MOTIVATION AND LEADER-MEMBER EXCHANGE: EVIDENCE COUNTER TO SIMILARITY ATTRACTION THEORY

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This study tests the similarity attraction paradigm using a measure of work motivation and leader-member exchanges. Seventy-five elected officials were sampled along with 368 of their staffers. Results indicate actual self-reported differences in sources of work motivation were not predictive of leader-follower exchanges, which is counter to the similarity attraction paradigm. It is argued that perceived similarity offers greater prediction of leader-member exchange quality than actual self-reported differences.

For several decades, Byrne’s (1971) similarity attraction paradigm has guided research on the effects of leader-follower similarities and differences upon individual dyadic relationships, being utilized in examining a variety of variables to understand the antecedents of such relationships. Much of work in this area has tested leaders’ attributions of followers’ dispositions (Gerstner & Day, 1997). Scandura (1999) contributed to this line of research by testing LMX from multiple perspectives. Turban and Jones (1988) tested actual similarity of person-centered variables and found they significant affected job satisfaction and performance. Baldwin (1999) argued that self-reported person-centered variables may reduce social desirability bias by increasing privacy of the respondent and decreasing respondents’ anxiety in answering questions “correctly.” To better understand similarity attraction theory, self-reported measures of person-centered variables that examine these self-reported differences merit further empirical inquiry.

Similarity attraction theory has been used to test leader-member exchange (LMX) using variables such as sex (Liden, Wayne, & Stilwell, 1993), race (Cianni & Romberger, 1995), attitudes (e.g., job satisfaction and pay ratings) (Turban & Jones, 1988), sources of power (Cogliser & Schriesheim, 2000) and subordinate performance and ingratiation (Deluga & Perry,
Results have generally supported the tenets of similarity attraction theory, indicating that leaders and followers who were similar on the predictor variables had higher quality relationships than those who reported differences on the same variables. Little work has been done in the area of work motivation, which is surprising since motivation is widely considered one of the more salient dispositions in human behavior (Mitchell & Daniels, 2003).

Previous research using the sources of work motivation has found correlations with influence tactics (Barbuto, Fritz, & Marx, 2002), use of transformational leadership behaviors (Barbuto, Fritz, & Marx, 2000), and Hofstede’s cultural dimensions (Barbuto & Gifford, 2007). Motivation remains an important matter in the workplace, and the absence of studies testing its impact on LMX leaves a void in the field that requires study. Therefore, this study explores the relationship between motivation and LMX. Particularly, this study tested whether or not sources of work motivation impacted the quality of leader-member exchange relationships.

Leader-Member Exchange

Newcomb (1956) stated that individuals would be attracted to one another based on mutual reciprocation of rewards within the relationship. Byrne (1971) extended Newcomb’s work, articulating the similarity-attraction paradigm and proposing that “similarity between two individuals enhances liking and consequently affects interactions and behaviors” (266). Byrne concluded that when a leader and a follower share similar attitudes, opinions, and beliefs, their relationship would be more positive. From this similarity attraction paradigm, Dansereau, Graen, and Haga (1975) developed vertical dyad linkage theory to depict the leader-follower relationship. Dansereau et al.’s findings indicated that leaders fostered differentiated dyadic exchanges with individual followers based upon similarities and differences.

Leader-member exchange theory evolved from this work on vertical dyad linkage (Dansereau et al., 1975; Johnson & Graen, 1973). Early studies indicated that managers developed high and low quality relationships that categorically resembled in-groups and out-groups (Graen, Novak, & Sommerkamp, 1982). In high leader-member exchange relationships, managers exhibited high levels of mutual trust, respect, and obligation toward members (Gerstner & Day, 1997). Low quality relationships were characterized by managers exhibiting low levels of mutual trust, respect, and obligation toward members (Graen et al., 1982).

