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Master Thesis

Balance in Social and Economic LMX Relationships and its Relation to Work Performance - Relational Schemas as Moderator

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Abstract

The aim of this study is to examine the link between social leader-member exchange (SLMX) balance, economic leader-member exchange (ELMX balance), and work performance. It also examines whether followers' expressive and instrumental relational schemas moderate the relationship between different LMX balance constellations and work performance. The study is based on cross-sectional data from an internet survey conducted among 150 followers (response rate = 87%) with 62 associated leaders (response rate = 84%) in Norwegian companies. Analyses of variance revealed that work performance scores varied significantly across four different SLMX relationship types (H1-H2) but not across ELMX relationship types (H3-H4). Moderation analyses revealed significant interactions between certain SLMX relationship types and relational schemas, and between certain ELMX relationship types and relational schemas (H5-H8). Five out of eight hypotheses were partially supported. The study fills both theoretical and empirical gaps in LMX theory research, and is the first to combine insights about balance in perceptions with the distinction between SLMX and ELMX. It increases our understanding of the LMX construct by giving a clearer image of the conditions under which LMX relates to work performance. It also advances our knowledge about the interplays of leader-member exchanges and followers' relational schemas.

Key words: Leader-member exchange (LMX), LMX theory, social LMX, economic LMX, LMX balance, relational schemas, work performance, work effort, work quality

Content

Introduction and Research Question

The basic premise of leader-member exchange (LMX) theory is that leaders over time develop relationships of different quality with their individual followers (Graen & Uhl-Bien, 1995). The quality of these relationships have been related to a number of important employee-outcomes (Dulebohn, Bommer, Liden, Brouer, & Ferris, 2012). However, few studies have examined these relationships through the eyes of both dyadic parties (Buch, Thompson, & Kuvaas, 2016). Consequently, an emerging topic in LMX research is that of LMX balance, i.e. the degree to which leaders and followers have similar perceptions of their LMX quality (van Gils, van Quaquebeke, & van Knippenberg, 2010). Another emerging topic in LMX research, based in social exchange theory, is the distinction between social (SLMX) and economic leader-member exchanges (ELMX). Where these have traditionally been placed along the same continuum with economic exchanges being equal to low-quality and social exchanges being equal to high-quality, researchers have recently argued that they are qualitatively different and should examined as separate constructs (Kuvaas, Buch, Dysvik, & Haerem, 2012).

Though both the topic of LMX balance and the topic of social and economic LMX raise important concerns regarding traditional LMX research, they have yet to be combined in a single study. This leaves a gap in the LMX research, which we attempt to fill with this study. By addressing recommendations from both research topics, we aim to improve theoretical knowledge provide a more nuanced understanding of leader-member relationships.

For our thesis, we will be investigating the importance of social LMX balance and economic LMX balance specifically. Based on previous findings, we expect that work performance will be highest in dyads where leaders and follower are in agreement over a high presence of SLMX and a low presence of ELMX. Furthermore, we expect that work

performance will be lowest in dyads where parties are in agreement over a low level of SLMX and high level of ELMX, and that unbalanced relationships will show intermediate levels of work performance. To bring more nuance and depth to the study, we will also be examining the moderating role of expressive and instrumental relational schemas on this relation. We expect that expressive relational schemas will have a positive moderating influence, whereas instrumental relational schemas will have a negative moderating influence.

Researchers have pointed out the importance of collecting ELMX and SLMX data from both followers and leaders in order to draw conclusions regarding balance between leader and followers' perceptions of the quality of their relationship (Buch, Kuvaas, Dysvik, & Schyns, 2014; Schyns & Day, 2010; Schyns & Wolfram, 2008). This is the main contribution of our study. In short, we seek to answer the following questions:

What are the relations between different social and economic LMX relationship types and followers' work performance? And *do followers' relational schemas moderate these relations?*

