Are Group Consensus in LMX and Shared Work Values Related to Organizational Outcomes?

Birgit Schyns*

University of Twente, The Netherlands

Keywords: Leadership, LMX, Commitment, Job satisfaction, Performance, Occupational Self-Efficacy, Consensus

* Requests for reprints should be addressed to Birgit Schyns, University of Twente, Faculty of Behavioural Sciences, Department of Work and Organizational Psychology, PO Box 217, 7500 AE Enschede, The Netherlands, e-mail: B.Schyns@utwente.nl. The data reported here are part of a project founded by the German Scientific Society (DFG, project number: Mo 440/4-1). The author wishes to thank Karin Sanders and Ronni Greenwood as well as two anonymous reviewers for their comments on an earlier version of this manuscript.
Abstract

Leader-Member Exchange (LMX) refers to the relationship quality between leader and follower. In most cases, LMX is rated individually and set in relation to individually-rated outcomes. In this study, however, focus is placed on consensus in the perception of LMX within a team. In line with balance theory, it is argued here that consensus is an important influential factor in the development of followers’ attitudes. Yet, in terms of group performance, the relevance of shared work values need also be considered. The fact that a team has high consensus in their perception of their leaders does not necessarily mean that its performance is in line with company expectations. Consequently, in this study, it is proposed that high work values would moderate the relationship between consensus and performance. The hypotheses were tested using a sample of employees in German banks and insurances. Results indicate that there is some support for the proposed relationship between consensus in contribution and job satisfaction as well as the relationship between consensus in contribution and commitment. In addition, moderating effects of work values emerged. This indicates that consensus with respect to LMX is influential in organizations, and suggests that leaders should strive towards having a similar relationship with all followers.
Are Consensus in LMX and Work Values Related to Organizational Outcomes?

Some authors argue that a high degree of consensus in the perception of leadership serves as an important stimulus for team cohesion. Sanders and Schyns (in press), for example, found this assumption confirmed in their study concerning perception of transformational leadership. A leadership concept that may be even more relevant in this context is Leader-Member Exchange, as it focuses on the relationship quality between a leader and each of his/her individual followers. It is proposed here that differences in the quality of relationship between a leader and individual members can lead to problems within a team. Ideas concerning how different relationships with a leader might affect other relationships within the team could be drawn from Heider’s (1958) balance theory. This will be elaborated on in a following section. Prior research suggests that consensus in a work group can indeed have a negative impact on performance, for example when members have low work values (i.e., do not regard work as important in their lives. Sanders, 2004). For this reason, it is expected that shared work values will have a moderating effect on the relationship between consensus in the perception of LMX and follower attitudes, as well as on consensus in the perception of LMX and performance.

Leader-Member Exchange and Consensus in Leader-Member Exchange

Leadership research has focused on many different facets of leadership, one of these being the interaction between leader and member. The merit of the LMX-approach (e.g., Graen & Uhl-Bien, 1995) is that it takes into account the dyadic relationships between one leader and one follower, as compared to the relationship between a leader and a complete group. Leader-Member Exchange (LMX) refers to the quality of this relationship between a leader and each of his/her members (e.g., Dansereau, Graen, & Haga, 1975; Dienesch & Liden, 1986; Graen & Uhl-Bien, 1995). Dienesch and Liden (1986) have developed an assessment of this relationship quality based on a fundamental concept of mutuality and including three different
dimensions, namely: perceived contribution (to the mutual goals), loyalty (with respect to public support), and affect (interpersonal attraction). Liden and Maslyn (1998) later added the dimension, “respect”, which refers to the follower’s appreciation of his/her leader’s professional competences. Both leader and member contribute equally to the relationship (although the leader may be the one initiating the exchange, Graen, 2003). Consequently, when rating LMX, both leader and follower are asked to rate their relationship on the same dimension(s).

Studies on LMX have most often found positive relationships between followers’ ratings of LMX and their work related attitudes (e.g., commitment, see meta-analysis by Gerstner & Day, 1997, and Schyns, Paul, Mohr, & Blank, 2005, for that relationship in a German work context) as well as follower’s LMX ratings and performance (see meta-analysis by Gerstner & Day, 1997).

