

Durham Research Online

Deposited in DRO:

27 July 2017

Version of attached file:

Accepted Version

Peer-review status of attached file:

Peer-reviewed

Citation for published item:

Foti, R. J. and Hansbrough, T. K. and Epitropaki, O. and Coyle, P. T. (2017) 'Dynamic viewpoints on implicit leadership and followership theories : approaches, findings, and future directions.', *Leadership quarterly.*, 28 (2). pp. 261-267.

Further information on publisher's website:

<https://doi.org/10.1016/j.leaqua.2017.02.004>

Publisher's copyright statement:

© 2017 This manuscript version is made available under the CC-BY-NC-ND 4.0 license
<http://creativecommons.org/licenses/by-nc-nd/4.0/>

Additional information:

Use policy

The full-text may be used and/or reproduced, and given to third parties in any format or medium, without prior permission or charge, for personal research or study, educational, or not-for-profit purposes provided that:

- a full bibliographic reference is made to the original source
- a [link](#) is made to the metadata record in DRO
- the full-text is not changed in any way

The full-text must not be sold in any format or medium without the formal permission of the copyright holders.

Please consult the [full DRO policy](#) for further details.

Dynamic Viewpoints on Implicit Leadership and Followership Theories: Approaches, Findings, and Future Directions

It has been more than 40 years since Eden and Leviatan (1975) demonstrated how Implicit Leadership Theories (ILTs) guide raters' sense-making processes when completing leadership questionnaires. In the intervening years, interest in implicit theories has been widespread and considerable research has been generated with significant implications for our understanding of leadership and followership processes in organizational settings (Epitropaki, Sy, Martin, Tram-Quon, & Topakas, 2013). Organizational members are sense-makers and they use their implicit theories to construct a simplified understanding of events that emphasize human qualities rather than the more complex effects of organization systems (Meindl, 1995). Such research recognizes the active, constructive role of perceivers in the social influence process that is at the heart of leadership. Recent theoretical developments (e.g., Lord, Brown, & Harvey, 2001; Lord & Shondrick, 2011) have highlighted the dynamic nature of leadership and followership schemas but empirical research has lagged behind. Thus, our motivation for this special issue was to showcase new empirical and conceptual work that captures ILTs and IFTs as dynamic, context-sensitive and time-sensitive phenomena.

The early work of Lord, Foti, and De Vader (1984) applied social cognitive theory to understanding implicit theories and developed a theory of leadership that describes how categorization influences perception, memory and interactions with a potential leader. They proposed that ILTs are cognitive categories with a graded structure similar to other types of person (Cantor & Mischel, 1977) and object categories (Rosch, 1978). Rather than being defined by concrete, *specific* critical features, that distinguish leaders, such categories develop

around an *abstract* set of attributes and behaviors shared by different types of leaders. Thus, categories form around prototypes, the most typical examples or the most ideal types (Gabora, Rosch, & Aerts, 2008). These category structures are thought to be learned through experience, although they may originate early on from experience with caregivers (Keller, 1999; 2003). Individuals rely on these categories to distinguish leaders from non-leaders and the resulting categorization process is based on either recognition or inferential processes. Leadership perceptions based on recognition-based processes are the result of a match between the perceiver's leadership prototype and the perceived characteristics and behavior of potential leaders, whereas inferential-based processes rely on information about past performance to infer leadership.

In understanding leadership as a social influence process, follower categorization is equally as important as leader categorization (Uhl-Bien and Pillai, 2007). A similar social cognitive process has been hypothesized in the case of Implicit Followership Theories (IFTs; Sy, 2010). IFTs are cognitive categories individuals hold regarding the traits and behaviors typically associated with followers (Sy, 2010; van Gils, van Quaquebeke, & van Knippenberg, 2010). Similar to ILTs, categories of IFTs can be based on the most typical instances or the most ideal; however, current research has focused on the former. Perceptions and identification of an individual as a follower can be recognition-based processes following from a match between the perceiver's followership prototype and perceived follower characteristics and behavior, but followership can also be inferred based on performance information (Sy, 2010).

Match with a leader or follower category serves as an antecedent of organizational outcomes, such as leader-member exchange (Coyle & Foti, 2015; Engle & Lord, 1997, Epitropaki & Martin, 2005; Sy, 2010), as well as bias in behavioral ratings (Hansbrough, Lord,

& Schyns, 2015). Thus, work in the area of implicit theories has advanced our understanding of the cognitive processes underlying leaders' and followers' perceptions, interpretations, and sense-making in response to both leadership and followership behaviors (DeRue & Ashford, 2010; Shamir, 2007; Shondrick & Lord, 2010), showing perceptions of both leaders and followers are critical to the leadership process.