Theoretical Framework

Leader-Member Exchange Theory

LMX theory originates from a 1975 study that was conducted to challenge two assumptions often made in contemporary leadership research (Dansereau, Graen, & Haga, 1975). First, that followers under the same leader are homogenous enough to be considered a single entity, and second, that leaders tend to behave similarly towards all of their followers. Dansereau et al. (1975) argued that there may be many differences in how a leader interacts with each of his

or her followers, and that each dyadic relationship is different (Northouse, 2016). From this

perspective, leaders' relationships to their work units was regarded as a series of complex vertical

dyads rather than as one single top-down relation. Dansereau et al. (1975) found that leaders

create two general types of vertical dyads by psychologically separate their followers into either

an in-group or an out-group. Which group a follower was sorted into depended on their

compatibility with the leader.

In-group followers are in close contact with their leader. They are often provided with

detailed and thorough information, and with opportunities to negotiate their roles. Furthermore,

their relationship with their leader is characterized by a high degree of mutual trust, respect and

obligation (Graen & Uhl-Bien, 1995). In other words, in-group dyads are equated to high-quality

relationships, and are relational and social in nature. Followers sorted into the out-group, on the

other hand, have less frequent contact with their leader, are less interested in taking on new and

different responsibilities, and are less invested in the leader-member exchange relationship than

in-group followers (Northouse, 2016). They tend to do only what is required by their job

description without additional effort (Graen & Uhl-Bien, 1995). Out-group relationships are

generally viewed as low-quality and characterized by transactional or economic components.

Much research has been devoted to understanding how different quality LMX

relationships relate to employee outcomes (e.g. Buch, Kuvaas, & Dysvik, 2018; Dulebohn et al.,

2012; Gerstner & Day, 1997; Kuvaas et al., 2012). For instance, high-quality LMX has been

positively linked to job performance, organizational citizenship behaviors (OCBs), job

satisfaction (Harris, Wheeler, & Kacmar, 2009), feelings of energy and creative work

involvement (Atwater & Carmeli, 2009), and role clarity and perception of fairness (Furunes,

Mykletun, Einarsen, & Glasø, 2015). Furthermore, it has shown negative associations to

outcomes like turnover intention (Atwater & Carmeli, 2009), reports of stress and bullying, and negative affectivity (Furunes et al., 2015). In other words, the benefits of high-quality exchange relationships are well-established.

LMX relationships develop and change over time, and followers are likely to transition from the out-group to the in-group as they spend more time working with their leader (Liden, Sparrowe, & Wayne, 1997). Thus, the basic ideas of LMX theory are that leaders over time will develop relationships of different quality with their individual followers, that these relationships can be placed on a continuum from low-quality economic to high-quality socioemotional, and that high-quality relationships are preferable to low-quality ones in terms of outcomes.

Balance in LMX Perceptions

Though the outcomes of LMX quality are well documented in the literature (e.g. Buch et al., 2018; Dulebohn et al., 2012; Gerstner & Day, 1997; Kuvaas et al., 2012), few studies have considered the perceptions of quality from both dyadic parties simultaneously (Kuvaas & Buch, 2016). Indeed, nearly 90% of LMX studies included in a 2009 meta-analysis examined relationships with information obtained from only one dyadic party (Sin, Nahrgang, & Morgeson, 2009). This constitutes an important theoretical limitation as LMX development is contingent on both parties' willingness to reciprocate and engage in social and economic exchanges. Consequently, scholars have recently argued that more in-depth research is needed on the balance in leader-follower perceptions of the same relationship (Cogliser, Schriesheim, Scandura, & Gardner, 2009; Kuvaas & Buch, 2016; Matta, Scott, Koopman, & Conlon, 2015).

LMX balance is defined as the similarity of leader and follower perceptions of their LMX quality (van Gils et al., 2010, p. 334). When viewing the perceptions of leaders and followers simultaneously, four LMX relationship types emerge (Figure 1; Cogliser et al., 2009; Matta et al.,

2015). Two of the types are balanced in nature. When perceptions are balanced, the leader and

the follower are in consensus and view the relationship similarly. Balanced low relationships

occur when both parties experience the relationship as low-quality. Neither party is prepared to

make long-term social investments in the relationship and neither has misunderstood the

intention of the other to do so. Such relationships are likely to occur in the early stages of LMX

development, before socioemotional elements have had a chance to develop (Graen & Uhl-Bien,

1995). However, mature relationships may also be of a balanced low nature.