Further research has tested similarities and differences as antecedents of leader-member exchanges. Studies have included dispositional and demographic variables such as attitudes (e.g., Basu & Green, 1995; Liden, Wayne, & Stilwell, 1993; Murphy & Enscher, 1999), sex (e.g., Larwood & Blackmore, 1978; Pelled & Xin, 2000), race (e.g., Basu & Green, 1995; Bedi, 1999; Tsui, Egan, & O’Reilly, 1992), and sexual orientation (Carrasco, Barbuto, & Gifford, 2007). Other studies have tested a combination of demographic and attitude similarity (e.g., McClane, 1991; Murphy & Enscher, 1999; Turban & Jones, 1988).

In sum, theoretical assumptions and empirical findings have supported similarity attraction theory whereby persons who perceive themselves as similar to each other will be inclined to like each other, thereby enhancing their working relationship. Similarity attraction theory research also demonstrates that dispositional and affective components play an important role in the development of leader-member exchanges (Liden et al., 1993).
Sources of Work Motivation

Many perspectives of motivation have been examined. These perspectives include need-based (Maslow, 1954; McClelland, 1961), intrinsic (Deci, 1975), social identity (Ashford & Mael, 1989), value-based (Etzioni, 1961), self-concept based (Brief & Aldag, 1981), and developmental (Kegan, 1982). More recently, scholars have examined work motivation, which is defined as the process by which behavior is energized, directed, and sustained in organizational settings (Steers, Bigley, & Porter, 2003). Much of the research on work motivation has been conducted from the content-based perspective. Content-based motivation refers to an assumption that an individual possesses unique factors that energize, direct, and sustain work-related behavior (Steers et al., 2003). Motivating factors have been differentiated into extrinsic (or external) and intrinsic (or internal) factors (Deci). Deci described intrinsic motivation as an individual’s attainment of pleasure from enjoyment of the task. Extrinsic motivation occurs when an individual engages in an activity or task because completion leads to external rewards such as money, promotion, or grades (Deci, 1971).

Leonard, Beauvais, and Scholl (1999) proposed an integrative taxonomy of work motivation that further differentiated external and internal sources of motivation. Leonard et al.’s taxonomy included five sources of work motivation, including two intrinsic sources (intrinsic process motivation and self-concept internal) and two extrinsic sources (instrumental motivation and self-concept external motivation).

Internal Sources of Motivation

Leonard et al. (1999) suggested that intrinsic process and self-concept internal were categories of internal motivators. Intrinsic process motivation refers to motivation due to the enjoyment of the task, wherein work itself becomes motivational for the individual due to sheer enjoyment of performing the task (Barbuto & Scholl, 1998). Self-concept internal motivation was drawn from McClelland’s (1961) need for achievement, Deci’s (1975) notion of an internal motivating force to overcome obstacles, and Katz and Kahn’s (1978) description of an individual’s motivation to achieve ideal role performance based upon internal factors. Individuals set internal standards for traits, competencies, and values as a basis for the ideal self. This ideal self motivates individuals to engage in behaviors that reinforce such internally derived standards and, ultimately, higher levels of achievement (Leonard et al.).

External Sources of Motivation

Leonard et al. (1999) suggested that instrumental motivation and self-concept external motivation were two categories of external motivators. Instrumental motivation evolved from Barnard’s (1938) exchange theory, as well as from expectancy theory and equity theory, which presumed that organizations and employees enter into exchange relationships where external factors such as money or promotion drive employee motivation to perform a task (Leonard et al.). Self-concept external motivation refers to motivation that is primarily other-directed. Motivation comes from affirmation of values, competencies, and traits (Barbuto & Scholl, 1998). This motivation is similar to McClelland’s (1961) need for affiliation and Alderfer’s (1969) relatedness needs.
Leonard et al.’s (1999) sources of work motivation have been found to be antecedents to transformational leadership behaviors (Barbuto, Fritz, & Marx, 2000), influence tactics (Barbuto, Fritz, & Marx, 2002), watch-wearing behaviors (Spencer, 2001), organizational citizenship behaviors (Barbuto, Brown, Wheeler, & Wilhite, 2003), transformational, transactional and charismatic leadership (Barbuto, Cundall, & Fritz, 2005), influence triggers (Barbuto, 2000), locus of control (Barbuto & Story, 2008), and mental boundaries (Barbuto & Story, 2007). Other research has found cross-cultural differences in work motivation (Barbuto & Gifford, 2007).