More recent perspectives (e.g., Hanges, Lord, & Dickson, 2000; Lord, Brown, & Harvey, 2001; Lord & Shondrick, 2011) have attempted to capture the inherently dynamic and complex nature of leadership and followership perceptions using a connectionist framework. In connectionist models, the process unfolds when top-down constraints such as goals and gender combine with bottom-up inputs such as behaviors of a potential leader or follower to activate multiple nodes in the prototype network. Such perspectives allow for the possibility that ILTs and IFTs are not static and change may take place at the individual, relational, or organizational level of analysis. The connectionist perspective offers one potential explanation of how perceptions of leadership and followership can be fluid and context sensitive, yet still produce coherence and substantial consistency (Foti, Knee & Backert, 2008; Sy, Shore, Strauss, Shore, Tram, Whiteley, Ikeda-Muromachi, 2010). Thus, dynamics begin to play a greater role when it is evident that ILTs and IFTs are not fixed in time and place but, instead, are context sensitive.

Overview of the Articles

The goal of this special issue was to capture recent theoretical and empirical developments in Implicit Leadership and Followership Theories that address some of the more dynamic aspects of the leadership process. In the five articles that follow, both theoretical and empirical advances are evident, and represent two major themes. The first two articles advance our understanding of the dynamic aspects of implicit theories by focusing on the influence

process and investigating relational schemas or implicit theory congruence. The remaining three articles enhance our understanding of the dynamic nature of implicit theories by focusing on either the temporal aspect of implicit theories or the role of emotional expression. Table 1 provides an overview of the focus of each article in terms of characteristics of the implicit theory and method used.

Theme 1 – relational influence processes

Research can capture the dynamic nature of implicit theories by focusing on the leadership relationship, instead of solely on leader OR follower implicit theories. The leadership relationship can be conceptualized in different ways and at different levels of analysis.

Relational schemas are cognitive structures that represent regularities in patterns of interpersonal relatedness and consist of expected contingences of how the (significant) other will react in a specific social situation (Baldwin, 1992). Relational schemas include three elements: an interpersonal script, a self-schema and a schema about the other person. Epitropaki et al. (2013) considered relational schemas of leadership a promising line of research that can extend ILT and IFT research to the dyadic level of analysis to help understand the dynamic interplay between ILTs and IFTs.

Tsai, Dionne, Wang, Spain, Yammarino and Cheng (2017) respond to the call for an in-depth understanding of relational leadership schemas. They specifically examined two types of relational schemas, namely expressive relational schemas (ERS) that are associated with social support and instrumental relational schemas (IRS) that emphasize short-term economic exchanges. They further investigated the effects of inter-individual relational schemas' congruence on leader-follower relationships. By using polynomial regression and response surface methodology, they showed that ERS congruence was associated with positive follower-

rated LMX. Interestingly, both IRS congruence and incongruence were found to have a negative impact on LMX. Their findings have important implications for ILTs as well as for LMX theory and research. They not only highlight the role of relational schemas for leader-follower interactions but also point to the need for a closer look into the content of these relational schemas. Their results suggest that individuals (leaders or followers) who hold schemas of relationships as mainly short-term economic exchanges (versus a deeper affective connection) will be less likely to invest the time and energy to cultivate high quality interactions. One could even argue that relational schemas may neutralize (in the case of IRS congruence) or accentuate (in the case of ERS congruence) the importance of LMX quality in organizational settings.

The degree of congruence or incongruence in implicit theories held by leaders and followers is at the core of the mutual influence process (Coyle & Foti, 2015; Engle & Lord, 1997). Specifically, interpersonal congruence (the extent to which leaders and followers hold similar implicit theories) are important influences on how individuals perceive relationship quality with their partner (Epitropaki et al., 2013). Lord and Maher (1991) provide a theoretical framework for the interpretation of the effects of both followers' and leaders' implicit theories on their dyadic relationship. They move away from the simplistic conceptualizations that assume leaders' behaviors affect followers' behaviors and vice versa, to propose that these relationships are affected by, and filtered through, the implicit theories of both individuals.

Interpersonal congruence is the focus of the second article of the special issue. Riggs and Porter (2017) examine how congruence between leader and follower implicit leadership theories impacts LMX. The authors contend that congruence in ILTs triggers automatic categorization processes. Namely, leaders and followers who hold similar mental models of leaders will more inclined to view each other as "leader-like" therefore, congruence of ILTs serves as a heuristic to

differentiate leaders from non-leaders. Furthermore, based on the similarity hypothesis (i.e., people prefer similar others), ILT congruence fosters a positive evaluation of the potential relationship partner as well as a willingness to confer leadership status on that individual thereby setting the stage for the development of high quality leader-follower relationships. Using polynomial regression and response surface methodology to assess congruence, Riggs and Porter found that congruence between leader and follower ILTs was positively associated with LMX while less congruence was associated with lower quality LMX.