Figure 1

An Illustration of LMX Balance: Four LMX Relationship Types.

Leader perception of LMX

		Low	High
Follower perception of LMX	High	Unbalanced: *Follower over-estimation*	Balanced: *High LMX*
	Low	Balanced: *Low LMX*	Unbalanced: *Leader over-estimation*

Note. Different compositions of leader and follower perceptions of quality generate different

LMX relationship types. Adapted from Matta et al. (2015) and Cogliser et al. (2009).

Balanced high relationships occur when both parties perceive the relationship as high-quality and are prepared to make long-term investments in it. In balanced high relationships, both leaders and followers experience high levels of trust, respect, liking, and reciprocal influence (Cogliser et al., 2009). Typically, balanced high relationships take time to develop as they require that leaders and followers get to know each other and eventually become trusted allies (Graen & Uhl-Bien, 1995).

The third and fourth relationship types are unbalanced, meaning that they are characterized by one party viewing the relationship more favorably than the other. Follower over-estimation denotes relationships where the follower rates the relationship as high while the leader rates it as low. The follower views themselves as operating on the basis of mutual trust, respect, liking and influence, whereas the leader views the relationship as more contractual or economic (Cogliser et al., 2009). Leader over-estimation denotes the opposite phenomenon, where the leader is the one perceiving the relationship more favorably. Meta-analyses have revealed that as little as 8-13% of variance in LMX perceptions is shared between leaders and followers (Gerstner & Day, 1997; Sin et al., 2009; van Gils et al., 2010). In other words, unbalanced LMX relationships are more frequent than one might think.

Social and Economic Leader-Member Exchanges

Another branch of research springing out of traditional LMX theory concerns the need to differentiate more clearly between social and economic exchanges. Though much LMX research relies on social exchange theory (Blau, 1964), few scholars have considered that social and economic exchanges are qualitatively different from one another and should be researched accordingly (Andersen, Buch, & Kuvaas, in press). The majority of LMX research has been conducted with a high-quality focus, capturing mainly socioemotional elements (Bernerth,

Armenakis, Feild, Giles, & Walker, 2007; Schriesheim, Wu, & Scandura, 2009). The outcomes of transactional or economic exchanges, on the other hand, have been examined mainly by omission (Furunes et al., 2015). In other words, measures of low-quality LMX have reflected the absence of socioemotional element rather than the actual presence of economic or contractual elements (Andersen et al., in press).

This limitation was addressed by Kuvaas et al. (2012), who conceptualized social leader-member exchanges (SLMX) and economic leader-member exchanges (ELMX) as separate constructs and developed items for measuring each of them. SLMX relationships are characterized by an ongoing and long-term feeling of diffuse mutual obligation, trust, and mutual expectations. ELMX relationships are more formal, contractual, short term, and transactional in nature. In ELMX relationships, emphasis is placed on the balance of give and take in a short-term perspective. Research conducted on this theoretical basis has generally indicated that SLMX is related to beneficial outcomes, whereas ELMX is unrelated or negatively related to beneficial outcomes (Andersen et al., in press).

Normally, SLMX and ELMX are negatively related to each other (e.g. Berg, Grimstad, Škerlavaj, & Černe, 2017; Kuvaas et al., 2012). However, some research has suggested that they can interact and that dyadic relationships can consist of high levels of both (Caniëls & Hatak, 2019). Thus, by examining SLMX and ELMX as separate constructs, social and economic exchanges may be conceptualized as a factors that contribute to the totality of the leader-member relationship (Kuvaas et al., 2012).

