

**A Dimensional Analysis of the Relationship between Servant Leadership and
Leader Member Exchange**

BY

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THESIS

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DEDICATION

To the poets, scientists, story tellers, and philosophers of the past who desired to know and sacrificed for it and upon whose shoulders we stand today, especially Alexander Pope who commands, “Know then thyself, presume not God to scan; The proper study of Mankind is Man.”

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LIST OF ABBREVIATIONS

CFA	Confirmatory Factor Analysis
CFI	Comparative Fit Index
CMV	Common Method Variance
ICC	Intraclass Correlation Coefficient
LMX	Leader-Member Exchange
OCB	Organizational Citizenship Behavior
RMSEA	Root Mean Square Error of Approximation
RWA	Relative Weight Analysis
SEM	Structural Equation Modeling
SRMR	Standardized Root Mean Square Residual
TLI	Tucker-Lewis Index

SUMMARY

Servant leadership is a leadership model focusing on developing followers, dedication to their holistic wellbeing, and a concern for not only organizational, but extra organizational stakeholders. Leader-member exchange is the quality of relationship between leader and follower. Both of these leadership models have been shown to be related to important organizational outcomes. Using Foa and Foa's (1974) resource theory of social exchange, I view the seven dimensions of servant leadership behaviors (Liden, Wayne, Zhao, & Henderson, 2008) as forms of exchange currency supervisors use to develop high quality exchange relationships with followers. Further, I suggest that followers will reciprocate to leaders in the form of voluntary behaviors aimed at the leader. Tests (using structural equation modeling and relative weights analysis) according to the expectations of resource theory offered only tenuous support for four of the 18 hypotheses. I suggest for future research that the application of resource theory requires the understanding of the *meaning* behind the dyadic exchanges, not simply a measure of behaviors *per se*, in order to understand how leaders and followers reciprocate behaviors within a dyadic exchange relationship.

1. INTRODUCTION

Servant leadership (Greenleaf, 1977; Liden, Wayne, Zhao, Henderson, 2008) is a leadership model based in service toward followers. Servant leadership is unusual in the leadership literature for several reasons. First, it arose from the reflections of a high level leader at a major corporation, rather than being distilled from scientific observation at the inception. Second, it focuses on serving and fulfilling follower needs so that they can grow and develop into servant leaders themselves. Third, it is concerned with more than organizational goals or internal stake-holders, but rather sees followers and those outside the organization in the wider community as the purview and concern of the servant leader. For the servant leader, it is not simply enough to have a successful profitable team, but rather, one with a serving climate that makes investments in growth and improvement in the team, organization, and wider community.

Servant leadership has been shown to be related to several important workplace outcomes (Chaudhry, Cao, & Vidyarthi, 2015), and several of the key components of the theory have been supported empirically (e.g., the growth of followers and a serving culture; Hunter et al., 2013; Liden, Wayne, Liao, & Meuser, 2014). While several taxonomies exist (see Van Dierendonck, 2011, and Northouse, 2016, for a review), this dissertation relies on the Liden et al. (2008) taxonomy, as the scale development work used to create the measure is more robust than the (many) alternative scales available (Van Dierendonck, 2011). This taxonomy has seven dimensions of servant leadership behavior: conceptual skills, helping subordinates grow and succeed, emotional healing, creating value for the community, putting subordinates first, empowering, and behaving ethically.

Servant leadership is a taxonomy of leadership behaviors. I contend that these behaviors, that is, how the leader treats the followers in terms of servant leadership, impact the quality of

relationship between leader and follower. Leader-member exchange (LMX; Dansereau, Graen, & Haga, 1975) describes this quality of relationship. Many scholars over decades have contributed to a vast literature on LMX, which together shows many relationships with important workplace outcomes (summarized in recent meta-analyses: Dulebohn, Bommer, Liden, Brouer, & Ferris, 2012; Martin, Guillaume, Thomas, Lee, & Epitropaki, 2016; Rockstuhl, Dulebohn, Ang, & Shore, 2012). LMX grew from research into vertical-dyad linkages (Liden & Graen, 1980) and the realization that leaders form unique relationships with followers, rather than treat them all equally. While many scholars view LMX as a unidimensional construct (e.g., Graen & Uhl-Bien, 1995), Dienesch and Liden (1986) and Liden and Maslyn (1998), as well as others, have made an argument to view LMX multi-dimensionally. This argument is based in the idea that human exchanges unfolding through role events are multifaceted, that is, that there are several forms of “exchange currency” (Liden & Maslyn, 1998: 45) corresponding with the way in which the leader and follower interact.

Several scholars have concerned themselves with the relationship between servant leadership and LMX both theoretically and empirically. At first, servant leadership scholars were concerned with discriminate validity and parsimony, that is, that servant leadership contributes to the leadership literature in a unique theoretical way, and that it accounts for variance beyond that which is accounted for by other leadership constructs (e.g., Liden et al., 2008), most notably the more commonly researched LMX and transformational leadership (Dinh, Lord, Gardner, Meuser, Liden, & Hu, 2014). While establishing the unique contribution of servant leadership to the leadership literature, they simultaneously showed a non-zero relationship between servant leadership and LMX.

Scholars then turned their attention to the nature of this relationship. Liden and colleagues (2008) specified that servant leaders deliberately develop strong social exchange relationships with their followers. Investigation of the connection between servant leadership and LMX is of particular theoretical import because both models suggest an individualized relationship between leader and follower as a core component of their respective theories (Van Dierendonck, 2011). This individualized treatment suggests the use of Foa and Foa's (1974)'s resource theory of social exchange to frame inquiry into the relationship between servant leadership and LMX. Research to date has envisioned leadership behaviors as an antecedent to LMX (Nahrgang & Seo, 2016) and servant leadership scholars seem to concur (Barbuto & Wheeler, 2006; Barbuto, Wilmot, Singh, & Story, 2012; Wu, Tse, Fu, Kwan, & Liu, 2013), placing servant leadership as an antecedent to LMX in their models. Resource theory can be used to explain this relationship, as servant leadership behaviors provide resources to followers, who then reciprocate with LMX as expected by social exchange theory.

There are reasons to focus on higher order constructs, as most scholars interested in servant leadership and LMX have done. First is Kelly's (1927) "jangle" fallacy, where a phenomenon is discussed using two different terms. The simplicity and parsimony of theory that arises when discussing a higher order construct, rather than breaking it into its respective dimensions, reduces this tendency. Indeed, it is often difficult to create different theoretical rationales for each dimension of a higher order construct and discussing the higher order construct alleviates this need. Second, broader predictors are stronger predictors of a wider array of workplace behaviors (Jenkins & Griffith, 2004; Johnson, Rosen, & Chang, 2011). It is the goal of the scientist to explain the most variance with the fewest variables, and the use of higher

order constructs can serve this purpose. Nevertheless, the use of higher order constructs opens the question of the “black box” that unfolds between their respective components.

Extant servant leadership and LMX research has largely ignored the dimensionality of both constructs and there are theoretical reasons to be concerned with the dimensional-level relationships between them. I argue that this is a significant theoretical lacuna precisely because theory suggests that there *are* theoretically meaningful differences in how the dimensions of both operate. Resource theory suggests that different servant leadership behaviors and LMX dimensions correspond with different resources, and for this reason, we can expect differing relationships between them. As Liden and Maslyn (1998) observed, there are different forms of exchange that contribute to a leader-member relationship. In this dissertation, I elaborate on this framework and extend it to servant leadership. For example, servant leadership has differing forms of service toward followers (e.g., emotional healing is of a different form than conceptual skills), which I contend relate (or relate more strongly) to one dimension of LMX over others.

The purpose of this dissertation is to investigate these differing relationships. Using Foa and Foa’s (1974) resource theory, I provide a dimensional level theoretical framework for the relationship between servant leadership and LMX, and test this framework empirically. This will permit scholars to have a more complete nuanced understanding of how the seven servant leadership behaviors may contribute to the growth and maintenance of a high quality LMX relationship. A more nuanced view of the servant leadership – LMX relationship is valuable as it sets the stage for future research into theoretical moderators of this relationship, which will more effectively and accurately model the leader-follower-situation triad.

This dissertation extends theory by proposing relationships between servant leadership and LMX at the dimensional level, such that LMX dimensions mediate the impact of servant

leadership dimensions on dyadic focused outcomes (organizational citizenship and deviance directed toward the leader). This makes three important contributions through the application of resource theory. First, it extends LMX theory by showing a more nuanced view of how the dimensions of LMX are related to employee behavioral reciprocation. Second, it extends servant leadership and LMX theory by showing a nuanced view at the dimensional level of how servant leader behaviors contribute to their followers' relationships with their respective leaders. Third, it extends servant leadership theory by showing how dimensions contribute differently to dyadic outcomes through different aspects of the LMX relationship with the leader (that is, indirect effects of SL on dyadic outcomes through LMX). This research answers a call from Mitchell, Cropanzano, and Quisenberry (2012) to investigate interpersonal relationships as composed of multiple components.

2. LITERATURE REVIEW

This literature review focuses on research that investigates servant leadership and LMX as dimensional constructs. While many scholars use dimensional conceptualizations in theory and measurement, analyses most often amalgamate dimensions into an overall superordinate construct. Here, I review literature that deviates from this norm. First, I review literature that supports differing effects of servant leadership dimensions. Second, I discuss LMX as a unitary and dimensional construct, followed by research that supports differing effects of the LMX dimensions. I close this section by discussing research that has investigated servant leadership and LMX in the same study. This sets the stage for the following chapter, which employs resource theory to develop hypotheses about the relationship between servant leadership and LMX at the dimension level.

2.1 Supporting Differing Effects of the Servant Leadership Dimensions

There has been extensive scale development work producing a variety of dimensional scales corresponding to several different conceptualizations of servant leadership (Bambale & Shamsudin, 2013; Barbuto & Wheeler, 2006; Dennis & Bocarnea, 2005; Dennis & Winston, 2003; Ehrhart, 2004; Liden et al., 2008; Liden, Wayne, Meuser, Hu, Wu, & Liao, 2015; Mittal & Dorfman, 2012; Murari & Gupta, 2012; Oner, 2011; Page & Wong, 2000; Reed, Vidaver-Cohen, & Colwell, 2011; Sendjaya, Sarros, & Santora, 2008; Sendjaya & Cooper, 2011; Van Dierendonck & Nuijten, 2011; Whittington, Frank, May, Murray, & Goodwin, 2006; Wong & Page, 2003; scholars contributing to servant leadership scale development are marked with a * in the references). Because this work has been extensively reviewed (Northouse, 2016; Van Dierendonck, 2011), the remainder of this review section will focus on researchers who tested

models using dimensions of servant leadership scales (though most did not hypothesize at the dimension level).

Liden et al. (2008) validated the first robust measure of servant leadership revealing a seven dimension construct. These dimensions were subject to a hierarchical linear modeling analysis using community citizenship behavior, in role performance, and organizational commitment as criterion variables. No servant leadership dimension was a significant antecedent of all three criterion variables, and three dimensions were significant antecedents of none. Adding to the strength of these results, LMX and transformational leadership were controlled for in this study.

Barbuto, Gottfredson, and Searle (2014) and Beck (2014) investigated the antecedents of servant leadership using the Barbuto and Wheeler (2006) 5-dimension servant leadership questionnaire (SLQ) scale. They found that in same source data, locus of control and emotional intelligence predict all five dimensions, but in different patterns. However, no relationships were significant when regressing leader self-reported personality on follower-reported leadership.

Bobbio, Van Dierendonck, and Manganelli (2012) validated the Van Dierendonck and Nuijten servant leadership survey (SLS; 2011) in an Italian context. While offering formal hypotheses at the aggregate servant leadership level, they tested these hypotheses using perceived leader integrity, burnout, affective, continuance, and normative commitment, OCB, and anti-role behaviors (similar to deviance) as criterion variables for validation. They found differing patterns of results for each criterion variable, and no dimension significantly predicted all of the outcomes.

Hale and Fields (2007) used Dennis' (2004) three-dimension interpretation of servant leadership (service, humility, and vision) and measure. While they did not offer hypotheses, they

did test if the three dimensions were related to leadership effectiveness in two samples (US and in Ghana). They found all three to be related in the Ghana sample, but vision was not in the US sample. This suggests not only differing patterns of results by dimension, but that societal culture may also play a role.

Mittal and Dorfman (2012) reviewed the servant leadership literature, identified six dimensions of servant leadership, and using expert ratings, selected items from the GLOBE survey that corresponded with each servant leader dimension. They were able to do this for five of their six identified dimensions. The goal of their study was to show which dimensions are endorsed more or less frequently in some culture clusters versus others. Their results show support for four of their six hypotheses, and more broadly, that there are different patterns of servant leadership “native” to culture clusters. This finding, that is, that the expression of servant leadership differs by culture, corresponds with the findings of Hale and Fields (2007).

Senjaya and Pekerti (2010), using the Sendjaya et al. (2008) servant leadership measure, offered parallel hypotheses predicting that the six dimensions present in that model each are related to trust in leaders. However, while a regression with the aggregate servant leadership measure with trust in leader was significant, a separate regression revealed that only three of the dimensions showed significant relationships.

In summary, while many researchers have contributed construct definition and scale development work to the servant leadership literature, and all of the measures of servant leadership that I reviewed are dimensional in nature, very few scholars have tested hypothesized models regarding differing effects of servant leadership. More common is to hypothesize about servant leadership and test it in aggregate (e.g., Hu & Liden, 2011), or report tests of each dimension after hypothesizing about the construct in aggregate (e.g., Bobbio et al., 2012; Liden

et al., 2008). This literature review highlights two obstacles to dimension level servant leadership to date. First, researchers have employed a large quantity of theoretical interpretations of the servant leadership construct as well as differing measures. Second, with the exception of Liden et al. (2008) and Bobbio et al. (2012), no outcome variables overlapped. These obstacles make amalgamating what has been done at the dimensional level difficult, as many dimensions do not overlap with the majority of proffered constructs and criterion variables have, with one exception, not been used across studies. However, the extant work does suggest that the dimensions of servant leadership, regardless of the measure selected to operationalize servant leadership, do show differing patterns of results.

2.2 LMX from a Dimensional Perspective

While there have literally been hundreds of published LMX articles in the present century alone, and LMX ranks third among the various leadership models/approaches in terms of researcher attention (Dinh et al., 2014), very little work has been done with the dimensions of LMX identified by Liden and Maslyn (1998). Certainly, while Liden and Maslyn (1998) is a highly cited article (610 cites in PsycInfo as of October 1st, 2015), only 53 of those also include the word “dimension” in the title, abstract, and keywords. Of the 41 articles available through my university library, 11 report the use of the four dimensions in some way at the individual level. So, while the LMX-MDM measure is one of the two most often used measures of LMX, the dimensional qualities of the scale are not often employed as such, but rather the scale is most often used in aggregation in order to capture more of the LMX content domain than other measures (Liden, Wu, Cao, & Wayne, 2016). This section reviews those studies that utilize the four LMX-MDM dimensions in theory and/or analysis.

2.2.1 Supporting Differing Effects of LMX Dimensions

Collins, Burrus, and Meyer (2014) tested if embeddedness mediated the relationship between the LMX dimensions and job satisfaction, with subordinate gender as a moderator of the LMX -> embeddedness relationship. These authors offered parallel hypotheses for all four LMX dimensions and found support for them. Support for a sex moderation was not found for contribution and professional respect, but was supported for loyalty and affect, suggesting that women respond to these relational aspects of a leader's behavior with embeddedness and subsequent job satisfaction more so than men.