Theme 2 – dynamic representations of implicit theories

Understanding the dynamic nature of implicit theories has been the focus of much theorizing. The remaining three articles capture the dynamic perspective of ILTs/IFTs by considering how implicit theories may change over time and may vary based on the context.

The first perspective proposes that components of time should be incorporated directly into ILTs and IFTs. In their paper, Alipour, Mohammed and Martinez (2017) argue that temporal individual differences are an important factor in the context of ILTs and IFTs. They specifically focus on four time-based individual differences, namely time patience, time perspective, polychronicity and pacing style and introduce the concepts of temporal ILTs (TILTs) and IFTs (TIFTs). They specifically propose that individuals have prototypes about the temporal attributes of ideal leaders and followers. Temporal ILTs are likely to best be represented by a 3-factor structure that includes a future-time perspective, polychronicity and deadline pacing. Temporal IFTs are also represented by a 3-factor structure but their content is different. They include present-time perspective, early pacing and time patience. They further outline the implications of inter-individual TILTs and TIFTs congruence on leader-follower interactions. If, for example, the follower holds a temporal prototype of an ideal leader as future-

oriented, polychronic and not a deadline pacer but his/her actual manager is present-oriented, monochronic and deadline pacer, this is likely to create coordination difficulties and negatively affect the leader-follower interactions. They also highlight the possibility of national cultural differences of TILTs and TIFTs content. By using connectionist models as their guiding framework, they further present a heuristic example of a connectionist TILTs and TIFTs network at the subordinate level and illustrate the role of contextual constraints such as organizational culture in the generation of temporal leadership and followership prototypes.

The second perspective broadens the conceptualization of bottom up process in the connectionist model to include when a leader's facial expression conveys different emotions. Trichas, Schyns, Lord and Hall (2017), in an experimental study conducted in an organizational setting, examined the effects of leader's happy vs. nervous emotions on leadership perceptions and ILTs endorsement. Their results showed that in the condition of a happy emotional display by the leader, participants exhibited higher endorsement of prototypical ILTs (e.g., sensitivity) and lower endorsement of antiprototypical traits (e.g., tyranny). In general, the leader's display of happy facial expressions resulted in higher leadership ratings, higher trait ratings, greater correlations among trait ratings and greater dependence of trait ratings on leadership perceptions. There are important implications of this study for the dynamic nature of ILTs (and IFTs). Their study supports the core argument of connectionist models that leadership categories are context-sensitive and vary both within and between individuals. If a minimal manipulation, such as a facial emotional expression, was enough to generate change in the salience of prototypical vs. antiprototypical traits, the possibility of ILTs and IFTs malleability in very short time-lags (even to the point of daily fluctuation) needs to be further examined.

As noted previously, a connectionist framework captures the inherently dynamic nature of leadership perceptions. One important implication of a connectionist perspective is that the leader prototype can be activated by characteristics of the culture, leader, follower or context. Chiu, Balkundi, and Weinberg (2017) explore how information about the context- the manager's position in a social network- activates followers' leadership perceptions. According to the network perspective, individuals are embedded within networks of interconnected relationships that provide opportunities for and constraints on behavior. The authors assert that these social networks provide followers with information about a manager's power and influence which, in turn, activates the leader prototype. Chiu et al. (2017) conducted both a longitudinal and cross-sectional study to test these ideas. Across two studies they found that managers' network centrality activated followers' leadership perceptions. Moreover, the relationship between managers' network centrality and followers' leadership perceptions was mediated by managers' social power.

Future Research and New Directions

To begin, we offer some important clarifications for those doing research in this area.

1) ILTs are not synonymous with actual leader behavior. Instead, the literature focuses on perceptions of leaders rather than objective leader behavior. For example, in Lord and Maher's (1991) reciprocal influence model, social perception is conceptualized as a sense-making process that focuses on the *interpretation* of behavior rather than leader behavior per se. Moreover, reliance on ILTs and ILFs may trigger "false alarms" in person perception whereby observers incorrectly report behaviors that were not observed yet are consistent with the leader prototype (Phillips & Lord, 1982). Therefore, reliance on ILTs may introduce a bias into leadership ratings. Epitropaki and Martin (2005) showed that employees relied more on their

ILTs to make sense of their relationship with their manager when their intrinsic motivation was low. Their finding was consistent with Macrae and Bodenhausen's (2000) suggestions that individuals resort more to schematic thinking when motivation is low. The Trichas et al. (2017) study in this special issue further emphasizes the role of emotion and mood as a contributing factor to individuals' reliance on prototypical (in conditions of positive emotion) and antiprototypical (in conditions of negative emotion) leadership traits. This is an interesting avenue for future research. Under which conditions are individuals more likely to resort to categorical thinking and fill in perceptual gaps based on their ILTs and IFTs rather than engage in careful information processing of exhibited leadership behaviors?