Theory and Hypotheses

Literature on LMX balance and on the separation between social and economic LMX has given valuable contributions to the LMX literature. Nevertheless, to our knowledge, the two

perspectives have yet to be combined in a single study. The aim of this study is to investigate LMX balance, and social and economic LMX jointly, in the hopes of gaining more detailed and nuanced knowledge of the LMX construct as a whole. When combining the concept of LMX balance with SLMX and ELMX, two matrices similar to that presented in figure 1 are created. One specifically for SLMX balance, and one specifically for ELMX balance. Perceptions of high SLMX indicates experience a high degree of trust, liking, and respect, while low perceptions represent absence of these elements. For ELMX, high perceptions indicate a more short-term and transactional view of the dyad. Low levels indicate the absence of these elements.

SLMX Balance and Work Performance

SLMX balanced high relationships include followers and leaders who are both highly invested in their relationship, trust one another, and experience a sense of mutual obligation (Graen & Uhl-Bien, 1995). SLMX has previously been related to a number of positive employee outcomes, including work effort and performance (Andersen et al., in press). Additionally, research on LMX balance has indicated that the balanced high relationships are preferable to any other relationship type in terms of producing beneficial outcomes (Cogliser et al., 2009; Marham, Yammarino, Murry, & Palanski, 2010; Matta et al., 2015). We therefore expect that work performance will be highest in SLMX balanced high relationships when compared to other SLMX relationship types.

SLMX balanced low relationships denote situations in which both leaders and followers experience little trust, mutual obligations, and expectations (Kuvaas et al., 2012). When compared to other SLMX relationship types, we therefore expect that respondents with an SLMX balanced low relationship type will be lowest in terms of work performance.

For SLMX, unbalanced relationship types are characterized by one party perceiving high levels, and the other perceiving low levels of socioemotional exchange. Some research has suggested that balance, be it high or low, is always preferable to unbalance (Matta et al., 2015). This is based in the idea that unbalanced relationships may generate role confusion and subsequent negative outcomes. Other studies have indicated the opposite - that overestimation by one party is preferable to balanced low relationships and can boost positive outcomes and produce desirable outcomes (Cogliser et al., 2009). Since the presence of socioemotional elements are higher for unbalanced SLMX dyads than for balanced low ones, we argue that unbalanced SLMX relationships will show intermediate associations to work performance in comparison to other SLMX relationship types.

Furthermore, we assume that which of the unbalanced relationship types show higher levels of work performance will depend on the reporting party. When work performance is self-reported by the follower, we expect that the follower over-estimation type will show higher mean scores in terms of work performance. In other words, we expect follower-reports of work performance to be more dependent on their own perception of the leader-member relationship than on their leader's perception. Conversely, when follower work performance is evaluated by the leader, we expect that leader over-estimation will show higher mean scores for work performance. Again, because ones' own perception of the dyadic relationship is more salient than that of the dyadic partner.

H1: For SLMX, self-reported work performance will be highest for followers in balanced

high relationships and lowest for followers in balanced low relationships. For the

unbalanced relationship types, work performance will be higher when followers report

higher levels of SLMX than their leaders.

H2: For SLMX, leader-reported work performance will be highest for followers in

balanced high relationships and lowest for followers in balanced low relationships. For

the unbalanced relationship types, work performance will be higher when leaders report

higher levels of SLMX than their followers.

ELMX Balance and Work Performance

For ELMX, we turn the above argumentation on its head. Research that has been conducted with ELMX in focus has shown that it is related to a number of negative employee outcomes, including lower work performance and work effort (Andersen et al., in press). We therefore find it reasonable to assume that work performance will be lowest for the ELMX relationship type with the highest occurrence of economic elements, the ELMX balanced high relationship type. Furthermore, we expect that work performance will be highest for the ELMX relationship type where the occurrence of economic exchanges is lowest, the balanced low relationship type.