Greguras and Ford (2006) developed a parallel version of the LMX-MDM, measuring the leader-follower relationship from the perspective of the supervisor (SLMX-MDM). Their work predicted and found differing patterns of significant relationships between the four dimensions of LMX-MDM (and SLMX-MDM) and satisfaction with supervisor, affective organizational commitment, job involvement, in-role performance, and OCBs (in general). Affect, loyalty, and professional respect were related to satisfaction with supervisor. Affect, contribution, and professional respect were related to affective organizational commitment. Contribution and professional respect were related to job involvement. Loyalty was related to in-role performance, and none of the four LMX dimensions were related to organizational citizenship behavior. No dimension of LMX-MDM (or SLMX-MDM) predicted all criterion variables and no criterion variable was predicted by all four LMX dimensions. They also predicted and found that their new measure of SLMX-MDM accounted for incremental variance beyond LMX-MDM.

Law, Wang, and Hui (2010) offered two studies testing a model where the four dimensions of LMX-MDM (which they call "exchange currencies" borrowing from Liden & Maslyn's language), rather than loading on an overall LMX-MDM dimension, as is usually done, predicted LMX-7, which they call "global LMX." In-role, extra role, and contextual

performance were used as criterion variables. While these authors hypothesized “global LMX” as a mediator between the LMX-MDM dimensions and their criterion variable, they did not report tests of indirect effects. Nevertheless, differing patterns of path coefficients were reported for the relationships between the dimensions of LMX and LMX-7 in study 1. Specifically, affect was not significantly related to LMX-7, supporting the notion that LMX-MDM captures a wider content domain.

Lee (2008) hypothesized a positive relationship between the loyalty and contribution dimensions of LMX-MDM and the criterion variable of innovativeness. A hierarchical regression of innovativeness on the four dimensions of LMX-MDM revealed that only loyalty is significantly related. Similarly, Olsson, Hemlin, and Pousette (2012) found partial support for their prediction that the four dimensions of LMX relate to individual creative performance.

Maslyn and Uhl-Bien (2001) predicted that the dimensions of affect, loyalty, and professional respect will relate to subordinate reports of manager effort, with results supporting their predictions for affect and loyalty. They predicted manager effort would be related to subordinate contribution; this hypothesis was not upheld. They predicted that effort from both manager and subordinate was negatively related to professional respect; this prediction was upheld. Finally, their prediction that subordinates’ own efforts would be positively related to contribution was upheld. A strength of this study is that they ran a parallel analysis with LMX-MDM as a composite. The comparison of results highlights the differing relationships the dimensions have with the outcome variables present in this study.

Sin, Nahrgang, and Morgeson (2009) in a study of agreement between leader and follower on the quality of relationship they share, show through regression differing patterns of relationship between follower reported LMX dimensions and relationship tenure, quantity of

dyadic interaction, and communication frequency, as well as interactions between them and the LMX dimensions in predicting leader reported LMX with the follower. Specifically, member LMX interacted with relationship tenure to predict leader reported LMX loyalty and contribution; member LMX interacted with dyadic interaction to predict leader reported LMX affect; member LMX interacted with communication frequency to predict leader reported LMX loyalty. Unconditional effects were found between dyadic interaction and leader reported LMX loyalty and professional respect, and between communication frequency and leader reported LMX affect.

Wang, Law, and Chen (2008) hypothesized relationships between affect, loyalty, and contribution with contextual performance (interpersonal facilitation and job dedication), as well as a relationship between professional respect and task performance. Structural equation modeling results supported only relationships between affect and contextual performance (as well as a hypothesized relationship with task performance. Contribution showed only a relationship with the job dedication dimension of contextual performance.

2.2.2 No Model Tested; Correlations Only.

Lee (2011) reported only correlations for the four LMX-MDM dimensions and six outcome variables (positive affectivity, negative affectivity, workload, exhaustion, cynicism, and professional efficacy), but used the aggregation in model testing. Raabe and Beehr (2003) report correlations for the four dimensions and job satisfaction, organizational commitment, and turnover intent. Lee, Lee, Lee, & Park (2005) reported differing patterns of correlations between the four dimensions of LMX-MDM from both the supervisors' and subordinates' perspectives of their respective relationships; five outcome variables dealing with feedback seeking behaviors were also assessed from both perspectives (positive feedback seeking, negative feedback

seeking, direct asking, indirect cue monitoring, and direct cue monitoring). Differing patterns of correlations were found. Therefore, these studies support, albeit in a rudimentary way (that is, with correlational evidence versus more robust statistical procedures), differing relationships between the four LMX-MDM dimensions and outcome variables.

2.2.3 Summary of Dimensional LMX.

In summary, using a variety of methods and sources, these 11 studies show differing patterns of results for the LMX-MDM dimensions compared with each other, as well as each dimension correlated with the composite scale. The reviewed studies provide evidence that the dimension of LMX matters in that within studies, all dimensions were not found to provide parallel predictive validity. However, the literature contains few studies that investigate LMX at the dimensional level. Most scholars investigate LMX as an aggregate construct. More evidence is needed to determine if this is appropriate, or if important nuances are lost through this practice. A study with the intent to identify the antecedents of each dimension and to examine the mediating role of the dimensions in explaining key outcomes has the potential to add to the literature in meaningful ways. For example, leaders relying on affect versus contribution in their exchange decisions may fall prey to biases or favoritism. Perhaps leadership behaviors based in task management (e.g., servant leadership conceptual skills) affect the LMX relationship in different ways when compared to more relationship or emotion-based behaviors (e.g., servant leadership emotional healing). Only Sin et al. (2009) and Maslyn and Uhl-Bien (2001) undertook an investigation of LMX antecedents at the dimensional level. The former predicted leader-follower agreement; the latter investigated effort toward the relationship from each dyadic partner. The investigation of the relationship between leadership style, which is seen as an LMX antecedent (Dulebohn et al., 2012), and the four LMX dimensions is an open area of research.

2.3 Servant Leadership and LMX

Servant leadership, along with other forms of leadership, has been shown to be positively related to LMX (e.g., Barbuto, Wilmot, Singh, & Story, 2012; see Nahrgang & Seo, 2016). My literature review was unable to uncover any published work testing models where the dimensions of servant leadership related to LMX in general or by dimension (though correlational evidence does exist and is reviewed). There has, however, been work testing models with the constructs in aggregate, which will be reviewed here in order to establish the connection between these constructs.

Several studies have contributed correlational evidence that servant leadership dimensions are related to LMX in aggregate. Ehrhart (2004) in one of the earliest empirical servant leadership studies, showed an average correlation between his servant leadership dimensions and LMX of .61. Barbuto and Wheeler (2006) included LMX and transformational leadership in their scale development work, showing that servant leadership is a superior predictor of LMX than is transformational leadership. Their analysis and conclusions rely on correlational data; however, their sample was hierarchical with multiple raters assessing individual leaders. This represents a limitation of their study. Liden et al. (2008), as mentioned above, controlled for LMX and transformational leadership in their study. While no analyses were presented that tested the potential for a causal relationship between servant leadership and LMX, servant leadership dimensions all moderately to strongly correlated ($r = .48 - .75$; $p < .01$) with LMX. Van Dierendonck and Nuijten (2011) showed positive and significant correlations with seven of their eight dimensions and LMX. While each of these scholars are using their own operationalization of servant leadership, they contribute evidence that servant leadership and LMX are positively related, but not redundant with each other.

Ehrhart (2004) went beyond correlational evidence to demonstrate the unique contribution of servant leadership by showing adequate fit for a confirmatory factor analysis measurement model containing servant leadership, LMX, and transformational leadership – a first and strong example in the extant literature that servant leadership is distinct from these other leadership models. Regression analysis showed that servant leadership accounted for unique variance for supervisor satisfaction, perceived supervisor support, trust in supervisor, organizational commitment, and procedural justice.

I uncovered three examples of researchers going beyond controlling for LMX in servant leadership analyses by testing models where LMX is either an outcome or mediator of servant leadership. First, Barbuto and colleagues (2012) sought to test leader-follower agreement on servant leadership as a predictor of LMX from the follower's perspective. However, their polynomial regression analysis showed that the leader's perception of his/her servant leadership was not related to follower reported LMX. Nevertheless, the follower's perception of servant leadership was related to LMX quality in their analysis. While this analysis was not conducted with dimensions of servant leadership or LMX, it nevertheless provides evidence that these two constructs are related.

Second, Wu, Tse, Fu, Kwan, and Liu (2013) provide some of the strongest evidence of LMX as an outcome of SL and mediator of servant leadership's impact on workplace outcomes available in the literature to date, albeit with some weaknesses. One clear strength in this study is that Wu and colleagues collected three wave data: Ehrhart's (2004) measure of servant leadership from followers at time 1, LMX from followers at time 2, and customer oriented OCB from supervisors at time 3. A second clear strength is that confirmatory factor analyses show SL and LMX as separate factors in the dataset – an important contribution given the generally high

correlations found between these constructs. Sobel (1982) tests were used to test the mediation of LMX between servant leadership and OCB. However, this is problematic because their data were hierarchical and they employed the Sobel test. Use of the Sobel test is not recommended for hierarchical data because the within and between group variance effects are likely different and this is problematic for the Sobel test (Zhang, Zyphur, & Preacher, 2009). Nevertheless, while this study likely overestimates the mediation and future research should employ more robust statistical procedures, this study does suggest servant leadership is an antecedent of LMX, and LMX can transmit the effect of servant leadership to outcome variables.

Third, Newman, Schwartz, Cooper, and Sendjaya (2015) likewise provide some of the strongest evidence of LMX as a mediator between servant leadership and workplace outcomes available in the literature. These authors show acceptable fit for a confirmatory factor analysis measurement model with servant leadership, LMX, psychological empowerment, proactive personality, and OCB as separate factors, demonstrating once again that LMX and servant leadership are distinct constructs. These authors hypothesize and provide evidence that LMX fully mediates servant leadership's impact on OCB, while controlling for the mediating effect of psychological empowerment. Rather than using the Sobel test (1982), these authors used a more robust bias corrected bootstrap procedure (Zhang, Zyphur, & Preacher, 2009). These results converge with those of Wu et al. (2013) in supporting LMX as a mediator between servant leadership and OCB.

In summary, many scholars have contributed evidence that servant leadership and LMX are different constructs (Liden, Panaccio, Meuser, Hu, & Wayne, 2014), but at the same time highly related. However, recent extant evidence points to LMX as a mediator of servant leadership's effects on workplace outcomes, rather than the reverse (for which the literature

provides no examples.) However, the question of how dimensions of servant leadership relate to the dimensions of LMX as mediators of their individual effects on outcomes has yet to be addressed in the published literature. Further, only OCB has been tested as an outcome, and servant leadership is related to a large variety of outcomes (job performance, creativity, justice, trust in leader, organizational commitment, organizational identification, job satisfaction, and turnover intentions; Chaudhry et. al., 2015), offering additional opportunities to expand theory regarding the mediation of servant leadership on outcomes through LMX. In the next section, I offer theory substantiating the prediction that servant leadership is an antecedent to LMX. In short, servant leadership provides resources to followers and through these resources, the LMX relationship is nurtured.

3. THEORY AND HYPOTHESES

3.1 Resource Theory

Foa (1971) and Foa and Foa (1974) outlay the details of their resource theory of social exchange. This theory specifies a taxonomy of six resources exchanged or transmitted during interpersonal encounters: Love (also called affiliation or fidelity), status, service, information, good, and money. Theirs is the most comprehensive resource taxonomy to date, yet it has only recently been applied to LMX research (Mitchell et al., 2015; Wilson, Sin, & Conlon, 2010). I suggest that resource theory can be applied to leadership research and dyadic relationships shared by leader and follower more broadly, rather than only to LMX. Mitchell and colleagues suggest that viewing interpersonal relationships as composed of multiple components is a fruitful and underexplored avenue of research. Leadership behaviors in general and outcomes received by the leader as a result constitute forms of social interaction through which social resources are exchanged. As such, resource theory of social exchange serves as an excellent framework to understand how behaviors of the leader are received and reciprocated by the follower.

Foa and Foa maintain that anything exchanged in a human interaction can be classified in one or more of six resource categories (Mitchell et al., 2012; Foa & Foa, 1974; Sabbagh & Malka, 2012). These are:

1. *Affiliation*: expressions of affection, care, warmth, comfort, and joy of being around the person; friendship opportunities.
2. *Status*: expressions of importance, prestige, admiration, respect, regard, or esteem; involves evaluation and judgment.
3. *Services*: doing things or the promise of doing things on behalf of or to the person or belongings of the other; altruistic behavior.

4. *Information*: enlightenment, advice, information, opinion, or instructions;
opportunities for growth and development
5. *Goods*: physical objects, job security.
6. *Money*: hard or digital currency or promissory note (e.g., personal check).

However, it is not the object or action that necessarily *ipso facto* has a placement in the taxonomy, but rather it is the meaning behind the object or action that is important. For example, a Band-Aid applied by a school nurse is a service, but when applied by a mother, it also is an act of love. A balloon is a good when sold at a store, but a symbol of status when given in the classroom to signify a birthday or accomplishment, and further a symbol of love when given by a grandmother. Even money can be symbolic: the dollar placed in the 5 year old's Thanksgiving card by a family member has little monetary value, but yet is taken as a sign of love. The same dollar left as a gratuity on a large check could be an insult in exchange for poor service.

Foa and Foa also specify two dimensions on which their six resources can be placed: concreteness and particularism. *Concreteness* refers to the tangibility of the resource. For example, goods are (by definition) very tangible. Conversely, information and status are abstract. *Particularism* refers to how much it matters from whom the resource is received. Resources high in particularism matter a great deal; those low on particularism can be received from anyone. For example, money is low on specificity – it matters little from whom you receive it for money has the same value regardless of the source. Conversely, expressions of affiliation matter a great deal. Strangers enacting expressions of familiarity bring discomfort rather than the comfort experienced from a familiar source. The six resources are therefore arranged in a circular configuration based upon their similarity or differences on these two dimensions (see italic words in the circumplex in Figure 1.)

Servant leadership and LMX dimensions each describe aspects of the interpersonal encounters in the workplace and as such, resource theory can be used to classify these dimensions in order to understand which servant leadership dimension is most strongly related to which LMX dimension. Organizational citizenship behaviors and deviance toward supervisors, as expressions of reciprocity, likewise constitute behaviors that can be classified by resource theory. The following sections specify these classifications, that is, map the servant leadership and LMX dimensions as well as OCB and deviance toward supervisor onto the resource classes (see Figure 1). A fundamental tenant of resource theory of social exchange, and the core upon which my theory is based, is that these resources are preferably exchanged for the same resource (i.e., affiliation for affiliation, service for service), but if this is not possible, the next nearest resource in the circumplex is preferred. This permits hypotheses about the relative strength of relationships between the behaviors of servant leadership, LMX, and OCB and deviance toward supervisor based upon the relationship between resource classes upon which they map.