The Relationship between Motivation and LMX

This study extends the motivation and leader-member exchange literatures by testing several hypotheses, using internal and external sources of work motivation as an antecedent to the quality of the leader-follower relationship. Leonard et al. (1999) delineated between motivational sources that are external (i.e., other directed, based upon reference groups) and internal (i.e., the ideal self derived from internal standards). Testing self-reported differences in internal and external source of work motivation should provide greater understanding of the effect of motivational sources in leader-member exchange relationships. Because the similarity attraction paradigm has been previously supported (Gerstner & Day, 1997), it is expected that leader and follower differences in motivation will negatively affect LMX quality. Differences in leader-follower internal sources of work motivation will be negatively related to leader-member exchange (H1a). Similarly, differences in leader-follower external sources of work motivation will be negatively related to leader-member exchange (H1b).

The relationship between leaders’ and followers’ sources of work motivation and the followers’ rating of LMX are tested in this study. Steers, Bigley, and Porter (2003) argued that motivation allows employees to focus energies on improving organizational existence, which includes relationships with supervisors. Testing the level of motivation of both leaders and followers in conjunction with quality of LMX should provide additional insight into the effect of motivation on LMX quality. Followers’ sources of work motivation will be positively related to leader-member exchange (H2). Leaders’ sources of work motivation will be positively related to leader-member exchange (H3).

Methods

Data were collected from seventy-five elected community leaders and 388 raters. Leaders served as treasurers in their respective counties and were elected by eligible voters in those specific counties. Sixty-five percent of the leaders were female with an average age of 51; 50% had earned a bachelor’s degree, and 20% had earned an advanced degree. Raters were colleagues or subordinates of the leader. Fifty-three percent of the raters were female with an average age of 46 years; 42% of the raters had earned a bachelor’s degree, and less than 10% had earned an advanced degree. Leaders’ scores were matched with their individual followers to form a total of 368 leader-follower dyads. Twenty dyads were not included due to missing information from either the leader or the follower that prevented calculation of the scales.
Sources of Work Motivation

Internal and external sources of work motivation were calculated using the Motivation Sources Inventory (MSI). Barbuto and Scholl (1998) developed the MSI to operationalize sources of work motivation. The MSI is a 30-question instrument measured with a 7-point Likert scale ranging from “entirely agree” to “entirely disagree.” The external motivation subscale is composed of scores from the MSI’s instrumental subscale and self-concept external subscale. A sample item from the external subscale is: “I will work harder if I get paid for the extra effort.” The internal motivation subscale is composed of scores from the MSI’s instrumental subscale and the self-concept internal subscale. A sample item from the self-concept internal subscale is: “I work harder if I know my skills are needed.”

Followers’ motivation sources subscales returned acceptable reliability coefficients with a Cronbach’s alpha of $\alpha=0.87$ for the external motivation subscale and $\alpha=0.75$ for the internal motivation subscale. Similarly, the leaders’ motivation sources subscales returned acceptable reliability coefficients with a Cronbach’s alpha of $\alpha=0.64$ for the external motivation subscale and $\alpha=0.68$ for the internal motivation subscale. Differences between individual leader and follower scores were calculated by taking the absolute value of the difference between the leader score and the follower score on each of the subscales (Barbuto & Story, 2008).

Leader-Member Relationship Quality

The quality of the leader-follower relationship was measured using the LMX-7 (Gerstner & Day, 1997). This instrument measures follower’s perception of relationship quality. The LMX-7 is a seven-item instrument with a seven point Likert scale where lower scores refer to lower quality relationships and higher scores refer to higher quality relationships. An example item from the LMX-7 is “This person understands my problems and needs.” The LMX-7 has been shown to have internal reliabilities from $\alpha=0.80$ to $0.90$ (Graen & Uhl-Bien, 1998). The reliability coefficient for this study was $\alpha=0.84$.