When one, but not both, parties displays behavior in accordance with ELMX, it is reasonable to assume that unbalanced relationships will show intermediate levels of work performance. Which of the unbalanced relationship types will show lower associations to work performance, will depend on whether work performance is reported by the leader or the follower. Once more, we argue that ones' own perception of the ELMX relationship is of greater importance for assessments of work performance than the perception of the dyadic partner. When

followers perceive the relationship as more transactional and short term than their leaders, their own ratings work performance are likely to be lower. Conversely, when a leader perceives the relationship as more transactional than their follower, this is likely to negatively influence their ratings of that follower's performance.

> *H3: For ELMX, self-reported work performance will be lowest for followers in balanced high relationships and highest for followers in balanced low relationships. For the unbalanced relationship types, work performance will be lower when followers report higher levels of ELMX than their leaders.*

> *H4: For ELMX, leader-reported work performance will be lowest for followers in balanced high relationships and highest for followers in balanced low relationships. For the unbalanced relationship types, work performance will be lower when leaders report higher levels of ELMX than their followers.*

The Moderating Role of Relational Schemas

Relational schemas are cognitive maps that people use to navigate their social surroundings (Baldwin 1992; 1997). They include beliefs about oneself and others, as well as scripts for expected patterns of social behavior derived from experience. Simply put, relational schemas are internal representations of our relationships with others (Tsai et al., 2017). Since LMX by nature concerns interpersonal relationships, its relation to relational schemas is of high interest. Relational schemas have previously been examined as an antecedent of LMX ratings (Tsai et al., 2017). However, as they influence both enacted behavior and interpretations of

others' behaviors (Lord & Maher, 2002), we are interested in their potential moderating influence on outcomes of LMX balance.

Expressive relational schemas. An expressive relational schema (ERS) defines dyadic relationships in terms of affective and extra-role behaviors (Tsai et al., 2017). In other words, followers with an expressive relational schema are more likely to notice SLMX-congruent behavior in their leaders. They are also likely to display SLMX congruent behaviors themselves. We therefore expect that followers' expressive relational schemas will moderate the relation between social and economic LMX relationship types and work performance in a positive direction.

H5: The relation between SLMX relationship types and work performance will be positively moderated by followers' expressive relational schemas.

H6: The relation between ELMX relationship types and work performance will be positively moderated by followers' expressive relational schemas.

Instrumental relational schemas. An instrumental relational schema (IRS) contains the basic economic and transactional knowledge needed to achieve short-term goals when interacting with others (Tsai et al., 2017). When followers have an instrumental relational schema, they enact and interpret behavior in line with transactional exchanges. This is representative of the kind of interactions that characterize ELMX, which has shown negative associations to work effort (Buch et al., 2014). Thus, we expect that followers' instrumental

relational schemas will moderate the relation between social and economic LMX balance and work performance in a negative direction.

H7: The relation between SLMX relationship types and work performance will be negatively moderated by followers' instrumental relational schemas.

H8: The relationship between ELMX relationship types and work performance will be negatively moderated by followers' instrumental relational schemas.

Research Methods

Sample and Procedure

Data for the study was collected through internet-based questionnaires in Qualtrics. To obtain the desired number of respondents, we reached out to people in our own professional and personal networks. They, in turn, presented the study to candidates for participation in their companies and sent an overview of leader-follower dyads back to us. We distributed the questionnaire to a total of 194 followers with 74 associated leaders, spread across 16 organizations. We received 169 completed questionnaires from followers (87% response rate) and 62 completed questionnaires from leaders (84% response rate). All questionnaires were distributed and completed before restrictions were imposed due to the outbreak of Covid-19.

After pairing leader and follower responses, we were left with a total of 150 dyads in the final data set. The number of followers paired with each leader ranged from 1-8 (mean = 2.7, median = 2). The majority of followers were between 26 and 35 years old (42%) and had worked in the organization for 1-5 years (39%). 62% of followers and 48% of leaders were female. Most of the leaders in the data set were between 36 and 45 years old (49%) and had worked in the

organization for 1-5 years (34%). Personnel responsibility was the most common type of

leadership responsibility in dyads (72%), and most dyads had a tenure of 1-3 years (49%).