3.2 Organizational Citizenship Behaviors (OCBs) and Deviance Directed toward the Supervisor as Exchange Currencies

Rather than focus on what employees *must* do (i.e., job performance), I elected to focus on what employees *can* or might do (both positive and negative) on a discretionary or voluntary basis towards their leader in response to the leader's behavior. This is in line with Blau's definition of social exchange, which "refers to *voluntary actions* of individuals that are motivated by the returns they are expected to bring and typically do in fact bring from others" (Blau, 1964: 91). OCBs are discretionary behaviors intended to help the organization and/or its members directly (Organ, 1988; Williams & Andersen, 1991). LMX research, based in social exchange and the norm of reciprocity (Gouldner, 1960), has firmly established that OCBs are positively

related to LMX (and more strongly than to job performance; Dulebohn et al., 2012). Conversely to OCBs, organizational deviance are voluntary behaviors that depart from expected organizational social norms and are intended to cause harm to the organization and/or its members directly (Robinson & Bennett, 1995). While OCBs as an outcome of LMX have received substantial attention (Dulebohn et al., 2012), deviance behaviors have rarely been examined but a negative relationship is supported by theory (Fox & Spector, 1999) and has been found empirically (El Akremi, Vandenberghe, & Camerman, 2010).

The relationship between LMX and deviance can be explained by social exchange theory and deviance theory, which suggest that deviance results if high quality social exchange, a generally desirable state, is not experienced (Kaplan, Gostjev, & Johnson, 2013). Deviance is an expression of negative emotion often arising from low-quality interpersonal interactions (Fox & Spector, 1999). Negative emotions are weighed more carefully and strongly in interpersonal reactions than are positive emotions, and people tend to take them more personally. The idea that “bad is stronger than good” is one of the more strongly supported ideas in social psychology (Baumeister, Bratslavsky, Finkenauer, & Vohs, 2001). Deviance indicates a lack of respect towards the supervisor, as well as a lack of care. Unlike other forms of counter-productive workplace behavior (e.g., stealing, time theft, sabotage), deviance has less of a physical concrete manifestation, and more of an interpersonal component. As such, deviance is a combination of lack of respect and care most prominently, combined with a lack of performing service secondarily. Therefore, deviance is a composite of the resource classes of status, affiliation, and secondarily, service.

OCB, as a form of helping behaviors, corresponds most closely to the resource taxonomy category of services, as they are actions performed on behalf of or to the person of the recipient

of the helping behaviors. It is also possible that the helping behaviors contain a symbolic expression of care towards the recipient supervisor. Unlike deviance, however, they do not contain the same import towards the status resource. Research shows that negative stimuli (e.g., deviance) are more salient than positive stimuli (e.g., OCB). It may be that the reason why negative events and expressions are more contagious than positive ones, and the responses to them more varied (Rozin & Royzman, 2001) is precisely because they are perceived to impact more resource classes.

One of the more consistent findings in organizational research is that the perceived source of treatment does matter, and predictive ability is maximized when outcomes are selected that align with the source of treatment (Rupp, Shao, Jones, & Liao, 2014). Organizational support/LMX/social exchange (Lavelle, Rupp, & Brockner, 2007), justice (Rupp et al., 2014), and deviance (Hershcovis et al., 2007) literatures converge on this point. They suggest that behavior that is perceived to “come from” an organizational referent (e.g., organization, coworkers, leader) is “returned to” that referent most strongly. Therefore, *supervisor directed behaviors* (OCBs and deviance) as outcomes are well suited to an investigation of the follower responses to leader treatment based on the principles of social exchange theory (Blau, 1964).

3.3 LMX and Social Resource Theory: Mapping the Dimensions onto the Currencies

Liden and Maslyn (1998: 50) define *affect* as “The mutual affection members of the dyad have for each other based primarily on interpersonal attraction, rather than work or professional values” and suggest this can be manifest as a friendship. This dimension directly corresponds with the resource theory category of affiliation – an affectionate, caring friendship (See Table 1).

Liden and Maslyn (1998) describe the *loyalty* dimension of LMX as comprising expressions of support and faithfulness towards the dyad member. These expressions are

consistent across situations (including the public and private fora). Resource theory specifies that the boundaries between resource categories are permeable and overlap in a continuum, therefore a one-to-one mapping is not necessary to utilize the taxonomy. This dimension is a composite of two exchange currencies. First, as an expression, loyalty involves the doing or promise to do something on behalf of the dyadic partner – in this case, defend them. As such, it is a service. Second, it involves an element of respect, regard, and admiration. One must earn the loyalty of another. As such, loyalty also involves the currency of status.

Contribution is the "perception of the amount, direction, and quality of work-oriented activity each member puts forth toward the mutual goals (explicit or implicit) of the dyad" (Dienesch & Liden, 1986: 624). This corresponds to the resource category of service, that is, doing things on behalf of the other, here, towards the mutual goals the leader and follower share as part of the workgroup.

Professional respect is the "perception of the degree to which each member of the dyad has built a reputation, within and/or outside the organization, of excelling at his or her line of work" (Liden & Maslyn, 1998). This dimension corresponds with the exchange currency of status, as it involves expressions of respect, regard, and esteem.

3.4 Hypotheses One: LMX and Deviance

While deviance towards the supervisor may be seen as "biting the hand that feeds them," research has demonstrated that employees do enact interpersonally deviant behaviors towards their supervisors (Tepper et al., 2009). Interpersonal *deviance* is a composite of the resource classes of status, affiliation, and secondarily, service. As such, following from the core tenant of the resource theory of social exchange, deviance will be most strongly related to the LMX dimensions most closely related to these combinations of resources. That is, resource theory

specifies resources are returned in kind when possible, or with the next most similar available resource. Specifically, the LMX dimension corresponding most closely to status and service as a composite (that is, loyalty) will be most negatively related to deviance. A (perceived) lack of loyalty is an explanation for deviant behavior (Abrams, Palmer, Rutland, Cameron, & Van de Vyver, 2014, Blanton & Christie, 2003). The LMX dimensions most closely related to status (professional respect) and affiliation (affect) separately will be most next most negatively related to deviance. Research suggests that respect of a referent is negatively related to expressions of deviance perpetrated against that referent (Al-Atwi & Baker, 2014). Interpersonal deviance is an expression of disrespect toward the recipient. Social exchange theory suggests consistent and equitable exchanges in high quality relationships and expressions of deviance run counter to these expectations (Blau, 1964). Therefore, followers who respect their supervisors engage in fewer disrespectful deviant actions towards them. The theory of relational cohesion (Lawler & Yoon, 1996), part of the social exchange family of theories, adds to the expectations of resource theory by suggesting that strong affective relationships serve as a restraint against deviant behavior (Williamson, 1981; Granovetter, 1985). Indeed, deviance implies a devaluation of the target and a detachment from intimacy (Sternberg, 2005; Dovidio, Gaertner, & Pearson, 2005). Of the four LMX dimensions, contribution is the most weakly associated with interpersonal deviance. One can insult and gossip about the supervisor while engaging in work tasks, for example.

Hypothesis 1: Compared to the other LMX dimensions, LMX loyalty is most strongly negatively related to deviance.

3.5 Hypothesis Two: LMX and OCB

OCBs are often helping actions directed toward individuals (Organ, 1988), and seen as a form of work performance (Williams & Andersen, 1991) that promotes organizational effectiveness (Organ, 1988). *OCBs*, as a form of helping behaviors, correspond most closely to the resource taxonomy category of services. *OCBs* by definition are actions performed on behalf of or to the person of the recipient of the helping behaviors. Altruism, part of the services exchange currency, is also a component of discretionary helping behaviors. Contribution is the LMX dimension most strongly corresponding to the resource currency of services. Social exchange theory suggests that follower willingness to go above and beyond is reciprocity for enjoying a high contribution relationship with the leader. Borman and Motowidlo (1993) contend that *OCBs* are in fact a form of contribution within the workplace. As discussed earlier, LMX loyalty is also in part an expression of the services exchange currency. Social exchange theory and empirical evidence suggest that *OCBs* are a way of demonstrating loyalty, as well as a way of giving back for loyalty experienced (Leung, 2008). Finally, it is also possible that the helping behaviors contain a symbolic expression of care towards the recipient supervisor, which corresponds to the resource currency of affiliation. The theory of relational cohesion, part of the social exchange family of theories, suggests that strong affective relationships promote work toward common goals (Lawler & Yoon, 1996). As such, LMX affect is also related to *OCBs*.

While early deviance research suggested that *OCB* and deviance are reciprocally and (strongly) negatively related, more recent research has shown this view is too simplistic (Dalal, 2005; Fox, Spector, Goh, Bruursema, & Kessler, 2012). Fox and colleagues demonstrated that onlookers can witness perpetrators of deviant behavior also enacting citizenship behaviors (2012). This same study reports that individuals helped underperforming employees, but also

enacted deviant behaviors towards them, extracting a “price” for their help. This highlights that deviance is associated with disrespect while OCB is not necessarily associated with respect.

Hypothesis 2: Compared to the other LMX dimensions, LMX contribution is most strongly related to OCB.

3.6 Servant leadership as a antecedent of LMX

Research has demonstrated servant leadership is an antecedent of LMX (Barbuto et al., 2012; Newman et al., 2015; Wu et al., 2013). Resource theory of social exchange can be used to support this empirical finding and decompose the composite servant leadership – LMX relationship demonstrated in the literature into the component dimensions and specify which servant leadership dimensions will be more strongly related to the dimensions of LMX. Servant leadership is a collection of behaviors enacted towards followers, and as such, I propose these behaviors can be classified as exchange currencies the leader offers to the relationship. LMX theory, grounded in role theory, suggests that leaders are the “first movers” in the formation of relationships with subordinates (Nahrgang & Seo, 2015), which supports the causal ordering hypothesized here. The following sections map servant leadership to the resource classifications, and offer hypotheses about the relative strength of relationship between the seven servant leadership dimensions and each of the four LMX dimensions. This is done using the aforementioned core tenant of resource theory that resources are exchanged for the same or as similar a resource as possible. Therefore, the closer the exchange currency offered by the servant leadership dimension is to that of the LMX dimension, the stronger the expected relationship.

3.7 Servant leadership and Social Resource Theory: Mapping the Dimensions onto the Currencies

Emotional healing is “the act of showing sensitivity to others’ personal concerns” (Liden et al., 2008: 162). This corresponds most closely to the resource category of affiliation, as it is an expression of care and comfort. This dimension is similar to the social support dimension of mentoring (Kram, 1985; Scandura & Katerberg, 1988), which has been viewed by scholars as a form of affiliation currency (Ensher, Thomas, & Murphy, 2001). However, emotional healing is also an action done to benefit the follower’s emotional wellbeing, and in this, it corresponds in part to the resource category of service.

Creating value for the community is an extra-organization focused dimension where leaders look beyond the immediate concerns of their workgroup and organization, seeing a larger community within which the organization is a member and contributes in that ecosystem. By definition, this dimension involves altruistic behaviors, which correspond to the exchange currency of service. Volunteerism is also generally considered a positive behavior associated with respect (Basil, Runte, Easwaramoorthy, & Barr, 2009; Glenton, Scheel, Pradhan, Lewin, & Hodgins, 2010), and one that gives the leader a chance to be known both within and outside of the organization as a socially conscious, self-sacrificial person. Socially conscious exemplars, such as Mother Theresa and Martin Luther King, Jr., highlight the respect that self-sacrificial community involvement can engender. Many volunteers commit their time gratis in the areas in which they are trained (Angood, 2015). Professional activities outside of the organization are a sign of a well-connected leader (Ibarra, 1993) worthy of respect. These activities also show that leaders expressing this dimension respect the community that they are altruistically serving. Therefore, this dimension most strongly manifests the exchange currencies of service and status. Secondly, leaders exhibiting this dimension are also concerned with and motivate followers to be aware of, concerned with, and engaged in the communities in which their organizations

operate (Liden et al., 2008). This corresponds to the resource category of information in that it is a form of advice, opinion, or even instruction.

Conceptual skills involve knowledge of the organization, tasks, and work goals. This corresponds to exchange currency of information, as it provides the leader with necessary resources to provide enlightenment, advice, information, opinion, and/or instructions to followers when necessary or helpful. Conceptual skills provide the leader with requisites for supporting and directing their followers. A lack of conceptual skills represents a lack of exchange currency necessary for supporting followers with information necessary for their roles.

The *empowering* dimension of servant leadership involves leaders delegating to and encouragement of followers to take ownership of problems and make work-related decisions on their own (Liden et al., 2008). Empowerment is a composite of the exchange currencies of service and status. Empowerment is an action taken towards the employee and, at the same time, a sign the leader trusts followers, and holds them in high respect, regard and esteem (Kirkman & Rosen, 1999). Empowering followers is a sign of their importance to the leader, team, and organization.

The *helping subordinates grow and succeed* dimension of servant leadership entails behaviors that demonstrate concern for follower career growth (Liden et al., 2008). Similar to empowering behaviors, helping subordinates grow and succeed is a way leaders can invest in their followers and their mutual futures. This behavior involves vocational support mentoring (Kram, 1985), which is beneficial to followers who receive it (Eby, Allen, Evans, Ng, & DuBois, 2008). Eby (2011) describes mentoring as the highest quality social exchange involving the greatest amount of reciprocity a follower can have with the leader (vs a standard supervisory

relationship). Scholars have suggested vocational support mentoring is a form of status, information, and services exchange currencies (Ensher et al., 2001).

Putting subordinates first is the practice of conveying to followers through words and actions that the satisfaction of their work needs is a priority, even if it requires self-sacrifice on the part of the leader (Liden et al., 2008). This dimension is a composite of three resource classes. First, resource theory suggests that support from the leader is related to affiliation and affection within the dyad (Foa & Foa, 1974, 1980). It is also related to service, in that it is an altruistic behavior and, by definition, an action performed to or on behalf of the follower. Finally, and secondarily, it is related to status, in that it is an expression of respect and regard.

Liden and colleagues define the *behaving ethically* dimension of servant leadership as “interacting openly, fairly, and honestly with others.” Unethical behavior tarnishes the images of the perpetrator and we hold those in positions of authority to a higher standard, making this a salient workplace concern especially within the leader-follower dyad. Ethical behavior corresponds to the exchange currency of status in that it is an expression of respect (Folger, 2012). Ethical philosophers consider unethical behavior to be an affront to human dignity (Kant, 1785) and as such, unethical behavior signifies to the followers that the leader does not respect them, but rather treats them as elements or objects to be used (or abused) for personal gain, amusement, or whim.

3.8 Hypothesis Three: Servant Leadership-LMX Affect

LMX affect corresponds most closely with the resource currency of affiliation. According to resource theory, affect will be exchanged between follower and leader in reciprocity for leadership behaviors corresponding to this dimension. Servant leadership emotional healing transmits affiliation currency to followers. LMX theory (Dienesch & Liden,

1986) suggests emotional support is related to affect as it helps to create a warmer, more personal connection within the dyad. Followers reciprocate their leaders' emotional healing and sensitivity overtures with an affective friendship-based relationship with their leaders. Putting subordinates first likewise transmits affiliation currency to followers. Putting subordinates first is the practice of conveying to followers through words and actions that the satisfaction of their work needs is a priority, even if it requires self-sacrifice on the part of the leader (Liden et al., 2008). Resource theory suggests that support from the leader is related to affiliation and affection within the dyad (Foa & Foa, 1974, 1980).

Hypothesis 3: a) Servant leadership emotional healing and b) putting subordinates first are the servant leadership dimensions most strongly related to LMX affect.

3.8 Hypothesis Four: Servant Leadership-LMX Loyalty

LMX loyalty is a composite of the exchange resource currencies of status and services. The servant leadership dimensions that express status *and* service to followers are creating value for the community, empowering, and helping subordinates grow and succeed. These behaviors are, according to resource theory, most likely related to strong loyalty within the dyad because loyalty returns both currencies simultaneously.