Procedure

Data were collected during a full-day leadership training seminar sponsored by an association as an annual professional development program. Participants consisted of a group of elected officials who were members of this association. Leaders were asked to complete the instruments and return them directly to the primary researcher in a postage-paid envelope. Each leader was asked to solicit between four and six colleagues and/or subordinates to complete the rater version of the instruments. Raters’ instruments were also returned directly to the primary researcher in a postage-paid envelope. Instruments were coded to protect the identities of the raters; however, leaders’ names were kept on a separate coding sheet for interpretation and feedback. Of the 92 eligible leaders, 75 participated in the study for an 82% response rate. Of the selected 552 raters, 368 usable rater packages were returned for a 67% response rate.

Previous studies have analyzed antecedent variables using correlational analyses in order to understand the relationship between the antecedent variable and LMX (Gerstner & Day, 1997). For this study, zero-order correlations and descriptive statistics were calculated for all variables and are reported in Table 1.
Results

Results indicated that none of the hypothesized relationships were significant. Table 2 describes the results of the correlation analysis for differences between leader and follower internal and external motivation and leader-member exchange relationship quality (LMX). From this finding, it cannot be determined that differences in leaders’ and followers’ internal or external sources of work motivation positively or negatively affect the quality of the leader-follower exchange relationships. Separately, neither leaders’ individual sources of work motivation nor followers’ individual sources of work motivation were related to the quality of the leader-follower relationship. This result is unexpected and contrary to the extant research on similarity attraction theory.

Table 1
Descriptive Statistics, Reliabilities, and Intercorrelations for Leader Sources of Motivation, Follower Sources of Motivation, and Leader-Member Exchange (LMX)

<table>
<thead>
<tr>
<th>Variables</th>
<th>M</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Leader – Extrinsic</td>
<td>3.34</td>
<td>.68</td>
<td>.64</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Leader – Intrinsic</td>
<td>3.36</td>
<td>.71</td>
<td>.67**</td>
<td>.68</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Follower – Extrinsic</td>
<td>3.54</td>
<td>1.01</td>
<td>.05</td>
<td>.00</td>
<td>.87</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Follower-Intrinsic</td>
<td>3.48</td>
<td>.84</td>
<td>-.05</td>
<td>-.10</td>
<td>.72**</td>
<td>.75</td>
<td></td>
</tr>
<tr>
<td>5. LMX</td>
<td>22.05</td>
<td>4.86</td>
<td>.03</td>
<td>.08</td>
<td>-.01</td>
<td>.04</td>
<td>.84</td>
</tr>
</tbody>
</table>

Note. **p<.01. Cronbach’s alpha scores are reported in parentheses on the diagonal.

Of interest, however, is the significant correlation between the internal and external sources of motivation (leader’s r=.67, p<.01; follower’s r=.72; p<.01). This positive correlation indicates that as internal sources of motivation increased, so too did external sources of motivation. A significant positive correlation between leader and follower differences in external and internal motivation was also found (r=.45) (see Table 2). This appears to be a residual effect from the significant relationships between leader internal and external sources of motivation and follower internal and external sources of motivation, not an independent result. While the result should not be entirely dismissed, it is not considered to be a noteworthy finding.

Table 2
Descriptive Statistics and Intercorrelations for Motivation Differences and Leader-Member Exchange (LMX)

<table>
<thead>
<tr>
<th>Variable</th>
<th>M</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. L-F Difference Ext</td>
<td>.46</td>
<td>.50</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. L-F Difference Int</td>
<td>.45</td>
<td>.50</td>
<td>.45**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. LMX</td>
<td>22.05</td>
<td>4.86</td>
<td>.05</td>
<td>.02</td>
<td></td>
</tr>
</tbody>
</table>

Note: **p<.01. L-F Difference Ext=Absolute value of difference between leader and follower extrinsic
scores. L-F Difference Int=Absolute value of difference between leader and follower intrinsic scores.

**Discussion**

This study tested actual self-reported sources of work motivation in leaders and followers and the differences in sources of work motivation between leaders and followers as predictors of the quality of leader-follower relationships. Specifically, it was hypothesized that greater differences in leaders’ and followers’ self-reported sources of work motivation would be related to lower quality leader-follower relationships. The relationship between leaders’ sources of work motivation and the followers’ perception of the quality of the leader-follower relationship, as well as the followers’ sources of work motivation and the followers’ perception of the quality of the leader-follower relationship, were also explored.