2) Notably, implicit leadership theories are not outside an individual's conscious awareness. Rather the term implicit, as used in implicit leadership theories, refers to individuals' preconceptions about traits (e.g., the patterning of leadership variables) that they bring to the leadership situation (Eden & Leviatan, 1975). Individuals have an internal working model or schema comprised of certain traits and characteristics that are typically associated with the word "leader". Moreover, as demonstrated by previous research, individuals are quite aware of the content of these categories; yet, at the same time, individuals may be unaware of the impact of these categories (e.g., false memories) on their decision making and judgments. As shown in the Trichas et al.'s (2017) study, embodied characteristics and states such as facial expressions and emotion may impact leadership perceptions outside conscious awareness. Therefore, contrary to early perspectives that imposed a strict dichotomy of implicit vs. explicit processing, the current consensus is that most schemas may be processed implicitly and explicitly (Epitropaki et al., 2013).

3) Implicit leadership theories have a clearly defined center but fuzzy boundaries.

Therefore, even though there may be wide spread agreement about certain characteristics such as intelligence associated with the word “leader” (e.g. Lord et al., 1984; Offermann, Kennedy, & Wirtz, 1994) there is still variation based on individual differences. For example, previous research has found that some individuals are more likely to endorse antiprototypical leader characteristics (Foti et al., 2012; Keller, 1999). Moreover, the GLOBE studies (Den Hartog, House, Hanges, & Ruiz-Quintanilla, 1999) found that while leader attributes associated with charismatic/transformational leadership were universally endorsed, the endorsement of other leader attributes—such as risk taking, ambition, compassion, enthusiasm, sensitivity, self-sacrifice, and willfulness was culturally contingent.

4) There is an important and meaningful difference between typical leaders and ideal leaders. As noted by Junker and van Dick (2014), implicit theories are represented on two dimensions: the norm of the prototype and the valence of the prototype. The norm of the prototype refers to whether the category is represented by the most representative or typical characteristics, or the most ideal. The valence of the prototype refers to whether the attributes contained in the prototype are positive or negative. For example, Schyns and Shillings (2011) found that ILTs were comprised of both effective and ineffective attributes. Likewise, Epitropaki and Martin (2005) report that the term “leader” is associated with both positive and negative characteristics. On the other hand, some research (e.g., Foti et al., 2012; Keller, 1999) has focused on ideal leaders in order to capture leadership preferences based on individual differences.

As with any complex area of research, the theory is ahead of the data. This is clearly the case in the study of dynamic approaches to implicit theories. We sought to close this theory-data

gap with the inclusion of the empirical studies reported in this special issue. Beyond the clarifications for conducting research in this area, we offer the following insight and new directions for future empirical research.

Riggs and Porter (2017), Tsai et al. (2017), and the authors of numerous prior studies (Engle & Lord, 1997; Coyle & Foti, 2015; Topakas, 2011) demonstrate that the extent to which leaders and followers hold congruent ILTs and IFTs impacts both partners' assessment of relationship quality (e.g. LMX). These variable-oriented investigations, however, assume all characteristics (e.g. intelligent, hardworking) are equally meaningful. Studying congruence of implicit theories can be meaningfully extended using a person-oriented approach. The person-oriented approach is so labeled because it takes into account intra-individual variation within a system of variables (Bergman & Vargha, 2013). That is, the person-approach acknowledges that variables can combine differently for some types of individuals than they do for others. Thus, rather than focusing on the variables per se, and how they relate within the population as a whole, person-oriented research identifies and compares subgroups of individuals sharing similar patterns of variables within a population (Foti & McCusker, 2017). Adopting a pattern-oriented approach allows researchers to gain a more in-depth examination of the interplay between content and structure of implicit theories, thus enhancing understanding of the relationship between implicit theories (Foti & Coyle, 2015). Such research should examine how profiles of ILTs and IFTs are related as well (e.g. whether individuals with a certain pattern of ILTs are likely to hold a certain pattern of IFTs) as well as whether this correspondence predicts relationship-oriented outcomes. Furthermore, comparing these correspondence rates for leaders and followers may also be fruitful.

Future research should examine the extent to which congruence on implicit theories of typical vs. ideal leaders differentially predicts relevant work outcomes (e.g. organizational citizenship behaviors, counterproductive work behaviors, work-family conflict). Further examination of both types of implicit theories in the context of the same study would provide much needed clarity regarding the fruitfulness of using ILTs and IFTs in leadership training models and team-building exercises.

