceptions of followers: Implications for naturally occurring pygmalion effects. *The Leadership Quarterly, 23*(5), 822-834. doi:10.1016/j.leaqua.2012.03.006