Hypothesis 4: a) Servant leadership creating value for the community, b) empowering, c) helping subordinates grow and succeed and d) putting subordinates first are the servant leadership dimensions most strongly related to LMX loyalty.

3.8 Hypothesis Five: Servant Leadership-LMX Contribution

LMX contribution corresponds most closely with the exchange resource currency of services. According to the prediction of resource theory, contribution will be returned in exchange for the leader offering services to the follower. The servant leadership dimensions of

emotional healing, creating value for the community, empowering, helping subordinates grow and succeed, and putting subordinates first are expressions or behaviors by which the leader transmits the services currency. Social exchange theory suggests followers reciprocate services with contribution.

Hypothesis 5: a) Servant leadership emotional healing, b) creating value for the community, c) empowering, d) helping subordinates grow and succeed, and e) putting subordinates first are the servant leadership dimensions most strongly related to LMX contribution.

3.8 Hypothesis Six: Servant Leadership-LMX Professional Respect

LMX professional respect corresponds most closely with the exchange resource currency of status. Resource theory specifies an in-kind exchange of status for status. The servant leadership dimensions that serve to transmit status are creating value for the community, empowering, helping subordinates grow and succeed, and behaving ethically. Therefore, these servant leadership behaviors instigate the expression of professional respect from followers toward their leaders.

Hypothesis 6: a) Servant leadership creating value for the community, b) empowering, c) helping subordinates grow and succeed, d) putting subordinates first, and e) behaving ethically are the servant leadership dimensions most strongly related to LMX professional respect.

4. METHOD

4.1 Participants and Procedures

Participants were sourced from a Chicagoland municipal park district. Data were collected on site through Qualtrics using computer hardware provided by my university. I or another researcher was present at all times. This method has the benefit of on-site data collection quality controls and eliminates error from data entry or inability to read responses. Employees took the survey during work hours; a second survey for supervisors took place 2 months later using the same onsite method during working hours. Dyad linkage quality was ensured by two methods. First, dyad linkages were provided by the organization's human resource department prior to data collection. Second, the employee and supervisor surveys indicated the referent supervisor/employee by name in order to assure correct linkages. Onsite researchers were then able to correct for any errors in company employee lists. Data are hierarchical, with leaders reporting on multiple followers (range = 1 – 20; average = 4.87). Our onsite data collection method and organizational endorsement accounted for a high response rate: 53 supervisors (100.00%) and 271 employees (55.88%) completed the survey. Usable data were collected from 219 usable dyads; 218 are able to be used for model analyses due to missing data on x variables for one case. This includes 45 of the 53 supervisors. Employee characteristics are as follows: Average age was 42.29 years (SD = 15.99; 10 participants declined to respond); 41.60% were male (1 participant declined to respond); 193 identified as Caucasian (88.1%), 11 identified as Latino (5.0%), 4 as black/African American (1.8%), 2 as Asian (.9%), 1 as Native American (.5%), 2 as other (.9%), and 6 declined to respond (2.7%). Supervisor characteristics are as follows: Average age was 44.80 (SD = 10.25); 48.90% were male (1 participant declined to respond); 46 identified as Caucasian (97.90%), 1 as black/African American (2.1%), and 1

declined to respond (2.1%).

4.2 Supervisor Survey Measures

Supervisor directed OCBs were measured using a 3-item scale adapted from Williams and Andersen (1991). Following Rupp and Cropanzano (2002), these were referent shifted to the supervisor; following Choi (2008), I shortened the scale to select the items relevant to the sample and reduce respondent fatigue. An example item is “Assists me with my work (when not asked).” These items were collected on a 1 “strongly disagree” to 7 “strongly agree” Likert scale. Cronbach alpha for this scale is .87.

Supervisor directed deviance behaviors were measured using the 3-item scale from Tepper et al. (2009). An example item is “this employee disobeyed my instructions.” Following Tepper et al., these items were assessed on a 7 point frequency Likert scale (Never, once a year, several times a year, once a month, once a week, several times a week, every day.) Cronbach alpha for this scale is .77.

4.3 Follower Survey Measures

Servant leadership dimensions were measured using the 28-item scale from Liden et al. (2008). Example items for each of the dimensions are: *conceptual skills* “My manager can tell if something work-related is going wrong”, *helping subordinates grow and succeed* “My manager makes my career development a priority”, *emotional healing* “I would seek help from my manager if I had a personal problem”, *creating value for the community* “My manager emphasizes the importance of giving back to the community”, *putting subordinates first* “My manager sacrifices his/her own interests to meet my needs”, *empowering* “My manager gives me the responsibility to make important decisions about my job”, and *behaving ethically* “My manager holds high ethical standards”. These items were assessed on a 1 “strongly disagree” to

7 “strongly agree” Likert scale. Cronbach alphas for these scales ranged from .84 to .94 (see Table 2).

LMX dimensions were measured using the 12-item Liden and Maslyn (1998) LMX-MDM scale. An example item for the *professional respect* dimension is “I am impressed with my supervisor's knowledge of his/her job”; for the *contribution* dimension is “I do work for my supervisor that goes beyond what is specified in my job description.”; for the *loyalty* dimension is “My supervisor would defend me to others in the organization if I made an honest mistake”; for the *affect* dimension is “I like my supervisor very much as a person”. This response scale for these items was 1 “strongly disagree” to 7 “strongly agree” Likert scale. Cronbach alpha for these scales ranged from .92 to .66 (see Table 2).

Data quality was assessed on the employee survey using the directed response careless responder items “Please answer ‘Strongly Disagree’ to this item so we can be sure you are reading the items,” and “Please answer ‘Disagree’ to this question.” The final item on the survey was a self-reported diligence item: “Quality data is critical to our ability to provide sound advice to [organization’s name]’s management. In your honest opinion, should we use your data? (keep in mind that we will not let anyone at [organization’s name] know how you answer this.)” Those failing any of these checks were removed from analysis due to the assumption of poor data quality due to lack of attention to the items (Meade & Craig, 2012).

Control/demographic variables were assessed last on the survey (Lindell & Whitney, 2001). However, Erdogan & Bauer (2014) suggest not to control for demographic variables, as their review found no consistent pattern of results, except for dyadic tenure. However, they suggest that organizational and/or dyad tenure may be an outcome of LMX, rather than a cause of it. Turnover intentions are related to low quality LMX (Dulebohn et al., 2012) and the

attraction-selection-attrition model would suggest employees may self-select out of dyads and/or organizations where they do not enjoy high quality LMX. Because of the lack of agreement regarding the role of dyad tenure with respect to LMX quality, and because analyses show insignificant chi-square change when added to the model, non-significant correlations with study variables, and lack of significance in model analyses, I elected to present the analyses without control variables.

4.4 Confirmatory Factor Analysis

A confirmatory factor analysis was conducted to test the dimensionality of the measures. Two models were computed for the leader reported variables. For these models, the OCB and deviance items were loaded on their respective factors and then on one factor. Seven models were computed for the follower reported variables. First, all items were loaded on a single “leadership” factor. Second, LMX items were loaded on their respective dimension, but servant leadership items remained on a single “servant leadership” factor. Third, servant leadership items were loaded on their respective dimension. Finally, theoretically similar dimensions were collapsed (model 4a: professional respect and contribution; Model 4b: affect and loyalty; Model 4c: empowering and helping subordinates grow and succeed; Model 4d: helping subordinates grow and succeed and putting subordinates first). These were done one pair at a time in order to test their distinction. Multi-level CFA is not possible with these data due to insufficient level 2 units.

4.5 Common Method Variance (CMV) Analysis

Because servant leadership and LMX were assessed from the same source at the same time, an examination of potential common method variance is warranted. Following Podsakoff, MacKenzie, Lee, and Podsakoff (2003), I tested for the prevalence of common method variance

for the follower reported leadership measures. Further, following Podsakoff et al. (2003), items measuring LMX and servant leadership were loaded on their own respective factors, in addition to this latent CMV factor. If the latent CMV factor explains 25% or more variance, CMV may be biasing the results in a meaningful way (Williams, Cote, & Buckley, 1989). Analyses did not converge due to the large number of items and latent variables and relatively small sample size. CMV estimation is therefore not possible using this technique with the present data.

4.6 Analytical Strategy

The data were analyzed in several ways due to sample size restrictions and limitations of existing analysis techniques. Structural equation modeling (SEM) in MPlus, which can perform multi-level structural equation modeling, was used to compute path coefficients. Since the present research does not involve modeling variance at the second level, TYPE=COMPLEX is the appropriate way to account for data nesting (Muthén & Muthén, 2010). Unfortunately, the data do not contain sufficient second level units for this analysis. I therefore had two options: 1) not control for group membership and instead estimate the entire model in a single level SEM or 2) estimate the servant leadership – LMX relationships separately from the LMX – OCB/deviance relationships. In order to assess the import of controlling for group membership, I conducted two analyses. First, removing OCB and deviance from the model permitted analysis controlling for group membership. I compared this to the same model (that is, servant leadership and LMX dimensions only) run without controlling for group membership (that is, a single level analysis). Only one path of the array of 28 servant leadership – LMX relationships (from emotional healing to loyalty) changed in significance (from $p = .08$ when controlling for group membership to $p = .04$ without this control.) Additionally, ICC(1) analysis (Table 2) show that only six of the 11 dimensions of servant leadership and LMX show a meaningful group effect

and only two of the 11 show a “large” group effect (LeBreton & Senter, 2008). Given that the ICC(1) results suggest a group level effect is not substantial in these data, that the one significant difference found when comparing SEM output controlling and not controlling for group membership involved variables that do not show substantial variance due to group membership, and because of the desire to estimate the entire model simultaneously, I elected to report analyses that do not control for group membership. Also, due to sample size, it was necessary to estimate this model with manifest variables. Finally, relative weight analysis (RWA) was employed in order to estimate relative importance of antecedent variables. Unfortunately, this analysis can only estimate the impact of antecedent variables on one outcome at a time. Results will be discussed by looking at the confluence of these two analysis techniques.

5. RESULTS

Means, standard deviations, ICC(1) and (2), Pearson correlations, and Cronbach alphas are reported in Table 2. CFA analyses showed adequate fit for the leader (CFI = .97, TLI = .94, RMSEA = .10, SRMR = .04) reported items (that is, OCB and deviance). The alternative model loading all items on one “employee behavior” factor produced inferior fit (CFI = .66, TLI = .43, RMSEA = .30, SRMR = .18). All items loaded significantly ($p < .01$) on their respective dimensions. A comparison of models shows the 11 factor model 3 produced superior fit (CFI = .91, TLI = .90, RMSEA = .07, SRMR = .07, AIC = 22002.68) when compared to the other 6 models (Table 3). All items loaded significantly ($p < .01$) on their respective dimensions.

Structural equation modeling (SEM; Table 4 & 5; Figure 3) results show mediocre fit to the data (CFI = .93, TLI = .80, RMSEA = .12, SRMR = .03). Figure 2 shows a summary of expected results. Figure 3 shows the actual results of the SEM analyses. Hypothesis one (loyalty is the LMX dimension most strongly and negatively related to deviance) is not supported by SEM (Table 4; $\beta = .02$; $p > .05$) or RWA (95% CI: .00 - .07) analyses. RWA revealed that affect is significantly stronger predictor of deviance toward the supervisor than the hypothesized loyalty dimension. Hypothesis two (contribution is the LMX dimension most strongly related to OCB towards the supervisor) likewise received no support from SEM ($\beta = .23$; $p > .05$) or RWA (95% CI: -.02 - .06). RWA revealed no dimension of LMX is significantly superior (compared to other LMX dimensions) in the prediction of OCB toward the supervisor. Of the 16 hypotheses predicting relationships between servant leadership and LMX dimensions (see Table 5), four were found to have significant SEM path coefficients (3a, emotional healing -> affect; 4b, empowering -> loyalty; 5a, emotional healing -> contribution; and 6e, behaving ethically -> professional respect), however, dimensions that were not hypothesized to be among the strongest

predictors of the dimensions outperformed the hypothesized dimensions. This suggests partial support in that these 4 hypothesized relationships show significant relationships, but not full support, as they were not the strongest predictors. RWA corresponded with SEM analyses in terms of rank order of terms for most terms and where differences arose, the discrepancies were minor (e.g., emotional healing and conceptual skills are rank 3 and 2, respectively for SEM but 2 and 3 respectively in the relative weights). With the exception of conceptual skills predicting professional respect, no servant leadership dimension showed consistently stronger prediction of LMX dimensions. Regarding hypothesis 3a, emotional healing was only a stronger predictor of LMX affect when compared to helping subordinates grow and succeed and putting subordinates first. Regarding hypothesis 3b, putting subordinates first was not significantly better than any other dimension (it was significantly lower than emotional healing). Hypothesis 4a (creating value for the community predicting loyalty) received no support. The present analyses reveal that creating value for the community is a significantly lower contributor to loyalty than all other servant leadership dimensions except conceptual skills. In sum, these analyses offer only partial support for hypothesis 3a, 4b, 5a, and 6e. Post hoc exploratory SEM analyses revealed that no indirect effects from servant leadership dimensions through LMX dimensions to either OCB or deviance are significant.

6. DISCUSSION

6.1 Overview of the Results

The present research investigates the relationship between servant leadership and LMX at the dimensional level. Different patterns of relationships were found between the dimensions of servant leadership and LMX, however, these patterns did not correspond with the hypothesized patterns. In some respects, the SEM analysis concurred with the RWA analysis. Rank order of terms was nearly identical, for example. However, whereas the SEM analysis selected only two or three terms as significant predictors of each LMX dimension, RWA analysis found all dimensions accounted for significant variance in the prediction of each LMX dimension. No servant leadership dimension arose as a clear “favorite” in terms of the prediction of all LMX dimensions. With regard to the SEM analysis, conceptual skills is very important in the prediction of contribution, professional respect, and affect. Behaving ethically is important for affect, loyalty, and professional respect. From this, we could suggest that being a knowledgeable, emotionally sensitive, and ethical leader is the most important way to develop an LMX relationship. However, strict interpretation of the RWA analysis does not support this. RWA does permit two conclusions. First, that conceptual skills is the most important contributor to professional respect and creating value for the community may significantly detract from loyalty. The former finding makes sense in that employees tend to respect knowledgeable leaders. The second, however, is difficult to reconcile. Perhaps the answer can be found in an ancient text, which remind us “No one can serve two masters. Either you will hate the one and love the other, or you will be devoted to the one and despise the other.” Perhaps followers find it difficult to be loyal to leaders who demonstrate split loyalty. Finally, it is important to note that in nearly all cases (Table 2), deviance shows a stronger correlation with servant leadership and

LMX dimensions, as well as servant leadership and LMX in aggregate. This suggests that employees are reticent to bite the hand that feeds them, as long as the hand feeds them. The idea that “bad is stronger than good” is one of the more strongly supported ideas in social psychology (Baumeister, Bratslavsky, Finkenauer, & Vohs, 2001). The stronger relationships between leadership and deviance, a negative workplace behavior, when compared to the relationships between leadership and OCB, a positive workplace behavior, corresponds with the “bad is stronger than good” finding.

These findings highlight the importance of using multiple methods and techniques in research. While the SEM analysis suggests some servant leadership dimensions are more important than others for the formation of an LMX relationship, the RWA analysis does not concur. Rather, RWA suggests that with two exceptions, the dimensions matter more or less to the same degree.