Taking a different approach, future research using a person-oriented approach could also focus on examining profiles of congruence at the *dyadic* level rather than the individual level. This approach differs from examining the correspondence an individual's ILTs and IFTs by identifying subgroups (i.e. classes) of dyads with similar multidimensional patterns of implicit theory congruence (Foti et al., 2012). This approach contributes a unique perspective of dyadic congruence to literature in two important ways: 1) by identifying critical points of congruence between leaders and followers, and 2) by examining congruence on ILTs and IFTs in the context of the same analysis. By assigning dyads to patterns using posterior probabilities, we can then assess the extent to which sub-group membership is more predictive of relationship-oriented outcomes (e.g. LMX, perceived support, contribution to the relationship) (Bray, Lanza, & Collins, 2010). Follow-up studies could then assess the extent to which additional information can be captured using patterns of dyadic congruence on relational schemas to predict relationship-oriented outcomes.

One further avenue for future research is to address the effects of implicit theories on the measurement of behavior (Eden & Leviatan, 1975; Rush, Thomas, & Lord, 1977; Hansbrough et al., 2015). In particular, leadership perceptions can be subject to gap filling processes regardless of whether they are the result of recognition-based or inferential-based processes. Individuals

using recognition-based processes may endorse items that *seem* familiar (because they fit the pattern of behaviors that are typically associated with leaders) but did not actually occur.

Inferential-based processes such as attributions can also be subject to automatic, gap filling processes. For example, Taylor and Fiske (1978) contend that attributions are a “top-of-the-head” phenomenon rather than more of a controlled process. In particular, attributions are highly dependent on where the observer’s attention is focused as the perceiver may accept the first plausible explanation for an event rather than engage in a more extensive search process (Lord & Shondrick, 2011). Indeed, Phillips and Lord (1981) have demonstrated that because leaders are salient individuals may attribute the performance of the group to leaders. Such attributions are likely the result of knowledge connectionist systems. In a connectionist network, when some prototypical leader characteristics are activated, they also activate the entire network of the leader prototype which may promote gap-filling processes. In general, such associative processing is the default processing mode (Fiske & Taylor, 2013). Therefore, as observed by Shondrick et al. (2010), the use of categorization-based processes is one of the biggest obstacles to leadership measurement.

Focusing on events may provide a mechanism to increase the accuracy of leadership ratings. Doing so would encourage raters to move away from the gap-filling processes associated with semantic memory and instead rely on the rich, vivid details associated with episodic memory. Indeed, episodic memory is the only kind of memory system that allows individuals to consciously re-experience past events (Tulving, 2002). Therefore, tapping into episodic memory by use of prior events may be particularly helpful to obtain retrospective accounts of leadership. For example, Hansbrough, Lord, & Schyns, (2016) report that validity is increased for scales based on episodic memory compared to scales based on semantic memory.

Morgeson (2005) found substantial agreement in leader ratings when raters were focused on a specific event. Thus it may be possible to increase accuracy and reduce the use of gap filling processes, such as ILTs, by designing leadership ratings to focus on specific events rather than general impressions.

The role of time needs further attention by ILTs and IFTs researchers. Although Alipour et al. (2017) offer a novel lens on the temporal dimensions of implicit theories and Trichas et al. (2017) indicate the possibility for high trait fluctuation, some core questions about change outlined in our call for papers warrant additional empirical evidence. How do ILTs and IFTs change over time and which patterns of change can we observe in narrow time spans (e.g., diary studies) vs. longer time spans (e.g., from youth to late adulthood)? As Lord (2017) notes “leadership science tends to emphasize entities over processes as explanations.... and it under-emphasizes the contextual factors that cause events to occur, particularly the unruly quantum events that dramatically change system states, and which may ultimately affect the performance outcomes we hope to predict from leadership theory” (p.18). Despite the dynamic conceptualization of ILTs and IFTs in recent years, the absence of longitudinal studies is striking. With the exception of Foti et al. (2008) who focused on the process of recreating connectionist leadership representations in terms of attractors and trajectories in two independent studies, limited empirical work has attempted to capture the dynamic nature of ILTs. Epitropaki and Martin (2005) examined the effects of ILTs on LMX using a 12-month time lag and found evidence for stability. It is however possible that such a long time lag may not capture the dynamic fluctuations of ILTs and IFTs.

As Day (2014) points out, if few measurements are used, then there is the danger of missing the curvilinear nature of change. Day and Sin (2011) for example, examined the

developmental trajectories of individuals participating in team-based leadership development activities. Using latent growth modeling techniques to analyze leadership development over 4-time points showed a curvilinear pattern (an overall negative leadership trajectory with a slight upturn in the last measurement). We clearly need intensive longitudinal data (ILD) with multiple and short measurement intervals in order to capture the dynamic nature of ILTs and IFTs. Experience sampling methodology (ESM) studies (e.g., Alliger & Williams, 1993) will be particularly relevant in this context.