Although early research on LMX suggests that there can indeed be differences in the quality of the relationships that individual members of a team have with their leader (Dansereau, Graen, & Haga, 1975), the question as to how these differences affect the way the team works together has not yet been addressed. To formulate the question more concretely: does having different relationships with a leader have an impact on the members’ attitudes and performance? Heider’s (1958) balance theory suggests a possible answer to this question. He argues that a triad of relationships has to be balanced in order for the members to feel comfortable. In terms of LMX, this would mean that two followers with different relationships to their leader are likely to get along badly (given that this difference in the relationship to the leader does not change in the course of time in which they are working together). A precondition for a good relationship between two members then would be that they agree that they both have the same quality of relationship with their leader (see Figure 1).

--- Please insert Figure 1 about here ---
This hypothesis is somewhat contradictory to the assumptions made in the context of LMX: Here, researchers maintain that a positive LMX relationship is always positively related to follower-related outcomes (e.g., their attitudes and performance). In contrast to this assumption, it is argued here that even low LMX can lead to positive members’ attitudes, provided that team members agree on the fact that they all have a low quality relationship with their leader. The following section will outline how consensus in LMX is related to specific attitudes.

Consensus in the perception of LMX within a group and the correlated followers’ attitudes

In terms of simple relationships, a prior study found that follower-rated LMX and followers’ attitudes are only partly related in the dataset used here (Wolfram & Schyns, 2004; Schyns & Wolfram, 2004). Whereas job satisfaction was related to most LMX dimensions, commitment and occupational self-efficacy were only related to the contribution dimension of LMX. In this study, the individual LMX perception is seen to be less important for followers’ attitudes than is their consensus in the perception of LMX. It is expected that consensus impacts on followers’ attitudes through the mechanisms outlined in the balance theory. These arguments are valid for job satisfaction and commitment. Employees who experience high consensus in their group are probably more satisfied with their work and feel more committed to their organization. In addition, consensus should be related to lower feelings of stress, as group members who have high consensus tend to help each other out in times of high workload (see Sanders & Schyns, in press, for the relationship between consensus in the perception of transformational leadership and solidarity behaviour).

In terms of occupational self-efficacy, it is assumed that members working in teams that have high consensus feel supported and get help from each other (Sanders & Schyns, in press; Tyler & Blader, 2001). It has been shown that support in the sense of verbal persuasion enhances self-efficacy (Bandura, 1977) and, that model learning is enhanced by similarity
between model and observer (i.e., e.g., high consensus) which also leads to higher self-efficacy (Bandura, 1977). Consequently members of a group who agree on LMX should have a high sense of self-efficacy with respect to their occupation. This allows us to assume that high consensus in LMX within a team is related to outcomes as rated by team members.

**H 1: Consensus within the team (low standard deviation) on LMX is related to followers’ attitudes (positively to job satisfaction, commitment, and occupational self-efficacy, and negatively to stress).**

*Consensus in the perception of LMX, shared values, and performance*

Although it is expected that consensus in the perception of leadership is related to followers’ attitudes, a different picture should emerge for the relationship between consensus within the group and *group performance*. First, we could expect that consensus in the perception of leadership will be related to performance as rated by the leader. This assumption is based on the idea that groups with high consensus cooperate better (see also the results obtained by Sanders & Schyns, in press) and thus, reach a higher performance level.

However, Sanders (2004) finds that certain forms of consensus (in this case, consensus in work values) are related to absenteeism, more specifically, that high consensus in terms of negative work values is related to higher short-term absenteeism. Consensus - in this case regarding work values that promote “joyriding” - can lead to lower performance.

Consequently work values are believed to be potential moderators of the relationship between consensus in LMX and group performance. High consensus in LMX in connection with positive work values leads to high group performance, whereas high consensus in LMX in connection with negative work values leads to low performance.