6.2 Weaknesses and Strengths

The cross sectional design and collection of the antecedent (servant leadership) and mediator (LMX-MDM) variables at the same time from the same source is a clear weakness. Future research should separate these in time to reduce common method variance. The level-2 sample size is lower than is needed to test the hypotheses controlling for group membership effects. This weakness is somewhat mitigated by the analyses, which show nearly identical relationships when the servant leadership – LMX relationships are tested controlling and not controlling for group membership. Further, ICCs support the need for controlling for group effects for only approximately half of the dimensions of servant leadership and LMX. Future research should strive for a higher second-level sample size to resolve this difficulty. A strength of the design is the SEM analysis technique, which allowed testing of all hypotheses

simultaneously. The robust procedures employed to ensure data quality (e.g., conscientious responder items) and dyad quality are also a strength.

6.3 Theoretical Implications

I suggest two complexities of using resource theory to predict workplace relationships, complexities which may account for the overall lack of significant findings in this dissertation. The application of the theory is predicated on 1) knowing the meaning that employees place on resources they receive, 2) knowing what resources are available to be exchanged by both members of the dyad, and 3) understanding the complexities of resources exchanged in combination as part of one exchange (for example, when an action conveys both affiliation and status or when a gift is both a good, information, and affiliation). First, Foa and Foa (1974) discuss that it is the *meaning* of the exchange, not the actual exchange, that is important and provides an exchange with its import and classification within the resource theory taxonomy. Present research applying the resource taxonomy is not capturing the underlying meaning ascribed to the exchange by either leader or follower. For some, work help may be communicating a positive service whereas for others, it may engender negative emotions arising from imputing that the help was given because the dyadic partner did not trust the person to whom help was offered, thus reducing the person's sense of status (or "taking" of status in the language of resource theory). Understanding the meaning ascribed to an exchange of resources is not captured in the present research, but does offer one potential issue with the present theorizing and serves as a caution to researchers applying this taxonomy to empirical research.

Second, not all resources are available to dyadic partners at all times. Followers specifically suffer a restriction in the kinds of resources available to them (Wilson et al., 2010). Leaders too may suffer constraints due to poor leader-leader relationships, company policy,

union contracts, or other environmental conditions (e.g., economy.) While resource theory suggests that partners exchange the nearest resource, and prefer more particularistic (Foa & Foa, 1974) resources (that is, resources that move towards the top of the circle (Figure 1)), restrictions in available resources may prohibit even the exchange of these substitute resources. Social expectations and personal preferences may also influence the exchange of resources. For example, affiliation may be socially inappropriate under some circumstances and personally uncomfortable in others. These restrictions highlight the importance of understanding the underlying *meaning* ascribed by the dyadic partners to the resources they are exchanging.

Goods and money, while economic in nature, are not excluded when the social exchange is formed. While these tend to be contractual and short term, they serve as the foundation for social exchange (Mitchell et al., 2012), and do not drop away when social exchange is formed. Goods and money are not commonly exchanged upward, that is, passed from follower to leader (Wilson et al., 2010), but it is not the case that these elements no longer exist in the exchange experiences of well-formed dyads. Raises and “perks,” such as a new office chair, computer, or flex-time are generally the purview of idiosyncratic deals (i-deals; e.g., Rosen, Slater, Chang, & Johnson, 2013) research, which has demonstrated that goods and money resources are still relevant even well after the dyad is formed. It seems, then, that LMX research would benefit from greater attention to i-deals and thereby attain a better theory-measurement alignment by expressly including the exchange currencies of money and goods. Here too, the meaning of these resources is likewise important. In the workplace, a new office chair may take on a meaning far greater than expected, and it is this meaning that may be the true currency and take on a “life of its own” far greater than a bystander would expect a chair to take.

6.4 Practical Implications

The practical limitations of the collected data discussed above and theoretical challenges discussed in the previous section limit my ability to offer strong practical implications. Servant leadership behaviors may have differing relationships with different dimensions of LMX. The strongest finding is that conceptual skills engender professional respect more than any other servant leadership behavior. While preliminary, the present study suggests caution in the application of creating value for the community, as it may negatively impact employee loyalty.

6.5 Future Research

An aspect of resource theory (Foa & Foa, 1974) not accounted for in the present research is that of the employees' idiosyncratic needs for resources. Resource theory specifies that the optimal range for resources varies from resource to resource and from person to person. When outside the optimal range, individuals seek to restore the balance experienced by the "ownership" of resources in their respective optimal ranges. For example, too little service at a retail store will result in dissatisfaction; too much is perceived as overbearing and irritating. However, what "too little" vs "too much" is depends on the individual shopper and their disposition. Some may come prepared to make a decision and the salesperson's attempts to further educate the shopper are taken as an offense or waste of time. Others may come to the store needing information or opinion. Some may need help finding the product and loading it; others are able bodied and prefer to handle the product themselves. The need for service, then, is an example of how need for resources is an individual idiosyncratic characteristic.

The experienced lack of resources engenders felt needs, and these will motivate action to fulfill them; likewise, an excess of resources may motivate their reduction (Foa & Foa, 1974). It follows, then, that followers in need of certain resources will respond more strongly to their leader when these resources are leader-provided, strengthening the relationship between servant

leadership and LMX. Conversely, followers not in need of the resources leaders provide will not respond as strongly, or may even respond negatively to their application if their application exceeds the optimal range. For example, too much status may be embarrassing to followers; too much information may be overwhelming. This suggests follower needs-based moderators on the relationship between the dimensions of servant leadership and LMX.

Attachment theory (Bowlby, 1969, 1973, 1980) suggests that some feel comfortable in relationships (secure attachment style), others avoid them (avoidant attachment style), and others are anxious about them (anxious-ambivalent attachment style), preoccupied with the relationship status and quality. Resource theory and attachment theory suggest processes of social interactions are learned from childhood and adolescent experiences; this provides common ground for integration of these two streams of research. Servant leadership and LMX, given their relational emphasis, seem prime candidates for research into how past events affect how relationships are built, maintained, and viewed by participants. For example, servant leadership may be comfortable for those who enjoy a secure attachment style. Conversely, servant leadership may be viewed negatively and suspiciously by those who are of the avoidant attachment style. Servant leadership may be uncomfortable for those who are anxious-avoidant, yet the servant leader may shine most strongly when working with these individuals as they may be able to, over time, engender the trust necessary to foster a strong LMX with these individuals. Bartholomew's (1990) more recent taxonomy of attachment style, that is, a 2x2 matrix of self versus other and positive versus negative view, is particularly appealing given resource theory's notion of self versus other and giving vs taking of resources. Those with a positive regard for self and other may respond well to servant leadership and be comfortable giving and receiving resources. Those with a negative regard for others and self may refuse resources provided by

others. Those with a positive self-regard and negative regard for others may be particularly challenging for the servant leader, as these individuals may take from the leader, but not reciprocate. The integration of Bartholomew's attachment theory with resource theory follows from suggestions by Foa and Foa (1974: 65).

Other variables common to organizational studies can likewise be investigated as potential moderators. For example, need for achievement may moderate the influence of helping subordinates grow and succeed – those needing greater achievement may benefit most from leaders' attempts to simulate career growth and these followers may reciprocate more strongly. Conversely, those with low need for achievement may react negatively to leaders who seek to empower them and simulate career growth. In the language of resource theory, these leaders are providing an excess of a resource and followers experiencing this oversaturation and the resulting discomfort and may undertake steps to reduce the leaders' application of these behaviors. The need for affiliation may moderate the emotional healing dimension of servant leadership; those with high needs will benefit from it; those with low needs may react negatively towards it. Ethics sensitivity may moderate the influence of the ethical behavior dimension of servant leadership on LMX. The work of Kerr & Jermier (1978) suggests that some elements of the workplace environment and employee can reduce the importance of leadership, that is, substitute for it. For example, employee skill, education, and expertise may moderate the influence of conceptual skills, as these serve as follower based characteristics that reduce the importance of this servant leadership dimension. The need for dependence vs independence suggests that some followers are more likely to seek resources only from the leaders, whereas others are prepared and even prefer to seek resources from the leader and others in their social network (Rotter, 1954; Foa & Foa, 1974). This suggests that some are more likely to actively

seek out substitutes for leadership, whereas others are more reliant upon the leader.

Resource theory incorporates the notion of ideal or expected behavior. This corresponds with the notion of leadership prototypes and implicit leadership theory (Lord, Foti, & De Vader, 1984). A discrepancy between ideal and actual behavior may negatively impact servant leaders' attempts to develop high quality leader-member relationships with their followers (Epitropaki & Martin, 2005). Even a leader-follower discrepancy between perceptions of ideal behavior can negatively impact LMX quality within the dyad (Coyle & Foti, 2015). The correct application of servant leadership, that is, one that develops high quality relationship with followers, may therefore be a complex equation involving subordinate needs and expectations, some of which may be deeply rooted in stable personality traits and others more fleeting elements of current yet transient states of being.

Finally, the findings of the present research suggest there is not general agreement on the leaders' application of servant leadership and LMX within the same workgroups. This is a known phenomenon for LMX (see Anand, Vidyarthi, & Park, 2015, for a review of LMX differentiation). However, this points out a theoretical conundrum for servant leadership research. Greenleaf specified that a servant leader is a servant always (Greenleaf, 1970). For example, one does not simply act ethically at home, and not at work, and still truly qualify as a servant leader. Yet servant leadership theory also suggests that leaders apply servant leadership differently at the dyadic level (Liden, Panaccio, et al., 2014). The ICC(1)'s computed from the present data suggest that for some dimensions, there is variance accounted for by group membership for some dimensions of servant leadership, but ICC(2)'s suggest that these means are not reliable. Therefore, while there is some group effect for some dimensions of servant leadership, the present data do not support the aggregation of any servant leadership dimension

to the group level. Together, this suggests a systematic situation: employees reporting to the same supervisor in the present sample disagree on the quality of servant leadership exhibited by their leader. LMX theory suggests that as group size increases, the ability to provide high quality LMX decreases; the application of servant leadership may likewise suffer from resource limitations due to large spans of control. However, the average group size in the present data was not large (average $n = 4.87$) and nevertheless, disagreement was found. This raises interesting questions: Is there disagreement precisely because the leader is throttling the application of some behaviors more or less depending on the follower in question? How do fairness perceptions of this difference affect workgroup relationships? Is differentiation recognized as an attempt to satisfy employee idiosyncratic needs? How do employees' perceived needs change in the presence of relative deprivation of servant leadership behaviors within the workgroup? As the medieval philosopher, Anselm of Canterbury noted, people have two competing needs: self-interest and justice, and self-interest is stronger (Anselm, 2000). It may be the case that servant leadership can be a cause of dissatisfaction when a focal employee sees others receiving attention from their leader that the focal employee does not receive even if the focal person making the observations does not need the attention, but wants it simply because others are receiving it. We know from the study of LMX that LMX agreement between leader and follower is not usually strong (Nahrgang & Seo, 2015). I suggest that agreement between the leader and follower on which servant leadership behaviors should be applied to the follower is likewise a complex matter, and one worth of the attention of researchers.

6.6 Conclusion

The present research shows mixed support for differing patterns of results for the relationship between the dimensions of servant leadership and LMX. The pattern of relationships

expected by the resource theory of social exchange did not emerge. More research is warranted to understand how dyadic partners understand and apply meaning to the exchanges in which they engage.

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* = Servant leadership scale development

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TABLE 1**MAPPING STUDY VARIABLES ONTO THE CURRENCIES OF THE RESOURCE THEORY OF SOCIAL EXCHANGE**

Dimension	Exchange Currency			
	Affiliation	Status	Services	Information
Deviance	1	1	2	
OCB Helping	2		1	
LMX Affect	1			
LMX Loyalty		1	1	
LMX Contribution			1	
LMX Professional Respect		1		
SL Emotional Healing	1		2	
SL Creating Value for the Community		1	1	2
SL Conceptual Skills				1
SL Empowering		1	1	
SL Helping Subordinates Grow and Succeed		1	1	1
SL Putting Subordinates First	1	2	1	
SL Behaving Ethically		1		

Note: Numbers indicate strength of expected relationship; where the same number is used on the line it indicates an equal strength. This represents a composite of currencies conveyed in a single dimension.

TABLE 2

MEANS, STANDARD DEVIATIONS, RELIABILITIES, AND INTERCORRELATIONS OF THE STUDY VARIABLES

Variable	M	SD	ICC(1)	ICC(2)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1. Servant Leadership (SL)	5.32	1.06			.97														
2. SL - Emotional Healing	5.30	1.40	.07	.26	.89 **	.90													
3. SL - Creating Value for the Community	5.27	1.28	.26	.63	.85 **	.71 **	.92												
4. SL - Conceptual Skills	5.89	1.02	.17	.50	.87 **	.75 **	.70 **	.89											
5. SL - Empowering	5.20	1.19	.20	.55	.80 **	.67 **	.62 **	.66 **	.84										
6. SL - Helping Subordinates Grow and Succeed	5.11	1.40	.11	.37	.88 *	.77 **	.68 **	.76 **	.64 **	.94									
7. SL - Putting Subordinates First	4.52	1.28	.07	.28	.87 **	.73 **	.68 **	.68 **	.66 **	.75 **	.91								
8. SL - Behaving Ethically	5.96	1.12	.08	.30	.82 **	.69 **	.66 **	.68 **	.58 **	.66 **	.67 **	.91							
9. Leader-Member Exchange (LMX)	5.82	.92			.88 **	.79 **	.71 **	.82 **	.71 **	.75 **	.72 **	.75 **	.93						
10. LMX - Professional Respect	5.94	1.10	.15	.47	.80 **	.68 **	.66 **	.84 **	.60 **	.70 **	.64 **	.68 **	.86 **	.91					
11. LMX - Loyalty	5.61	1.11	.08	.28	.73 **	.66 **	.53 **	.61 **	.65 **	.63 **	.61 **	.67 **	.85 **	.59 **	.81				
12. LMX - Affect	5.78	1.25	.36	.73	.83 **	.77 **	.71 **	.75 **	.65 **	.67 **	.69 **	.74 **	.93 **	.74 **	.73 **	.92			
13. LMX - Contribution	5.97	.83	.07	.26	.62 **	.60 **	.52 **	.59 **	.53 **	.55 **	.52 **	.44 **	.79 **	.58 **	.57 **	.66 **	.66		
14. Supervisor Focused OCB	5.26	1.24			.18 *	.21 **	.11	.13	.16 *	.19 **	.13	.11	.18 **	.12	.16 *	.14 *	.19 **	.87	
15. Supervisor Focused Deviance	1.52	.76			-.29 **	-.24 **	-.24 **	-.20 **	-.29 **	-.23 **	-.25 **	-.28 **	-.30 **	-.29 **	-.23 **	-.35 **	-.13	-.13	.77
16. Dyadic Tenure (Months)	53.95	57.92			.07	.13	.02	.02	.07	.02	.05	.10	.11	.07	.07	.13	.09	.13	-.02

Note. N = 207 - 218. Cronbach alpha reliabilities are reported in bold on the diagonal. OCB = organizational citizenship behavior. M = mean. SD = standard deviation. * $p < .05$; ** $p < .01$.