Finally, questions regarding the implications of leader and follower identity for ILTs and IFTs outlined in our call for papers remain unanswered. In their recent multilevel review of leader and follower identity, Epitropaki, Kark, Mainemelis and Lord (2016) highlighted the role of leadership and followership schemas as central components of leader and follower identities. They further argued that intra-individual congruence of ILTs and enacted leadership behaviors will increase the salience of a leader identity on the individual level. It will also increase the chances of leader identity claiming in a relational context and the view of the person as embodying the group leadership prototype on the collective level. On the other hand, intra-individual ILTs incongruence may result to difficulties in transitioning into a leadership role.

Conclusion

Overall, this special issue was meant to bring together articles using a variety of theoretical and methodological advancements to enhance our understanding of the role of implicit theories in the leadership process. A better understanding of ILTs and IFTs is essential to understanding how the leadership processes develop and unfolds over time. For example, as noted by DeRue and Ashford (2010), if a would-be leader makes a leadership (influence) attempt but others do not respond in turn with following behavior(s) then it is not leadership. Future

research needs to take a more dynamic and perhaps a more systems oriented perspective. Further advancement of knowledge in the area of implicit theories will require a better match between our dynamic and process oriented conceptualization of the leadership and our research (Dinh, Lord, Gardner, Meuser, Liden, & Hu, 2013).

We would like to thank Leanne Atwater, Senior Editor, and the associate editors of *The Leadership Quarterly* for supporting a special issue on implicit leadership and followership theories. Moreover, this special issue would not have been possible without the contributions of the reviewers listed below. We would like to thank them for their insightful, constructive, and detailed comments that helped to improve these manuscripts. We realize that the production of special issues requires additional time commitments from the LQ editorial board members and ad hoc reviewers, and we greatly appreciate the time and effort they invested. Thank you again.

Jan Ketil Arnulf	Jörg Felfe	Raj Pillai
Roya Ayman	Rosalie Hall	Ronald Riggio
Michelle Bligh	Paul Hanges	Terri Scandura
Kimberley Breevaart	Crystal Hoyt	Charles Scherbaum
Douglas Brown	Ronald Humphrey	Jan Schilling
Melissa Carsten	Dejun Tony Kong	Birgit Schyns
Shane Connelly	Robert Liden	Carl Senior
Dorothy Carter	Yonghong (Tracy) Liu	Rachel Smith
Barbara Crosby	Robert Lord	Seth Spain
Fred Dansereau	Robin Martin	Brian Robert Spisak
Deanne Den Hartog	Adam Meade	Thomas Sy
Tobias Dennerlein	Susan Murphy	Anna Topakas
Reinout de Vries	Austin Lee Nichols	Rolf van Dick
Marion Eberly	Richard Osborn	Niels Van Quaquebeke
Cecile Emery	James S. Phillips	Thomas Zagenczuk

References

- Alliger, G. M., & Williams, K. J. (1993). Using signal-contingent experience sampling methodology to study work in the field: A discussion and illustration examining task perceptions and mood. *Personnel Psychology*, 46, 525 – 549.
- Baldwin, M. W. (1992). Relational schemas and the processing of social information. *Psychological Bulletin*, 112, 461–484.
- Bergman, L. R., & Vargha, A. (2013). Matching method to problem: A developmental science perspective. *European Journal of Developmental Psychology*, 10, 9–28.
- Bray, B. C., Lanza, S. T., & Collins, L. M. (2010). Modeling relations among discrete developmental processes: A general approach to associative latent transition analysis. *Structural Equation Modeling*, 17, 541-569.
- Bray, B. C., Foti, R. J., Thompson, N. J., & Wills, S. F. (2014). Disentangling the effects of self leader perceptions and ideal leader prototypes on leader judgments using loglinear modeling with latent variables. *Human Performance*, 27, 393-415.
- Canter N., & Mischel W. (1977) Traits as prototypes: effects on recognition memory. *Journal of Personality and Social Psychology*, 35, 38-48.
- 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, 161-174.
- Day, D. (2014). Time and leadership. In A. J. Shipp, & Y. Fried (Eds.), *Time and Work: How time impacts groups, organizations and methodological choices*. (Vol. 2, pp. 30-52). (Current Issues in Work and Organizational Psychology). Hove and New York: Psychology Press.