**H 2: Consensus within the team (low standard deviation) on LMX is positively related to group performance for teams high on work values and is negatively related to group performance for teams low on work values.**
Method

Sample

The sample consisted of 234 followers (216 could be assigned to a leader) on low levels of hierarchy and their immediate supervisors. The sample was drawn from 22 banks and insurance companies. One-hundred-sixty-eight female followers and 65 male followers took part in the study. The mean age was 35 years ($SD = 9$). Fifty-four supervisors participated in this study. Twenty-nine of them were women, 25 men. The average age of the supervisors was 38 years ($SD = 7$). On average, the supervisors and followers worked together for 2.5 years ($SD = 2.3$). Per supervisor, we questioned between 1 and 10 followers (see also Schyns & Wolfram, 2004). The number of groups involved in this study was 54.

Procedure

Questionnaires were distributed among followers willing to participate in our study. Followers filled in the questionnaires in group-settings during work time. They provided answers to scales on LMX, job satisfaction, affective commitment, occupational self-efficacy, irritation, and work values. The questionnaires for the supervisors were distributed and then collected after having been filled in. These questionnaires provided information concerning the group’s performance. In order to be able to match followers and supervisors, we assigned each person a number.

Instruments

Leader-Member Exchange was assessed using a German translation of the LMX MDM instrument (Paul & Schyns, 2004; original: Liden & Maslyn, 1998). The instrument consists of four dimensions, namely, affect, respect, loyalty, and contribution. Each dimension consists of three items. The answer categories range from 1 = *do not agree at all* to 7 = *agree completely*. Sample items are “I like my supervisor as a person” (affect), “I am impressed with my supervisor’s knowledge of his/her job” (respect), “My supervisor defends my work
when questioned by a superior, even without full knowledge of the issue in question” (loyalty), and “I do work for my superior that goes beyond what is specified in my job description” (contribution). The internal consistencies (Cronbach’s alphas) of LMX were $\alpha = .92$, $\alpha = .89$, $\alpha = .81$, and $\alpha = .61$, for professional respect, affect, loyalty, and perceived contribution, respectively. Although the alpha for perceived contribution is relatively low, the lower alpha of this dimension compared to the other dimensions is in line with prior work (Liden & Maslyn, 1998; Maslyn & Uhl-Bien, 2001).

Job satisfaction was assessed using a general job satisfaction instrument developed by Oegerli (1985). The instrument comprises of eight items. A sample item is “I hope my work situation stays as good as it is at the moment.” The scale ranges from 1 = almost never to 5 = almost always. The reliability for eight items was $\alpha = .77$.

Commitment was assessed with the affective component of commitment. We used the German translation of the Allen and Meyer (1990) instrument (Schmidt, Hollmann, & Sodenkamp, 1998). The answer categories range from 1 = do not agree at all to 7 = agree completely. The instrument consists of eight items with an internal consistency of $\alpha = .73$. A sample item is “I would be very happy to spend the rest of my career in this organization”.

Occupational self-efficacy. We asked followers to indicate the extent to which they feel competent enough to fulfill the requirements of their job. For this assessment, we used a shortened, 8-item version of the OCCSEFF by Schyns and von Collani (2002). A sample item is “No matter what comes my way in my job, I’m usually able to handle it.” The answer categories range from 1 = does not apply at all to 7 = applies completely. The internal consistency for this scale was $\alpha = .84$.

Irritation describes a particular psychological state lying between mental fatigue/exhaustion and a state considered to be mentally ill (Mohr, Müller, & Rigotti, in press; Mohr, Rigotti, & Müller, in press). The answer categories range from 1 = strongly disagree to 7 = strongly
agree. An item example is “I get irritable when others approach me”. The five-item scale yielded a reliability of $\alpha = .80$.

*Work values* were assessed using the subscale “Subjective value of work” of the AVEM (work related behaviour and experience patterns; Schaarschmidt & Fischer, 1996). The instrument consists of eight items, with an answer scale from $1 = \text{does not apply at all}$ to $5 = \text{applies completely}$. A sample item is “I need my work like air to breathe”. The internal consistency was $\alpha = .81$ for four items.

*Group performance* was assessed using leader ratings on the following two instruments. We assessed *goal fulfilment* with six items that indicate the degree of the fulfilment of goals set in advance. A sample item is “We reach the goals set by the top management”. The scale ranges from $1 = \text{does no apply}$ to $4 = \text{applies completely}$. The internal consistency was $\alpha = .82$ for five items. We also asked the supervisors to indicate to what percentage they and their group reached the goals set for them (*Percentage of goal fulfilment*). A sample item is “To what percentage have you reached the goals set by the company?” The internal consistency of this 4-item-instrument was $\alpha = .79$.