TABLE 3
CONFIRMATORY FACTOR ANALYSIS RESULTS FOR FOLLOWER REPORTED ITEMS

Model	CFI	TLI	RMSEA	SRMR	AIC	Delta AIC
1	.71	.69	.13	.06	23744.71	1742.03
2	.76	.74	.12	.06	23334.86	1332.18
3	.91	.90	.07	.07	22002.68	
4a	.91	.90	.07	.07	22046.19	43.51
4b	.90	.87	.08	.07	22115.32	112.64
4c	.88	.87	.08	.07	22271.80	269.12
4d	.88	.86	.08	.05	22294.20	291.52

TABLE 4
SUMMARY OF STUDY HYPOTHESES 1 - 2

H	LMX Dimenions	β	p	Rank		RRW	95% CI		Test of RRW Significant Difference				Criterion Variable
				SEM	RWA		Lower	Upper	1	2	3	4	
	1 LMX - Affect	-.24	*	1	1	49.63	.01	.19		Y	Y	N	Deviance toward Supervisor
1	2 LMX - Loyalty	.02		3	3	14.07	.00	.07	Y		N	N	Deviance toward Supervisor
	3 LMX - Contribution	.16		2	4	8.13	-.01	.04	Y	N		N	Deviance toward Supervisor
	4 LMX - Professional Respect	-.08		4	2	28.17	.01	.10	N	N	N		Deviance toward Supervisor
	1 LMX - Affect	-.02		4	3	13.56	-.05	.01		N	N	N	OCB toward Supervisor
	2 LMX - Loyalty	.11		2	2	27.14	-.03	.04	N		N	N	OCB toward Supervisor
2	3 LMX - Contribution	.23		1	1	49.37	-.02	.06	N	N		N	OCB toward Supervisor
	4 LMX - Professional Respect	-.01		3	4	9.94	-.05	.01	N	N	N		OCB toward Supervisor

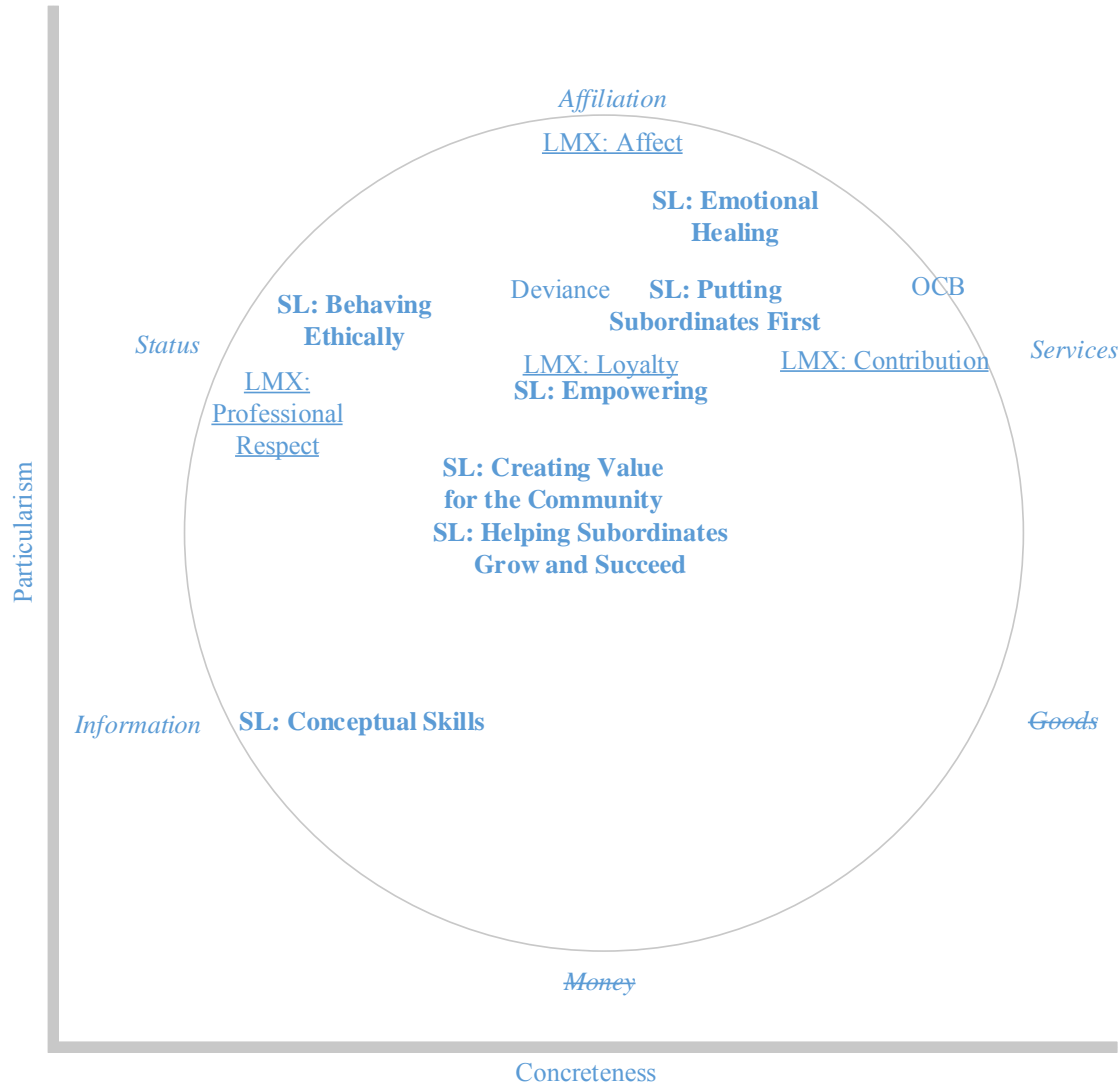
* $p < .05$; ** $p \leq .01$. Bold hypotheses indicate some support. Bold LMX dimensions indicate significance. RRW = Rescaled relative weight (Scaled as percent of variance accounted for); CI = Confidence interval test of significance of the RRW; SEM = Structural equation modeling; RWA = Relative weight analysis.

TABLE 5
SUMMARY OF STUDY HYPOTHESES 3-6

H	Servant Leadership Dimensions	β	p	Rank		RRW	95% CI		Test of RRW Significant Difference							LMX Dimenions
				SEM	RWA		Lower	Upper	1	2	3	4	5	6	7	
3a	1 SL - Emotional Healing	.25	**	3	2	17.59	.09	.16		N	N	N	Y	Y	N	LMX - Affect
	2 SL - Creating Value for the Community	.14	**	4	4	14.48	.08	.14	N		N	N	N	N	N	LMX - Affect
	3 SL - Conceptual Skills	.27	**	2	3	16.38	.08	.16	N	N		N	Y	N	N	LMX - Affect
	4 SL - Empowering	.10		5	6	11.47	.05	.12	N	N	N		N	N	N	LMX - Affect
	5 SL - Helping Subordinates Grow and Succeed	-.08		7	7	9.83	.04	.10	Y	N	Y	N		N	Y	LMX - Affect
3b	6 SL - Putting Subordinates First	.06		6	5	11.49	.06	.11	Y	N	N	N	N		N	LMX - Affect
	7 SL - Behaving Ethically	.30	**	1	1	18.76	.09	.19	N	N	N	N	Y	N		LMX - Affect
4a	1 SL - Emotional Healing	.13		3	3	14.96	.04	.11		Y	N	N	N	N	N	LMX - Loyalty
	2 SL - Creating Value for the Community	-.11		7	7	7.16	.01	.06	Y		N	Y	Y	Y	Y	LMX - Loyalty
	3 SL - Conceptual Skills	.03		6	6	11.56	.02	.10	N	N		N	N	N	N	LMX - Loyalty
	4 SL - Empowering	.28	**	2	2	19.73	.07	.15	N	Y	N		N	Y	N	LMX - Loyalty
	5 SL - Helping Subordinates Grow and Succeed	.08		4	4	12.68	.04	.10	N	Y	N	N		N	N	LMX - Loyalty
4d	6 SL - Putting Subordinates First	.04		5	5	11.71	.03	.09	N	Y	N	Y	N		N	LMX - Loyalty
	7 SL - Behaving Ethically	.35	**	1	1	22.20	.06	.19	N	Y	N	N	N	N		LMX - Loyalty
5a	1 SL - Emotional Healing	.15	*	2	2	19.87	.04	.12		N	N	N	N	N	Y	LMX - Contribution
	2 SL - Creating Value for the Community	.05		4	5	12.43	.02	.09	N		N	N	N	N	N	LMX - Contribution
	3 SL - Conceptual Skills	.22	*	1	1	20.30	.05	.13	N	N		N	N	N	Y	LMX - Contribution
	4 SL - Empowering	.08		3	3	14.75	.02	.10	N	N	N		N	N	N	LMX - Contribution
	5 SL - Helping Subordinates Grow and Succeed	.04		5	4	14.12	.03	.09	N	N	N	N		N	N	LMX - Contribution
	6 SL - Putting Subordinates First	.04		5	6	11.76	.02	.08	N	N	N	N	N		N	LMX - Contribution
	7 SL - Behaving Ethically	-.09		6	7	6.77	.00	.05	Y	N	Y	N	N	N		LMX - Contribution
6a	1 SL - Emotional Healing	-.01		7	5	11.27	.04	.10		N	Y	N	N	N	N	LMX - Professional Respect
	2 SL - Creating Value for the Community	.04		4	4	11.40	.04	.11	N		Y	N	N	N	N	LMX - Professional Respect
	3 SL - Conceptual Skills	.69	**	1	1	31.12	.18	.27	Y	Y		Y	Y	Y	Y	LMX - Professional Respect
	4 SL - Empowering	.01		6	7	9.22	.03	.09	N	N	Y		N	N	N	LMX - Professional Respect
	5 SL - Helping Subordinates Grow and Succeed	.06		3	3	13.23	.06	.12	N	N	Y	N		Y	N	LMX - Professional Respect
	6 SL - Putting Subordinates First	.02		5	6	9.66	.04	.09	N	N	Y	N	Y		N	LMX - Professional Respect
	7 SL - Behaving Ethically	.15	*	2	2	14.09	.06	.14	N	N	Y	N	N	N		LMX - Professional Respect

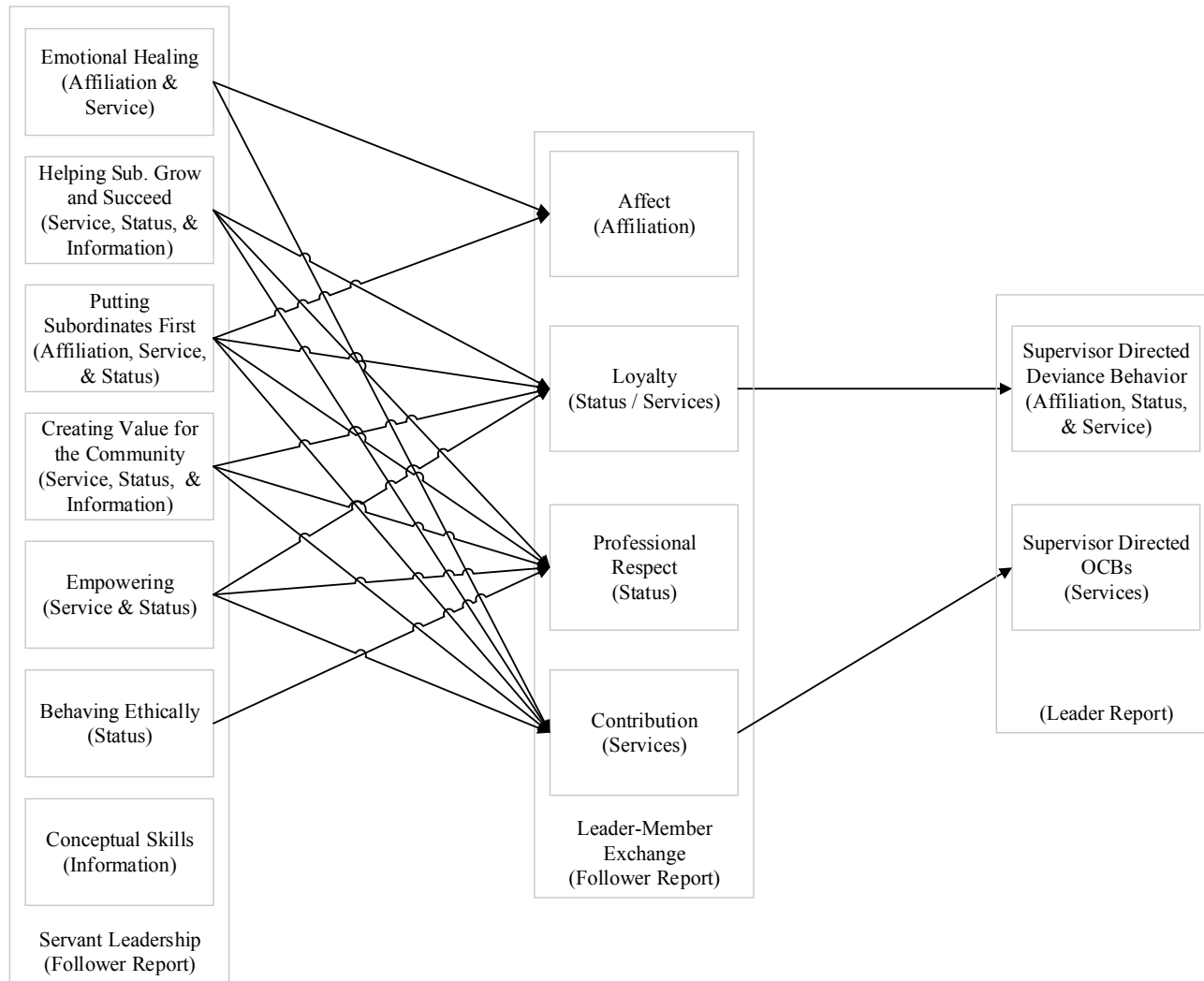
* $p < .05$; ** $p \leq .01$. Bold hypotheses indicate some support. Bold LMX dimensions indicate significance. RRW = Rescaled relative weight (Scaled as percent of variance accounted for); CI = Confidence interval test of significance of the RRW; SEM = Structural equation modeling; RWA = Relative weight analysis.