- Den Hartog, D.N., House, R. J., Hanges, P.J., & Ruiz-Quintanilla, S.A. (1999). Culture specific and cross-culturally generalizable implicit leadership theories: Are attributes of charismatic/transformational leadership universally endorsed? *Leadership Quarterly*, *10*, 219-256.
- DeRue, D. S., & Ashford, S. J. (2010). Who will lead and who will follow? A social process of leadership identity construction in organizations. *Academy of Management Review*, *35*, 627–647.
- Dinh, J., & Lord, R. G. (2013). A test of connectionist model of leadership category activation using implicit word fragment measures of Implicit Leadership Theories. Presented at the Society for Industrial Organizational Psychology, Houston, TX.
- Dinh, J. E., Lord, R. G., Gardner, W. L., Meuser, J. D., Liden, R. C., & Hu, J. (2014). Leadership theory and research in the new millennium: Current theoretical trends and changing perspectives. *The Leadership Quarterly*, *25*, 36-62.
- Eden, D., & Leviathan, U. (1975). Implicit leadership theory as a determinant of the factor structure underlying supervisory behavior scales. *Journal of Applied Psychology*, *60*, 736–741.
- Engle, E. M., & Lord, R. G. (1997). Implicit theories, self schemas, and leader-member exchange. *Academy of Management Journal*, *40*, 988–1010.
- 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*, 659–676.

- Epitropaki, O., Kark, R., Mainemelis, C. & Lord, R.G. (2016). Leadership and followership identity processes: A multilevel review, *The Leadership Quarterly*.
<http://dx.doi.org/10.1016/j.leaqua.2016.10.003>
- Epitropaki, O., Sy, T., Martin, R., Tram-Quon, S., & Topakas, A. (2013). Implicit leadership and followership theories “in the wild”: Taking stock of information-processing approaches to leadership and followership in organizational settings. *The Leadership Quarterly*, 24, 858-881.
- Fiske, S. T. & Taylor, S. E. (2013, 2nd ed.). *Social cognition: From brains to culture*. New York: McGraw-Hill.
- Foti, R. J., Bray, B. C., Thompson, N. J., Allgood, S. F. (2012). Know thy self, know thy leader: Contributions of a pattern-oriented approach to examining leader perceptions. *The Leadership Quarterly*, 23, 702-717.
- Foti, R. J. & Coyle, P. T. (August, 2015). Patterns of Leader and Follower Perceptions: How are They Related? In T. Dennerlein (Chair), *Implicit Followership Theories and People’s Dispositions as Drivers of Leadership Effectiveness*. Symposium conducted at the meeting of the 75th Academy of Management conference, Vancouver, BC
- Foti, R. J., Knee, R. E., & Backert, R. S. G. (2008). Multi-level implications of framing leadership as a dynamic process. *The Leadership Quarterly*, 19, 178–194.
- Foti, R. J., & McCusker, M. E. (2017). Person-Oriented approaches to leadership: A roadmap forward. In B. Schyns, P. Neves, & R. Hall (Eds.), *Handbook of Methods in Leadership Research*. Cheltenham, UK: Edward Elgar Publishing.
- Gabora, L., Rosch, E., & Aerts, D. (2008). Toward an ecological theory of concepts. *Ecological Psychology*, 20, 84-116.

- Hansbrough, T.K., Lord, R. G., & Schyns, B. (2016). Remember and know judgments as a screen for measurement development. Presented at the Society for industrial and Organizational Psychology, Anaheim, CA.
- Hansbrough, T. K., Lord, R. G., & Schyns, B. (2015). Reconsidering the accuracy of follower leadership ratings. *The Leadership Quarterly*, *26*, 220-237.
- Hanges, P. J., Lord, R. G., & Dickson, M. W. (2000). An information-processing perspective on leadership and culture: A case for connectionist framework. *International Review of Applied Psychology*, *49*, 133–161.
- 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*, 1154-1173.
- Keller, T. (1999). Images of the familiar: Individual differences and implicit leadership theories. *The Leadership Quarterly*, *10*, 589–607.
- Keller, T. (2003). Parental images as a guide to leadership sensemaking: An attachment perspective on implicit leadership theories. *The Leadership Quarterly*, *14*, 141–160.
- Kilduff, M., & Tsai, W. (2003). *Social networks and organizations*. London: Sage.
- Lord, R.G. (2017). Leadership in the future and the future of leadership research. In Schyns, B., Neves, P. & Hall, R. (Eds.), *Handbook of methods in leadership research*. UK: Edward Elgar Publishing.
- Lord, R. G., Brown, D. J., & Harvey, J. L. (2001). System constraints on leadership perceptions, behavior and influence: An example of connectionist level processes. In M. Hogg, & R. Tinsdale (Eds.), *Blackwell handbook of social psychology. Group processes, Vol. 3*. (pp. 283–310). Oxford, UK: Blackwell.