Variables and Measures

      Social and economic LMX. Follower- and leader-reported SLMX and ELMX were

measured using two eight-item scales from Kuvaas et al. (2012). Each item is scored on a 5-point

Likert response scale, ranging from 1 (strongly disagree) to 5 (strongly agree). The instruments

have two subscales where four items concern SLMX and four concern ELMX. For the follower

scales, Cronbach's alpha was .78 for SLMX and .82 for ELMX. For the leader scales,

Cronbach's alpha was .76 for SLMX and .73 for ELMX.

      Work performance. Work performance was measured using a 10-item scale developed

by Kuvaas and Dysvik (2009), which distinguishes between work effort and work quality. Items

were scored on a 5-point Likert response scale ranging from 1 (strongly disagree) to 5 (strongly

agree). Since the original instruments only measure employees' self-reported work effort and

quality, we adapted them to also fit from a leader perspective. For instance, "I try to work as hard

as possible" (follower-reported) became "He/she tries to work as hard as possible" (leader-

reported). For work quality, Cronbach's alpha was .91 for the leader scale and .80 for the

follower scale. For work effort, Cronbach's alpha was .84 for the leader scale and .69 for the

follower scale. The value for self-reported work effort is thus below the recommended cutoff

of .70 (Pallant, 2016). However, as there is little practical difference between .69 and .70, the

scale has proven sufficiently reliable in the past (Buch et al., 2014; Kuvaas & Dysvik, 2009), and

is firmly rooted in theory, we decided to proceed with analyses as planned without deleting items

or otherwise manipulating the scale.

Relational schemas. Followers' relational schemas were measured using a 10-item scale from Tsai et al. (2017). Each item was scored on a 6-point Likert type-scale ranging from 1 (strongly disagree) to 6 (strongly agree). The instrument has two subscales: five of the items assess expressive relational schema, while the other five assess instrumental relational schema. Cronbach's alpha was .76 for the expressive relational schema scale and .79 for the instrumental relational schema scale.

LMX balance. Drawing on previous research (Cogliser et al., 2009), we created theoretically defined LMX balance variables by performing median splits on the SLMX and ELMX data. The data was categorized and labelled in accordance with figure 1 for both SLMX and ELMX. The resulting distribution for SLMX relationship types was: Balanced high = 39 matched responses (26.0%), Balanced low = 41 matched responses (27.3%), Follower over-estimation = 31 matched responses (20.7%), and Leader over-estimation = 38 matched responses (25.3%). The resulting distribution for ELMX relationship types was: Balanced high = 32 matched responses (21.3%), Balanced low = 32 matched responses (21.3%), Follower over-estimation = 35 matched responses (23.3%), Leader over-estimation = 49 matched responses (32.7%). The distributions are summarized in table 1.

Table 1

Frequency Table for SLMX And ELMX Relationship Types

Variable	Frequency	Percent	Cumulative percent
SLMX relationships (n = 149)			
1. Balanced high	39	26.0	26.0
2. Balanced low	41	27.3	53.3
3. Follower over-estimation	31	20.7	74.0
4. Leader over-estimation	38	25.3	99.3
Missing	1	0.7	100.0

Variable	*Frequency*	*Percent*	*Cumulative percent*
ELMX relationships (n = 148)			
1. Balanced high	32	21.3	21.3
2. Balanced low	32	21.3	42.6
3. Follower over-estimation	35	23.3	65.9
4. Leader over-estimation	49	32.7	98.7
Missing	2	1.3	100.0

Note. SLMX = Social leader-member exchange, ELMX = economic leader-member exchange.

Control variables. To strengthen the internal validity of our study and rule out the possibility of influence from pre-existing differences among participants in the sample (Carlson & Wu, 2012), several control variables were included. These were sex, tenure in organization, type of leader responsibility, dyadic tenure, and the number of followers paired with each leader in the questionnaire. Sex was reported and coded as a binary variable (1 = female, 2 = male). Tenure in organizations was measured and coded as a categorical variable (1 = less than 1 year, 2 = 1-5 years, 3 = 6-10 years, 4 = 11-20 years, 5 = more than 20 years). Categories were the same for leaders and followers. The number of followers paired with each leader in the survey was treated as a continuous variable. Type of supervisory responsibility was categorical (1 = personnel responsibility, 2 = team leader, 3 = other leadership responsibility) along with dyadic tenure (1 = less than 1 year, 2 = 1-3 years, 3 = 4-6 years, 4 = 7-10 years, 5 = more than 10 years). Means, standard deviations and relationships between study variables are provided in table 2.