*Analysis*

In order to test the hypotheses, the standard deviation of LMX in groups in which followers rated one leader (degree of consensus) was calculated and correlated with the mean values of commitment, occupational self-efficacy, job satisfaction, and irritation for that respective group. These standard deviations were then assigned to the respective leader and correlated to his / her rating of the groups performance. For H2, the means of work values per group were also calculated.

*Results*

*Results for consensus in followers’ LMX-ratings and follower’ attitudes*
H1 (Consensus within the team (low standard deviation) is related to outcomes (commitment, occupational self-efficacy, job satisfaction, and irritation)) is only partly supported in our sample as only the correlation between the standard deviation in contribution and job satisfaction reached significance (see Table 1). This correlation is negative, indicating that - as hypothesized - a lower standard deviation is related to higher job satisfaction. None of the other outcomes is significantly related to consensus in LMX, although some of the correlations are of substantial size (commitment). As some of the correlations were in the expected direction, a composite measure of LMX was created and set into relation to the outcome variables. Again, due to the low N, no significant relationship was found, although with the exception of the variable “self-efficacy”, all correlations are in the expected direction.

One could argue that the correlation between contribution and job satisfaction is due, not so much to the standard deviation, but to an extreme high mean value implying a low standard deviation. This point was addressed by calculating the means and the correlations between means and standard deviations for all LMX dimensions. The means are 5.71, 5.09, 5.21, and 4.89, for respect, affect, loyalty, and contribution, respectively. The correlations are $r = -.532 (p < .01)$, $r = -.229$ (n.s.), $r = -.358 (p < .01)$, and $r = -.488 (p < .01)$, for respect, affect, loyalty, and contribution, respectively. This does not suggest a ceiling effect for contribution.

--- Please insert Table 1 here ---

**Moderating effect of work values**

H2 (Consensus within the team (low standard deviation) on LMX is positively related to performance for team high on work values and is negatively related to performance for teams low on work values) was tested using a procedure recommended by Aiken and West (1991), where the variables involved are centred and terms suspected of interacting are multiplied. The regression was performed using the standard deviation of LMX and the mean of work
values per team. As can be seen in Table 2, only the interactions between LMX-loyalty and work values on goal fulfilment, and the interaction between LMX-respect and work values on percentage of goal fulfilment, become significant. Both are only significant on a 10%-level. However, as the beta-weights are substantial and the small sample size does not allow us to expect higher levels of significance, these results are still noteworthy.

--- Please insert Table 2 here ---

In order to be able to describe the effect, the interactions were drawn according to the procedure recommended by Aiken and West (1991). Figure 2 indicates that, for groups with high work values, the relationship between the standard deviation in loyalty and goal fulfilment is positive, indicating that the less consensus in loyalty the higher the performance for groups with high work values. For groups with low work values the effect is the opposite, indicating that the more consensus in loyalty the higher the performance. This is contrary to expectations. An analysis of the simple slopes using a programme provided by Johannes Ulrich (http://www.staff.uni-marburg.de/~ullrichj/interactor_1.5.xls) reveals no significant effect ($SE_{low} = 0.06, t = 1.16, \text{n.s.}; SE_{high} = 0.06; t = 0.49, \text{n.s.}$).

--- Please insert Figure 2 here ---

For consensus in LMX-respect and work values on percentage of goal fulfilment, a different picture (see figure 3) emerges: There is almost no relationship between consensus in respect and percentage of goal fulfilment for groups high in work values, and a positive relationship between consensus in LMX and percentage of goal fulfilment for groups low in work values, indicating that the less consensus, the higher the performance in these groups. This is in line with expectations. An analysis of the simple slopes using a programme provided by Johannes Ulrich (http://www.staff.uni-marburg.de/~ullrichj/interactor_1.5.xls) reveals significant effects ($SE_{low} = 0.20, t = 123.58, p < .001; SE_{high} = 0.18; t = 126.58, p < .001$).
Summary and discussion