FIGURE 1
MAPPING SERVANT LEADERSHIP, LMX, OCB, AND DEVIANCE ONTO
RESOURCE THEORY CLASSIFICATIONS



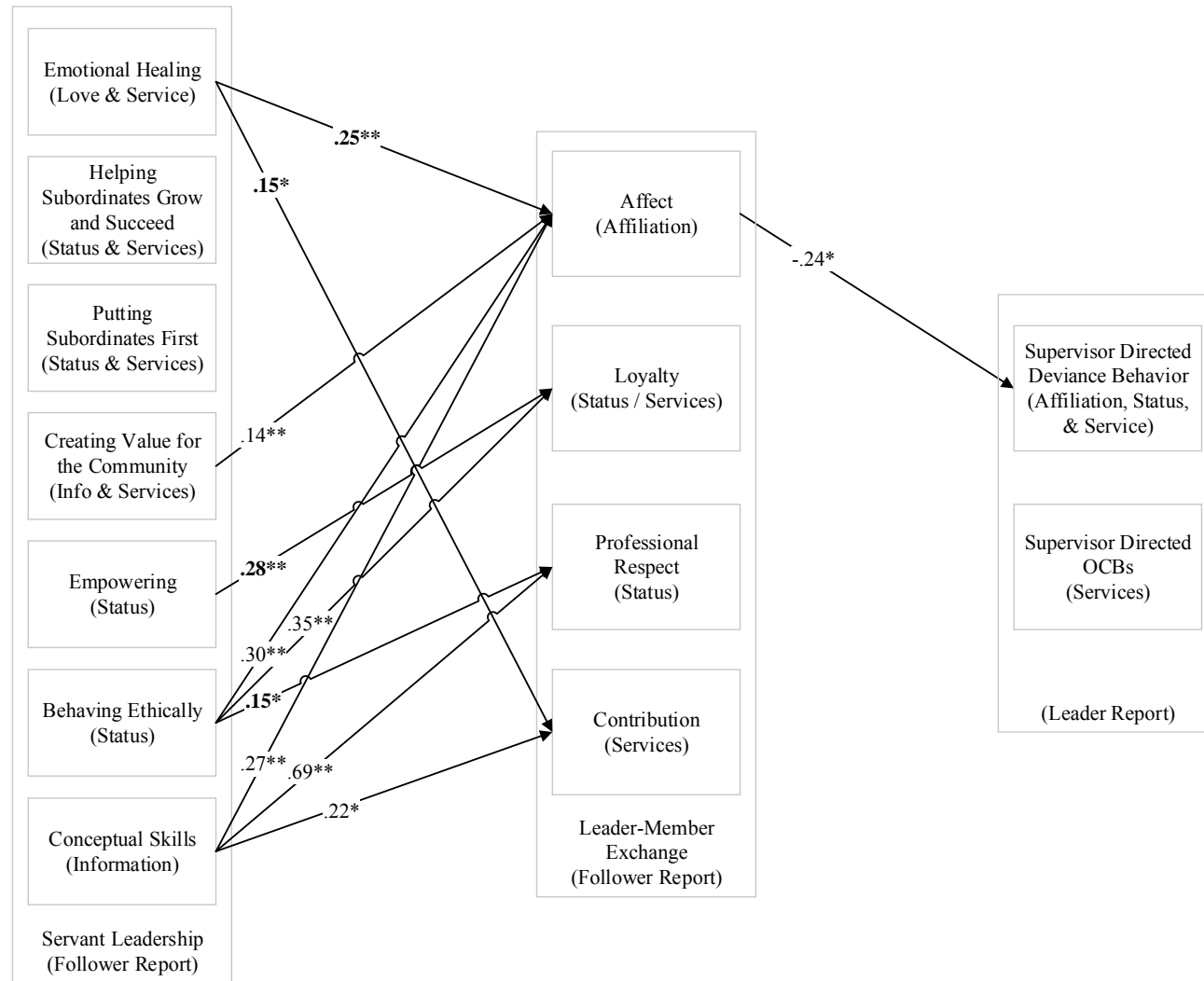
Note. Italics indicate resource theory, bold indicate servant leadership (SL) dimensions, underline indicate leader-member exchange (LMX) dimensions; Organizational citizenship behavior (OCB) and deviance are given in normal typeface. Goods and money are struck through because they are not directly incorporated in the theory presented here.

FIGURE 2
HYPOTHESIZED MODEL



Note. Hypothesized paths (pictured) are expected to be stronger than those not pictured.

FIGURE 3
RESULTS OF STRUCTURAL EQUATION MODELING



Note. Bold coefficients indicate support for hypotheses. Only significant paths are drawn. * $p < .05$; ** $p \leq .01$

APPENDICES

APPENDIX A

FOLLOWER SURVEY

Servant leadership

Liden, R. C., Wayne, S. J., Zhao, H. & Henderson, D. (2008). Servant leadership: Development of a multidimensional measure and multi-level assessment, *The Leadership Quarterly*, 19, 161-177.

Emotional healing

1. I would seek help from my manager if I had a personal problem.
2. My manager cares about my personal well-being.
3. My manager takes time to talk to me on a personal level.
4. My manager can recognize when I'm down without asking me.

Creating value for the community

1. My manager emphasizes the importance of giving back to the community.
2. My manager is always interested in helping people in our community.
3. My manager is involved in community activities.
4. I am encouraged by my manager to volunteer in the community.

Conceptual skills

1. My manager can tell if something is going wrong.
2. My manager is able to effectively think through complex problems.
3. My manager has a thorough understanding of our organization and its goals.
4. My manager can solve work problems with new or creative ideas.

Empowering

1. My manager gives me the responsibility to make important decisions about my job.
2. My manager encourages me to handle important work decisions on my own.
3. My manager gives me the freedom to handle difficult situations in the way that I feel is best.
4. When I have to make an important decision at work, I do not have to consult my manager first.

Helping subordinates grow and succeed

1. My manager makes my career development a priority.
2. My manager is interested I making sure that I achieve my career goals.
3. My manager provides me with work experiences that enable me to develop new skills.
4. My manager wants to know about my career goals.

Putting subordinates first

1. My manager seems to care more about my success than his/her own.
2. My manager puts my best interests ahead of his/her own.

3. My manager sacrifices his/her own interests to meet my needs.
4. My manager does what she/he can do to make my job easier.

Behaving ethically

1. My manager holds high ethical standards.
2. My manager is always honest.
3. My manager would not compromise ethical principles in order to achieve success.
4. My manager values honesty more than profits.

LMX-MDM

Liden, R. C., & Maslyn, J. M. (1998). Multidimensionality of leader-member exchange: An empirical assessment through scale development. *Journal of Management*, 24, 43-72.

1. I respect my manager's knowledge of and competence on the job.
2. My manager would defend me to others in the organization if I made an honest mistake.
3. My manager is the kind of person one would like to have as a friend.
4. I do not mind working my hardest for my manager.
5. My manager would come to my defense if I were "attacked" by others.
6. I like my manager very much as a person.
7. I do work for my manager that goes beyond what is expected of me in my job.
8. I admire my manager's professional skills.
9. My manager defends (would defend) my work actions to a superior, even without complete knowledge of the issue in question.
10. My manager is a lot of fun to work with.
11. I am willing to apply extra efforts, beyond those normally required, to meet my manager's work goals.
12. I am impressed with my manager's knowledge of his/her job.

APPENDIX B

SUPERVISOR SURVEY

Supervisor-directed OCB

Rupp, D. E., & Cropanzano, R. (2002). The mediating effects of social exchange relationships in predicting workplace outcomes from multifoci organizational justice. *Organizational Behavior and Human Decision Processes*, 89(1), 925-946.

1. Accepts added responsibility when you are absent
2. Helps you when you have a heavy work load
3. Assists you with your work (when not asked)

Supervisor-directed deviance

Tepper, B. J., Carr, J. C., Breaux, D. M., Geider, S., Hu, C., & Hua, W. (2009). Abusive supervision, intentions to quit, and employees' workplace deviance: A power/dependence analysis. *Organizational Behavior and Human Decision Processes*, 109, 156-167.

1. Disobeyed my instructions
2. Gossiped about me
3. Talked back to me

APPENDIX C

UNIVERSITY OF ILLINOIS AT CHICAGO

Office for the Protection of Research Subjects (OPRS)
Office of the Vice Chancellor for Research (MC 672)
203 Administrative Office Building
1737 West Polk Street
Chicago, Illinois 60612-7227

Approval Notice Continuing Review

December 1, 2015

Donald Kluemper, BS, MS, PhD
Managerial Studies
601 S. Morgan St.
M/C 243
Chicago, IL 60612
Phone: (225) 362-2858 / Fax: (312) 996-3559

RE: **Protocol # 2014-0935**
“A Longitudinal Investigation of Servant Leadership”

Dear Dr. Kluemper:

Your Continuing Review was reviewed and approved by the Expedited review process on November 25, 2015. You may now continue your research.

Please note that investigator training for Jeremy Meuser will expire on 12/26/2015. Kindly ask Mr. Meuser to update his training.

Please note the following information about your approved research protocol:

<u>Protocol Approval Period:</u>	December 1, 2015 - November 30, 2016
<u>Approved Subject Enrollment #:</u>	1000 (271 subjects enrolled)
<u>Additional Determinations for Research Involving Minors:</u>	These determinations have not been made for this study since it has not been approved for enrollment of minors.
<u>Performance Sites:</u>	UIC, Wheaton Park District Parks Plus Fitness Center
<u>Sponsor:</u>	None
<u>PAF#:</u>	Not applicable
<u>Research Protocol:</u>	

a) A Longitudinal Investigation of Servant Leadership; Version 1.4; 01/07/2015

APPENDIX C (continued)

Recruitment Materials:

- a) Script for Wheaton Park District; Version 1.1; 10/09/2014
- b) Email Recruitment for Wheaton Park District; Version 1, 01/07/2015

Informed Consents:

- a) Informed Consent for Wheaton Park District (Spanish); Version 1.1; 10/09/2014
- b) Waiver of Signed Consent Document (documentation of consent) has been granted for on-line survey under 45 CFR 46.117; minimal risk
- c) A waiver of informed consent has been granted for recruitment purposes only for the release of staff rosters under 45 CFR 46.116(d) (minimal risk; impossible to identify potential subject otherwise; written consent will be obtained at enrollment and contact information for declining/ineligible subjects will be destroyed)
- d) Web Survey for Wheaton Park District; Version 1
- e) Survey for Wheaton Park District (English); Version 1.2

Your research meets the criteria for expedited review as defined in 45 CFR 46.110(b)(1) under the following specific category:

(7) Research on individual or group characteristics or behavior (including but not limited to research on perception, cognition, motivation, identity, language, communication, cultural beliefs or practices and social behavior) or research employing survey, interview, oral history, focus group, program evaluation, human factors evaluation, or quality assurance methodologies.

Please note the Review History of this submission:

Receipt Date	Submission Type	Review Process	Review Date	Review Action
11/16/2015	Continuing Review	Expedited	11/25/2015	Approved

Please remember to:

→ Use your **research protocol number** (2014-0935) on any documents or correspondence with the IRB concerning your research protocol.

→ Review and comply with all requirements on the OPRS website under:
"UIC Investigator Responsibilities, Protection of Human Research Subjects"
(<http://tiger.uic.edu/depts/ovcr/research/protocolreview/irb/policies/0924.pdf>)

Please note that the UIC IRB has the right to seek additional information, require further modifications, or monitor the conduct of your research and the consent process.

Please be aware that if the scope of work in the grant/project changes, the protocol must be amended and approved by the UIC IRB before the initiation of the change.

APPENDIX C (continued)

We wish you the best as you conduct your research. If you have any questions or need further help, please contact OPRS at (312) 996-1711 or me at (312) 996-9299. Please send any correspondence about this protocol to OPRS at 203 AOB, M/C 672.

Sincerely,

Anna Bernadska, M.A.
IRB Coordinator, IRB # 2
Office for the Protection of Research

Subjects

Enclosures:

- 1. Informed Consent Document:**
 - a) Informed Consent for Wheaton Park District (Spanish); Version 1.1; 10/09/2014
 - b) Web Survey for Wheaton Park District; Version 1
 - c) Survey for Wheaton Park District (English); Version 1.2
- 2. Recruiting Material(s):**
 - a) Script for Wheaton Park District; Version 1.1; 10/09/2014
 - b) Email Recruitment for Wheaton Park District; Version 1, 01/07/2015

cc: Cheryl Nakata, Managerial Studies, M/C 243

APPENDIX C (continued)

**UNIVERSITY OF ILLINOIS
AT CHICAGO**

Office for the Protection of Research Subjects (OPRS)
Office of the Vice Chancellor for Research (MC 672)
203 Administrative Office Building
1737 West Polk Street
Chicago, Illinois 60612-7227

**Approval Notice
Initial Review (Response to Modifications)**

December 3, 2014

Donald Kluemper, BS, MS, PhD
Managerial Studies
601 S. Morgan St.
M/C 243
Chicago, IL 60612
Phone: (225) 362-2858 / Fax: (312) 996-3559

RE: **Protocol # 2014-0935**
“A Longitudinal Investigation of Servant Leadership”

Dear Dr. Kluemper:

Your Initial Review application packet (Response to Modifications) was reviewed and approved by the Expedited review process on December 1, 2014. You may now begin your research

Please note the following information about your approved research protocol:

Please note that investigator training for Robert Liden will expire on 22 December 2014 and he will no longer be eligible to be involved in research conducted at UIC after that date unless or until his training is updated.

<u>Protocol Approval Period:</u>	December 1, 2014 - December 1, 2015
<u>Approved Subject Enrollment #:</u>	1,000
<u>Additional Determinations for Research Involving Minors:</u>	These determinations have not been made for this study since it has not been approved for enrollment of minors.
<u>Performance Sites:</u>	UIC, Wheaton Park District Parks Plus Fitness Center
<u>Sponsor:</u>	None
<u>Research Protocol:</u>	

b) A Longitudinal Investigation of Servant Leadership; Version 1.3; 11/19/2014

APPENDIX C (continued)

Recruitment Materials:

- c) Script for Wheaton Park District; Version 1.1; 10/09/2014
- d) Survey Email for Wheaton Park District; Version 1.1; 10/28/2014

Informed Consents:

- f) Informed Consent for Wheaton Park District (Spanish); Version 1.1; 10/09/2014
- g) A waiver of informed consent has been granted for recruitment purposes only for the release of staff rosters under 45 CFR 46.116(d) (minimal risk; impossible to identify potential subject otherwise; written consent will be obtained at enrollment and contact information for declining/ineligible subjects will be destroyed)
- h) Survey for Wheaton Park District (English); Version 1.2

Your research meets the criteria for expedited review as defined in 45 CFR 46.110(b)(1) under the following specific category:

(7) Research on individual or group characteristics or behavior (including but not limited to research on perception, cognition, motivation, identity, language, communication, cultural beliefs or practices and social behavior) or research employing survey, interview, oral history, focus group, program evaluation, human factors evaluation, or quality assurance methodologies.

Please note the Review History of this submission:

Receipt Date	Submission Type	Review Process	Review Date	Review Action
10/03/2014	Initial Review	Expedited	10/06/2014	Modifications Required
10/16/2014	Response To Modifications	Expedited	10/20/2014	Modifications Required
11/05/2014	Response To Modifications	Expedited	11/06/2014	Modifications Required
11/24/2014	Response To Modifications	Expedited	12/01/2014	Approved

Please remember to:

→ Use your **research protocol number** (2014-0935) on any documents or correspondence with the IRB concerning your research protocol.

→ Review and comply with all requirements on the enclosure,

"UIC Investigator Responsibilities, Protection of Human Research Subjects"

(<http://tiger.uic.edu/depts/ovcr/research/protocolreview/irb/policies/0924.pdf>)

Please note that the UIC IRB has the prerogative and authority to ask further questions, seek additional information, require further modifications, or monitor the conduct of your research and the consent process.

APPENDIX C (continued)

Please be aware that if the scope of work in the grant/project changes, the protocol must be amended and approved by the UIC IRB before the initiation of the change.

We wish you the best as you conduct your research. If you have any questions or need further help, please contact OPRS at (312) 996-1711 or me at (312) 996-2014. Please send any correspondence about this protocol to OPRS at 203 AOB, M/C 672.

Sincerely,

Sandra Costello
Assistant Director, IRB # 2
Office for the Protection of Research

Subjects

Enclosures:

- 3. UIC Investigator Responsibilities, Protection of Human Research Subjects**
- 4. Informed Consent Documents:**
 - d) Informed Consent for Wheaton Park District (Spanish); Version 1.1; 10/09/2014
 - e) Survey for Wheaton Park District (English); Version 1.2
- 5. Recruiting Materials:**
 - c) Script for Wheaton Park District; Version 1.1; 10/09/2014
 - d) Survey Email for Wheaton Park District; Version 1.1; 10/28/2014

cc: Cheryl Nakata, Managerial Studies, M/C 243

VITA

Jeremy D. Meuser

Department of Managerial Studies, MC 243
University of Illinois at Chicago
601 S. Morgan
Chicago, IL 60607-7123
Cell: 734-417-6269
E-mail: jmeuse2@uic.edu
FAX: (312) 996-3559

EDUCATION

2016	Ph.D.	Organizational Behavior University of Illinois at Chicago (Chicago, IL)
2007	Certificate	Spirituality Creighton University (Omaha, NE)
2007	B.Phil.	Philosophy Sacred Heart Major Seminary (Detroit, MI)
2000	B.S.E.	Computer Engineering University of Michigan College of Engineering (Ann Arbor, MI)

RESEARCH INTERESTS

Leadership and the impact of leadership upon the individuals who experience it, servant leadership & workplace spirituality, differential leader treatment (leader-member exchange and idiosyncratic deals), and identification.