Interestingly, none of the hypothesized relationships were found, contradicting the notions purported by the similarity attraction paradigm. These findings indicate that actual self-reported similarity of sources of work motivation is not related to the quality of the leader-member exchange relationship. Practically speaking, leaders should note that they may develop high quality relationships with followers even though the follower may be motivated differently than the leader. Leaders will still need to be aware of these differences of motivation to successfully tap into each follower’s dominant source of work motivation in efforts to produce results and meet goals.

Leaders are commonly encouraged to surround themselves with diverse teams. Often, diversity is thought of in terms of demographic characteristics. However, motivation is also an individual characteristic from which leaders can build a diverse team. Teams and organizations with varying levels of intrinsic and extrinsic motivation may be more capable of sustaining effort in spite of the waxing and waning of organizational or team success. Inclusion of varying sources of work motivation may also provide leaders with more effective decision making advice not based purely on either intrinsic or extrinsic motivation. Leaders, teams, and organizations may experience numerous positive outcomes by embracing sources of motivation as one characteristic of diversity within teams and organizations.

Of particular note in this study is the significant and positive correlations found between extrinsic and intrinsic motivation sources in both leaders and followers. Deci (1975) argued that intrinsic motives within an individual should decrease the effect of extrinsic motives, revealing a negative correlation. However, Bandura (1977) contradicted this logic, stating that in workplace settings it is nearly impossible to find situations that lack either an intrinsic inducement or an extrinsic inducement. In fact, Bandura argued that withdrawing external rewards even for someone highly intrinsically motivated would be viewed as a punishment and thus reduce intrinsic motivation. Cameron and Pierce (1994) found that when employees received an extrinsic reward, there were no detrimental effects regardless of employees’ intrinsic or extrinsic motivation preferences. They noted that the distinction between intrinsic and extrinsic motivation should continue to be examined because the interplay between these two motives remains elusive. This study provides further evidence of the need to more effectively delineate between intrinsic and extrinsic motivation in work settings, to examine the interplay between these two sources, and to perhaps explore more complex models in which moderating and mediating variables affect motives.
Limitations/Future Directions

While the similarity attraction paradigm posited that leaders and followers who are similar would have higher quality leader-member exchange relationships, this theory was not supported by data from this sample. This study tested self-reported motivation of leaders and followers—not perceptions of differences, as many past studies have operationalized this construct. Since this study found that actual self-reported differences in motivation did not affect the quality of the leader-member exchange relationship, it is entirely possible that the similarity portion of similarity attraction theory should be based upon leaders’ or followers’ perceived similarity as opposed to actual reported similarity. In this study, it appears that independently self-reported actual differences offer little predictive value to leader-member exchange. Future research should distinguish between subjective attributions of similarity and measured differences of similarity when operationalizing the construct. Both forms of measures may be useful to confirm the conclusions made in this study.

A positive correlation between internal and external sources of motivation was found in this study, indicating that those with high internal motivation appear to also have high external motivation. It is unclear whether increased internal motivation is elevating external motives or vice versa. Closer examination may be warranted to test this relationship.

Conclusion

The similarity attraction paradigm states that individuals are more likely to have better relationships with those who are similar to themselves (Byrne, 1971). Previous research has confirmed this assertion to be true using a number of demographic and dispositional variables. This study does not support the similarity attraction paradigm, as no relationship between leaders’ sources of work motivation or followers’ sources of work motivation and the quality of the leader-member exchange existed.

Leadership development should continue to train leaders to understand the differences of work motivation and its impact upon individuals in the workplace; however, notions around objectively measured “fit” may be problematic as truly similar individuals will not necessarily develop better working relationships in dyadic exchanges. Future research should test antecedents of leader-member exchanges with particular attention paid to actual self-reported and perceived similarity criteria. The impacts of differences in work motivation, both in the workplace and in the development of leader-follower relationships, may offer plentiful lines of salient inquiry.

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