- 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.
- Lord, R. G., & Maher, K. J. (1991). *Leadership and information processing: Linking perceptions and performance*. Boston, MA: Unwin Hyman.
- Lord, R. G., & Shondrick, S. J. (2011). Leadership and knowledge: Symbolic, connectionist, and embodied perspectives. *The Leadership Quarterly*, *22*, 207–222.
- Meindl, J. R. (1995). The romance of leadership as a follower-centric theory: A social constructionist approach. *The Leadership Quarterly*, *6*, 329–341.
- Morgeson, F. P. (2005). The external leadership of self-managing teams: Intervening in the context of novel and disrupting events. *Journal of Applied Psychology*, *90* (3), 497-508.
- Offermann, L. R., Kennedy, J. K., & Wirtz, P. W. (1994). Implicit leadership theories: Content, structure, and generalizability. *Leadership Quarterly*, *5*, 43-58.
- Phillips, J. S., & Lord, R. G. (1981). Causal attributions and perceptions of leadership. *Organizational Behavior and Human Performance*, *28*, 143-163.
- Rosch, E. (1978). Principles of categorization. In E. Rosch, & B. B. Lloyd (Eds.), *Cognition and categorization* (pp. 27–48). Hillsdale, NJ: Erlbaum.
- Rush, M. C., Thomas, J. C., & Lord, R. G. (1977). Implicit leadership theory: A potential threat to the internal validity of leader behavior questionnaires. *Organizational Behavior and Human Performance*, *20*, 93-110.
- Schyns, B., & Shilling, J. (2011). Implicit leadership theories: Think leader, think effective? *Journal of Management Inquiry*, *20*, 141-150.

- Shamir, B. (2007). From passive recipients to active co-producers: Followers' roles in the leadership process. In B. Shamir, R. Pillai, M. Blight, & M. Uhl-Bien (Eds.), *follower-centered perspectives on leadership: A tribute to the memory of James R. Meindl* (pp. 9-39). Greenwich, CT: IAP.
- Shondrick, S. J., & Lord, R. G. (2010). Implicit Leadership and Followership Theories: Dynamic structures for leadership perceptions, memory and leader–follower processes. In G. P. Hodgkinson, & J. K. Ford (Eds.), *International review of industrial and organizational psychology* (pp. 1–33).
- Sy, T. (2010). What do you think of followers? Examining the content, structure, and consequences of implicit followership theories. *Organizational Behavior and Human Decision Processes*, *113*, 73–84.
- Sy, T., Shore, L. M., Strauss, J., Shore, T. H., Tram, S., Whiteley, P., et al. (2010). Leadership perceptions as a function of race–occupation fit: The case of Asian Americans. *Journal of Applied Psychology*, *95*, 902–919.
- Taylor, S. E. & Fiske, S. (1978). Salience, attention, and attribution: Top of the head phenomena. *Advances in Experimental Social Psychology*, *11*, 249–288.
- Topakas, A. (2011). *Measurement of implicit leadership theories and their effect on leadership processes and outcomes*. (Doctoral Dissertation). U.K.: Aston University.
- Tulving, E. (2002). Episodic memory: From mind to brain. *Annual Review of Psychology*, *53*, 1-25.
- Uhl-Bien, M., & Pillai, R. (2007). The romance of leadership and the social construction of followership. In B. Shamir, R. Pillai, M. Blight, & M. Uhl-Bien (Eds.), *follower-*

centered perspectives on leadership: A tribute to the memory of James R. Meindl (pp. 187-209). Greenwich, CT: IAP.

Van Gils, S., Van Quaquebeke, N., & van Knippenberg, D. (2010). The X-factor: On the relevance of implicit leadership and followership theories for leader–member exchange agreement. *European Journal of Work and Organizational Psychology, 19*, 333–363.

Table 1

Overview of articles.

Authors	ILT/IFT/Both	Recognition or Inference process	Typical/Ideal Prototypes	Implied/Explicitly Measured Time	Method
Theme 1 – Relational Influence Process					
Riggs & Porter (2017)	ILT	Recognition	Typical	Implied	Polynomial regression and response surface
Tsai, Dionne, Wang, Spain, Yammarino, & Cheng (2017)	ERS and IRS (relational schemas)	Recognition	Ideal	Implied	Polynomial regression and response surface
Theme 2 – Dynamic Representation of Implicit Theories					
Alipour, Mohammed, & Martinez (2017)	Temporal ILTs (TILTs) and IFTs (TIFTs)	Recognition	Ideal	Explicitly theorized	Theory paper
Chiu, Balkundi, & Weinberg (2017)	ILT	Inference	Typical	2-wave study	Social network analysis, HLM
Trichas, Schyns, Lord, & Hall (2017)	ILT	Recognition	Typical	Implied	Experimental study in a banking context ANOVAs, SEM