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Table 2

Means, Standard Deviations, Coefficient Alpha Reliabilities, and Correlation

Variable	M	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Follower variables																		
1. Sex	1.38	0.49																
2. Tenure	2.73	1.25	.01															
3. SLMX	4.30	0.67	.06	-.16	(.78)													
4. ELMX	2.28	0.94	-.10	-.11	-.06	(.82)												
5. ERS	3.91	0.99	.12	-.09	.39**	-.06	(.79)											
6. IRS	1.80	0.79	.22**	-.08	-.24**	.25**	-.10	(.76)										
7. Work effort	4.28	0.39	-.29**	-.13	.19*	-.06	.24**	-.15	(.69)									
8. Work quality	3.93	0.54	.07	.06	.18*	-.07	.19*	.11	.34**	(.80)								
Leader variables																		
9. Sex	1.52	.05	.47**	-.01	-.13	-.11	-.03	.20*	-.10	-.02								
10. Tenure	3.10	1.11	-.02	.45**	-.02	-.01	-.09	-.11	-.09	-.04	.21**							
11. No. of followers reported on	2.65	1.50	.10	.04	-.01	-.09	.19*	.11	-.04	.13	-.06	.08						
12. SLMX	4.17	0.62	.04	-.01	.32**	-.09	.21**	-.12	.07	.05	.00	.08	-.02	(.76)				
13. ELMX	2.46	0.85	.16	-.14	-.19*	.17*	-.07	.16*	-.20*	-.14	.20*	-.19*	.06	-.11	(.73)			
14. Work effort	4.36	0.53	-.17*	-.12	.25**	-.10	.09	-.16	.29**	-.02	-.06	.04	-.11	.37**	-.15	(.74)		
15. Work quality	4.10	0.77	-.04	.02	.17*	-.15	-.03	-.25**	.01	.11	-.09	.08	-.09	.31**	.01	.40**	(.91)	
Dyadic variables																		
16. Dyadic tenure	2.22	1.07	.04	.50**	-.12	-.01	-.19*	-.17*	-.21**	-.03	-.06	.37**	-.06	-.10	-.13	-.14	-.05	
17. Type of leader-responsibility	1.37	0.65	-.11	-.13	-.25**	.15	-.16	.19*	-.03	-.07	.13	-.25**	-.04	-.12	.10	.13	-.17*	-.09

Note. N = 150 dyads (150 followers, 62 leaders). SLMX = Social leader-member exchange, ELMX = Economic leader-member exchange, ERS = Expressive relational schema, IRS = Instrumental relational schema. Reliability coefficients are reported in parenthesis along the dialog. Tests of significance were two-tailed. *p < .05. **p < .01.

Analyses and Results

Confirmatory Factor Analyses

To test how well the hypothesized ten-factor model (follower and leader-reported SLMX, ELMX, work effort and work quality, and followers' expressive and instrumental relational schemas) fit with the data at hand, we conducted several confirmatory factor analyses (CFAs) to examine and compare alternative factor structures (table 3). This was done using the SEM builder in Stata/SE version 16.1 (Statacorp, 2019). For the each of the models, we assessed chi-square values, comparative-fit Indices (CFI), Tucker-Lewis Indices (TLI), Root-Mean-Square Errors of Approximation (RMSEA), Standardized Root-Mean-Square Residuals (SRMR). Acceptable fit is demonstrated when RMSEA and SRMR are < .08 and when CFI and TLI indices > .90 (Hu & Bentler, 1999). Although these goodness-of-fit-indices are frequently used to assess the quality of models, the complexity of our model can make it hard to obtain high cut-off values for CFI and TLI. Alternative measures of fit should therefore be applied (Hair, 2013; Hu & Bentler, 1999). Consequently, we also assessed the normed chi-square (χ_2/df), where values lower than 2 indicate good fit (Koufteros, 1999).