In this paper, it is assumed that followers’ consensus in the rating of LMX is positively related to positive followers’ attitudes and negatively related to negative followers’ stress. This hypothesis was only partly supported. Only the correlation between consensus in contribution and job satisfaction becomes significant. Others (e.g., to commitment) are substantial but do not become significant due to small sample size. In this paper, it was argued on the basis of Heider’s (1958) balance theory that a similar perception of the leader leads to positive outcomes. However, LMX research to date had found that the Leader-Member relationship quality has to be high to yield positive results (Gerstner & Day, 1997). It cannot be ruled out that the same is true for groups, that is, that there has to be consensus that the relationship qualities of each member with the leader are high. Hogg, Martin, and Weeden (2003), whose work is based on social identity theory (e.g., Tajfel, 1982), could show that a personalized leadership style such as LMX is relevant in groups with high and low membership salience. For our study, this could mean that a high quality relationship (high LMX) has an effect on the group members’ attitudes, and also an effect on groups that have either high or low consensus in LMX.

With respect to the impact of consensus in work values, two of the interactions of work values and consensus in LMX become significant. For consensus in loyalty and work values on goal fulfilment, results indicate that the relationship is negative for groups high in work values, which is to say that consensus is negatively related to performance in these groups, whereas it is positively related to performance in low work value groups. This could argue for a compensation effect. If the work values are low, a consensus in LMX can still lead to high performance. The result for the high work value group is less easy to explain: Why would consensus in loyalty lead to lower performance when the work values are high? In a way, this
is a compensation effect as well, as low consensus is still related to high performance when work values are high. Alternatively, loyalty refers to the extent to which a leader is willing to defend his/her followers. As consensus is defined independent of the actual amount of loyalty a leader shows, the members in this case probably agree that the leader does not show loyalty, which may not be in line with their own work values and, thus, their performance suffers. A post-hoc analysis indeed reveals that the group with high work values is a bit lower in the mean loyalty they perceive in their leader than the group with low consensus although not significantly so. Another explanation is that these people have high achievement motivation and could not, due to the bad economic situation in Germany at that time, live up to the expectation, whereas groups low in work values could do so as their ambitions may be lower in the first place.

For respect, no relationship between consensus and percentage of goal fulfilment for high work value groups was found. It seems, therefore, that their performance is independent of the consensus on respect within their groups. This result is in line with expectations in so far as groups high in work values are expected to perform well, independent of the context. For groups low in work values a negative relationship between consensus and performance was found: The lower the consensus the higher the performance. Thus, consensus may compensate for low work values. Here, again, the groups are probably not positive about their leader’s competence (as respect refers to the estimation of the leader’s competence), and, therefore, do not put effort in their task.

Limitations and future research

Certain limitations apply to this research. Although we were able to approach more than two-hundred participants for our study, the approach taken here allows us only to analyse the data on a group level, limiting the N for the analyses to around fifty. Consequently, although some absolute values (rs and betas) were reasonably high, they did not reach significance. Future
research could either try to examine a bigger sample or assess consensus in a different manner. A future approach could be to ask individuals to indicate their personal impression of group consensus. This may also have the advantage that perceived group consensus may affect individual outcomes to a bigger extend than the actual consensus.

In this study, cooperation was not assessed. Therefore, it remains unclear as to whether the group members actually act on their consensus in the sense that they not only agree on certain topics (in this case their relationship to their leader) but also behave accordingly.

Conclusion

Consensus in work groups is in itself an interesting topic as research has shown that it can have positive and negative outcomes with respect to organizational goals. This study has contributed to our knowledge about the effect of consensus, especially with respect to consensus in the perception of the relationship to the leader. Although only few results became significant, there were some interesting findings, such as the interaction effects of consensus and work values. It seems that both work in a compensatory manner.
References


theory of leadership over 25 years: Applying a multi-level multi-domain perspective.


Consensus in LMX

Bern, Switzerland.

Zentrum für Umfragen, Methoden und Analysen.