REFEREED PUBLICATIONS

Meuser, J.D., Gardner, W.L., Dinh, J.E., Hu, J., Liden, R.C., & Lord, R.G. 2016. A Network Analysis of Leadership Theory: The Infancy of Integration. *Journal of Management*, 42: 1374-1403.

Liden, R.C., Wayne, S.J., **Meuser, J.D.**, Hu, J., Wu, J., & Liao, C. 2015. Servant leadership: Validation of a short form of the SL-28. *The Leadership Quarterly*, 26: 254-269.

Liden, R.C., Wayne, S.J., Liao, C., & **Meuser, J.D.** 2014. Servant leadership and serving culture: Influence on individual and unit performance. *Academy of Management Journal*, 57: 1434-1452.

Dinh, J.E., Lord, R.G., Gardner, W., **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.

WORK IN PROGRESS

Anand, S., **Meuser, J.D.**, Vidyarthi, P.R., Liden, R.C., Rousseau, D.M., & Ekkirala, S. "Idiosyncratic Deals in Workgroups: Dealmakers, Leaders, and Coworkers as Drivers and Beneficiaries." First R&R at *Journal of Applied Psychology*.

Liao, C., Wayne, S.J., Liden, R.C., & **Meuser, J.D.** "Making Sense of Idiosyncratic Deals in the Context of Leader-Member Exchange Differentiation." First R&R at *The Leadership Quarterly*.

Park, H.S., Liden, R.C., Wayne, S.J., & **Meuser, J.D.** "The Employee Responses to LMX Differentiation as Moderated by Coworker Support." First R&R at *The Leadership Quarterly*.

Meuser, J.D., & Cao, X. "I belong because of what I get: A meta-analytic integration of social identity and social exchange theories." MS in preparation targeted for *Journal of Applied Psychology*.

Meuser, J.D., Liden, R.C., & Wayne, S.J. "Is servant leadership always a good thing? The moderating influence of servant leadership prototype on employee outcomes." MS targeted for *The Leadership Quarterly*.

Meuser, J.D., Gardner, W.L., Liden, R.C., & Lowe, K.B. A Rose by Any Other Name: Towards a Comprehensive Taxonomy of Leadership Theory. MS targeted for *The Leadership Quarterly*.

Meuser, J.D., Gardner, W.L., Liden, R.C., Lowe, K.B., Hu, J., & Smallfield, J. Mapping and meta-analyzing the leadership literature (2 follow-up studies to "Leadership Theory: The Infancy of Integration").

Wu, B., Liden, R.C., & **Meuser, J.D.** "Is your network competitive or complementary?" MS targeted for the *Journal of Management*.

Kluemper, D.H., McLarty, B., & Bing, M.N., **Meuser, J.D.**, & Sun, J. meta-perceptions approach to measuring personality: Implications for personality test faking. (5 studies, 4 collected, 1 in progress)

Kluemper, D.H., Wang, S., **Meuser, J.D.**, & Liden, R.C. Multilevel and longitudinal investigation of servant leadership.

Meuser, J. D., Yung, W.Y. *, & Liden, R.C. LMX Prototype. Study 1 complete. Study 2 data collection underway.

**Undergraduate under my supervision.*

Meuser, J.D., & Cao, X. "Mapping the theoretical landscape at the intersection of social identity and social exchange theories." MS in preparation.

Meuser, J.D., Kluemper, D.H., Liden, R.C. A dual process model of servant leadership. Data analysis phase.

"A calling to lead and the passion for helping others." Data analysis phase.

Composite leadership scale development. Data analysis phase.

Follower servant leadership prototype/leader behavior congruence. Data analysis phase.

Authentic Leadership Validation. Data collection and analysis phase.

“Who will be your next servant leader?” Servant leadership antecedents. Data analysis phase.

Meuser, J.D. “Predicting prototypes: Anticipating a servant leadership prototype using follower individual differences.”

Honors and Awards

Outstanding Reviewer Award, OB Division of the Academy of Management, August 2016.

Outstanding Reviewer Award, OB Division of the Academy of Management, August 2015.

Outstanding Reviewer Award, OB Division of the Academy of Management, August 2014 (top 141 of 1155 reviewers received this award).

Southern Management Association Best Overall Doctoral Student Paper Award, November 2013.

Southern Management Association Best Doctoral Student Paper – OB Track Award, November 2013.

Outstanding Reviewer Award, OB Division of the Academy of Management, August 2013 (top 129 of 1262 reviewers received this award).

GRANTS AND AWARDS

Co-Principal Investigator, Center for Human Resources Management, University of Illinois, Chicago and Champaign campuses, “Servant Leadership and Trust in the Organization ”, February 2010, **\$8,500**.

Principle Investigator, Greenleaf Center for Servant Leadership, “The Combined Effect of Servant Leadership and Follower Servant Leadership Prototype on Employee Engagement and Team Performance”, May 2011, **\$2,500**.

Society for Human Resources Management (SHRM) Foundation, Achieving Fairness When Treating Employees Differently: The Case of Idiosyncratic Deals (I-deals), December 2011, **\$44,073.75**.

Principal Investigator, Center for Human Resources Management, University of Illinois, Chicago and Champaign campuses, “Who Will Be Your Next Servant Leader?”, March 2013, **\$8,500**.

University of Illinois at Chicago Graduate College Student Travel Presenter Award, October 2013, **\$200**.

University of Illinois at Chicago Graduate Student Council Travel Award, October 2013, **\$275**.

Principle Investigator, Greenleaf Center for Servant Leadership, “Servant Leadership and Leader-Member Exchange (LMX): A Resource Theory Approach to Understanding Relationships between Dimensions”, May 2016, **\$2,500**.

REFEREED PRESENTATIONS

Meuser, J.D., & Bauer, T. N. *LMX Research Incubator Caucus*. (2016, August). Discussants: Smriti Anand, Talya N. Bauer, David V. Day, Cécile Emery, Olga Epitropaki, Berrin Erdogan, Jennifer D. Nahrgang, Ekin K. Pellegrini, Terri A. Scandura, Raymond T. Sparrowe, Robert C. Liden, Prajya Vidyarthi, Sandy J. Wayne. Session to be held at the annual meeting of the Academy of Management, Anaheim, CA.

Yung, W.Y.*, **Meuser, J.D.**, & Liden, R.C. (April, 2016). *Subordinate Preferences for a High Quality Relationship with their Leaders: A Leader-Member Exchange Prototype Scale Development*. Project presented at the University of Illinois at Chicago Student Research Forum.

**Undergraduate under my supervision.*

Meuser, J.D., & Scandura, T.A. *LMX Research Incubator Professional Development Workshop*. (2015, August). Discussants: Claudia C. Coglisier, James H. Dulebohn, Ravi S. Gajendran, George B. Graen, Julia E. Hoch, Stacie Furst-Holloway, Jennifer D. Nahrgang, Anson Seers, Hock-Peng Sin, Vijaya Venkataramani. Session held at the annual meeting of the Academy of Management, Vancouver, BC.

Liao, C., Wayne, S.J., Liden, R.C., & **Meuser, J.D.** (2013, November). *A multilevel analysis of leader-member exchange differentiation, idiosyncratic deals, and justice within teams*. Paper presented at the Southern Management Association Meeting, New Orleans, Louisiana. *Winner of the Best Overall Doctoral Student Paper Award at the conference. Winner of the Best Doctoral Student Paper – OB Track Award.*

Meuser, J.D., & Cao, X. (2013, August). *I'm good because of what I get: A meta-analytic mediation model of organizational identification*. Paper presented at the annual meeting of the Academy of Management, Lake Buena Vista, Florida.

Anand, S., **Meuser, J.D.**, Vidyarthi, P.R., & Ekkirala, S. (2013, August). *Leader Fairness and Employee i-deals: Coworkers as the Enablers*. Paper presented at the annual meeting of the Academy of Management, Lake Buena Vista, Florida.

Meuser, J.D., Liden, R.C., Wayne, S.J., & Henderson, D.J. (2011, August). *Is Servant Leadership Always a Good Thing? The Moderating Influence of Servant Leadership Prototype*. Paper presented at the annual meeting of the Academy of Management, San Antonio, Texas.

INVITED PRESENTATIONS

Meuser, J.D. (2016, February). *Servant leadership today*. To be presented at the Integritas Institute for Ethics, Chicago, Illinois.

Meuser, J.D. (2015, October). Southern Management Association Predoctoral Student Consortium. Presented at the annual meeting of the Southern Management Association, St. Pete Beach, Florida.

Meuser, J.D. (2014, November). Southern Management Association Predoctoral Student Consortium. Presented at the annual meeting of the Southern Management Association, Savannah, Georgia.

Liden, R.C., Wayne, S.J., Liao, C., Wu, J., & **Meuser, J.D.** (2014, June). *Processes Through Which Servant Leadership Relates to Organizational and Employee Outcomes*. Erasmus Universiteit, Rotterdam, The Netherlands.

Liden, R.C., Wayne, S.J., Liao, C., & **Meuser, J.D.** (2014, April). *Servant Leadership's Positive Influence on Employee and Organizational Outcomes*. Katholieke Universiteit Leuven (KU Leuven), Leuven, Belgium.

Meuser, J. D. (2013, October). *Finding the servant leader in you*. Presented to PPC Partners, Inc. Norcross, Georgia.

Meuser, J.D. (2013, June). *What the research says about servant leadership: Unde venisti et quo vadis?* Presented at the annual meeting of the Greenleaf Center for Servant Leadership. Indianapolis, Indiana.

Liden, R.C., Wayne, S.J., Liao, C., & **Meuser, J.D.** (2013, June). *Servant leadership and serving culture: Influence on individual and unit performance.* Presentation at Renmin University of China, Beijing, China.

Wayne, S.J., Liao, C., Liden, R.C., & **Meuser, J.D.** (2013, June). *The Divergent Effects of Leader-Member Exchange Differentiation on Individual and Group Outcomes: A Multi-level Analysis.* Presentation at Renmin University of China, Beijing, China.

Liden, R.C., Wayne, S.J., Liao, C., & **Meuser, J.D.** (2013, April). *Servant leadership climate: Influence on individual and organizational performance.* Guest Scholar Presentation at the Université Toulouse 1 Capitole, Toulouse, France.

Liden, R.C., Wayne, S.J., Liao, C., & **Meuser, J.D.** (2012, October). *Servant leadership climate: Influence on individual and organizational performance.* Presented at the annual meeting of the Society for Organizational Behavior. Ft. Collins, Colorado.

BOOK CHAPTER

Liden, R.C., Panaccio, A., **Meuser, J.D.**, Hu, J., & Wayne, S.J. 2014. Servant leadership: Antecedents, processes, and outcomes. In D.V. Day (Ed.), *The Oxford Handbook of Leadership and Organizations*. Oxford, England: Oxford University Press.

MEMBERSHIPS IN PROFESSIONAL ORGANIZATIONS

Member of the Academy of Management (AOM).

Member of the Southern Management Association (SMA).

PROFESSIONAL DEVELOPMENT ACTIVITIES

- Multilevel Modeling in MPlus. Statistical Horizons. (March, 2016). Presented by Kristopher J. Preacher.
- Case Method Teaching Seminar Part I. Harvard Business Publishing. (May, 2015).
- Advanced Structural Equation Modeling. CARMA. (May, 2013). Presented by Robert J. Vandenberg.
- Polynomial Regression and Response Surface Methodology. CARMA. (May, 2012). Presented by Jeffrey R. Edwards.
- Multilevel Modeling. CARMA. (January, 2011). Presented by Daniel A. Newman.

ADDITIONAL PROFESSIONAL ACTIVITIES

Member, Editorial Review Board, *Group and Organization Management*, 2016 – present.

Headed a team to design, implement, and manage a mass testing and subject pool within the Department of Managerial Studies at the University of Illinois at Chicago during the 2012-2016 school years.

Supervised undergraduate research projects and research volunteers during the 2010-2016 school years.

Reviewer for the 2011 - 2016 Academy of Management annual meetings.

Ad hoc reviewer for *Group & Organization Management*, 2014 - 2016.

Ad hoc reviewer for the *Journal of Occupational and Organizational Psychology*, 2015.

Ad hoc reviewer for the *European Journal of Social Psychology*, 2016.

Ad hoc reviewer for the *Journal of Organizational Behavior*, 2016.

ACADEMIC POSITIONS AND APPOINTMENTS

University of Illinois at Chicago

Research Assistant (Fall 2009 – Spring 2016)

Instructor – MGMT 452 “Organizational Behavior”

(Summer 2011/2012/2013; Spring 2013)

Instructor – MGMT 471 “Organizational Design”

(Fall 2012)

Instructor – MGMT 340 “Introduction to Organizations”

(Summer 2014/2015)

Instructor – HON 201 “Human Side of Business”

(Spring 2015)

Instructor – MGMT 460 “Business, Society, and the Global Economy”

(Fall 2015)

Instructor – MGMT 445 “Organizational Theory”

(Spring 2016)

Texas Tech University – Visiting Assistant Professor (2016-2017)

Instructor – MGT 3376 “Organizational Behavior”

(Fall 2016)

Instructor – MGT 4375 “International Management”

(Fall 2016)

TECHNICAL REPORTS

Kluemper, D., **Meuser, J.D.**, Wang, S., & Mitra, A. (2016, June). A longitudinal investigation of servant leadership: Year 2. Report presented to Wheaton Park District, Wheaton, IL.

Kluemper, D., **Meuser, J.D.**, & Wang, S. (2015, August). A longitudinal investigation of servant leadership: Year 1. Report presented to Wheaton Park District, Wheaton, IL.

Meuser, J.D., Liden, R.C., & Wayne, S.J. (2013, September). Investigating the quality of relationship between organizational leaders and volunteer subordinates. Report presented to FOCUS, Genesee, CO.

Meuser, J.D., Liden, R.C., & Wayne, S.J. (2012, September). Investigating the quality of relationship between organizational leaders and volunteer subordinates. Report presented to FOCUS, Genesee, CO.

Meuser, J.D., Liden, R.C., & Wayne, S.J. (2012, August). Employee Trust, Engagement, and Servant Leadership. Report presented to FOCUS, Genesee, CO.

Meuser, J.D., Liden, R.C., & Wayne, S.J. (2011, August). Servant Leadership and Antecedents of Employee Engagement. Report presented to FOCUS, Genesee, CO.

TEACHING EXPERIENCE

Undergraduate

Organizational Behavior. An junior/senior introductory course (4.91/5 student rating in Summer 2011)

Leadership, Organizational Design, and Change: A junior/senior leadership development course. (4.71/5 student rating in Fall 2012).

Introduction to Organizations: A junior level introductory business course. (4.75/5 student rating in Summer 2014.)

Honors College Seminar: The Human Side of Business. A discussion based course intended to expose non-business honors students to critical people-related business concepts. (4.88/5 student rating in Spring 2015)

Business, Society, and the Global Economy / International Management (Fall 2015 / Fall 2016)

Organizational Theory (Spring 2016)