## Table 1: Correlation between the standard deviation in followers’ LMX-ratings and follower-related outcomes

<table>
<thead>
<tr>
<th></th>
<th>Mean job satisfaction</th>
<th>Mean Commitment</th>
<th>Mean self-efficacy</th>
<th>Mean Irritation</th>
</tr>
</thead>
<tbody>
<tr>
<td>SD Affect</td>
<td>-.19</td>
<td>.10</td>
<td>-.01</td>
<td>-.12</td>
</tr>
<tr>
<td>SD Respect</td>
<td>-.11</td>
<td>-.09</td>
<td>.15</td>
<td>-.16</td>
</tr>
<tr>
<td>SD Loyalty</td>
<td>-.18</td>
<td>-.06</td>
<td>.04</td>
<td>-.16</td>
</tr>
<tr>
<td>SD Contribution</td>
<td>-.29*</td>
<td>-.25†</td>
<td>-.07</td>
<td>-.09</td>
</tr>
<tr>
<td>Composite LMX</td>
<td>-.22</td>
<td>-.06</td>
<td>.05</td>
<td>-.13</td>
</tr>
</tbody>
</table>

Note: ** Correlation is significant at the 0.01 level (2-tailed), * Correlation is significant at the 0.05 level (2-tailed), † Correlation is significant at the 0.10 level (2-tailed)
### Table 2: Moderated regression analysis: Leader rated performance as dependent variable

<table>
<thead>
<tr>
<th></th>
<th>Goal fulfilment</th>
<th>Percentage of goal fulfilment</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>SD</td>
</tr>
<tr>
<td>I</td>
<td>(Constant)</td>
<td>3.26</td>
</tr>
<tr>
<td></td>
<td>SD LMX Affect</td>
<td>0.16</td>
</tr>
<tr>
<td></td>
<td>SD work values</td>
<td>0.00</td>
</tr>
<tr>
<td></td>
<td>SD LMX Affect * mean work values</td>
<td>0.15</td>
</tr>
<tr>
<td>II</td>
<td>(Constant)</td>
<td>3.27</td>
</tr>
<tr>
<td></td>
<td>SD LMX Respect</td>
<td>0.03</td>
</tr>
<tr>
<td></td>
<td>SD work values</td>
<td>0.03</td>
</tr>
<tr>
<td></td>
<td>SD LMX Respect * mean work values</td>
<td>0.27</td>
</tr>
</tbody>
</table>
Table 2ff: Moderated regression analysis: Leader rated performance as dependent variable

<table>
<thead>
<tr>
<th></th>
<th>Goal fulfilment</th>
<th>Percentage of goal fulfilment</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>SD</td>
</tr>
<tr>
<td>III (Constant)</td>
<td>3.26</td>
<td>0.06</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SD LMX Loyalty</td>
<td>-0.02</td>
<td>0.13</td>
</tr>
<tr>
<td>SD work values</td>
<td>-0.03</td>
<td>0.11</td>
</tr>
<tr>
<td>SD LMX Loyalty * mean work values</td>
<td>0.48</td>
<td>0.26</td>
</tr>
<tr>
<td>IV (Constant)</td>
<td>3.26</td>
<td>0.06</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SD LMX Contribution</td>
<td>0.14</td>
<td>0.10</td>
</tr>
<tr>
<td>SD work values</td>
<td>-0.02</td>
<td>0.12</td>
</tr>
<tr>
<td>SD LMX Contribution * mean work values</td>
<td>-0.04</td>
<td>0.20</td>
</tr>
</tbody>
</table>

Note: † p < .10
Figure 1: Balanced triads
Note: In the figure, high consensus is on the left side, low consensus on the right side.

**Figure 2: Interaction between consensus in loyalty and work values on goal fulfilment**
Note: In the figure high consensus is on the left side, low consensus on the right side.

**Figure 3:** Interaction between consensus in respect and work values on percentage of goal fulfilment
Footnotes

\footnote{i Similar to the critique in this paper, Hogg, Martin, and Weeden (2003; see also Hogg, Martin, Epitropaki, Mankad, Svensson, & Weeden, 2005), whose work is based on social identity theory (e.g., Tajfel, 1982), criticized that LMX theory and research has so far ignored the problem of different relationships within work groups. Although the critique is similar, their approach is different, as they did not employ consensus in LMX to examine their assumptions but salience of group membership.}