Fit indices suggested adequate fit to our data in terms of normed chi square and RMSEA ($\chi_2(944) = 1528.28$, $p < .01$; $\chi_2/df = 1.62$; CFI = .79; TLI = .77; RMSEA = .07; SRMR = .09). Furthermore, when compared to any of the alternative models, the hypothesized ten-factor model showed reductions in the chi-square statistic. Standardized coefficients from items to factor ranged from .33 to .92, with only three items showing factor loadings lower than the recommended level of .5 (Item 1 for SLMX = .47, item 1 for ELMX = .35, item 5 for ERS = .38). As standardized residuals for these items were all below the recommended cutoff of 4.0, they were kept in the model (Hair, 2013). All factor loadings were significant ($p < .01$),

providing evidence for convergent validity. We also estimated the average variance extracted (AVE) to evaluate discriminant validity. AVE for all factors were satisfactory (i.e. above .5; Hair, 2013, p. 619), except for follower work effort which had an AVE of .4. Taking all of this into consideration, we deem our model to be of adequate fit with the data at hand.

Table 3

Results for Confirmatory Factor Analyses

Model	χ^2	p	df	χ^2/df	CFI	TLI	SRMR	RMSEA	Δdf	$\Delta\chi^2$
1. Ten-factor model	1528.28	.000	944	1.62	.79	.77	.09	.07		
2. Nine-factor model[a]	1758.05	.000	953	1.84	.71	.69	.11	.08		
3. Eight-factor model[b]	1842.80	.000	961	1.92	.69	.66	.10	.08		
4. Seven-factor model[c]	2065.94	.000	968	2.13	.61	.58	.12	.09		
Model comparisons										
Model 1 vs. Model 2									9	229.77
Model 1 vs. Model 3									17	314.52
Model 1 vs. Model 4									24	537.65

Note. n = 140. CFI = Comparative fit index; RMSEA = Root-mean-square error of approximation; SRMR = standardized root mean square; TLI = Tucker–Lewis index.

[a] Nine-factor model where all items for relational schemas are loaded onto a single factor.

[b] Eight-factor model where follower ratings of work effort and work quality are forced onto a single factor and leader ratings of work effort and work quality are forced onto a single factor

[c] Seven-factor model where all items for relational schemas are loaded onto a single factor, all follower ratings of work effort and work quality are loaded onto a single factor, and all leader ratings for work effort and quality are loaded onto a single factor.

Analyses of Variance

For hypotheses 1-4, which concerned the significance of group differences in work performance, we applied an analysis of variance approach as it fit our framework and hypotheses well (Cogliser et al., 2009; Pallant, 2016). Analyses were conducted in SPSS version 26. First, we ran two overall MANCOVAs by relationship types (one for SLMX and one for ELMX) for the set of outcome variables to determine the overall effect for the different relationship types. Leaders' and followers' sex and tenure were used as covariates, as well as type of leadership responsibility, dyadic tenure, and the number of followers paired with each leader in the survey. Next, mean differences in the outcome variables were tested using one-way ANOVAs across the different social and economic LMX relationship types. Finally, post hoc tests were conducted to uncover significant differences between groups. Mean scores for work effort and work quality across the different LMX relationship types, as well as results from post-hoc tests, are reported in table 4.

SLMX balance and follower-reported work performance. The MANCOVA model for SLMX was significant ($F(12, 344) = 3.60$, Wilk's $\lambda = .73$, $p < .001$), and accounted for 27% of the variance (1 - λ), indicating overall differences among the means for the set of dependent variables across the four SLMX relationship types when controlling for background variables. Two covariates contributed significantly to the model: subordinate sex ($F(4, 130) = 4.09$, Wilk's $\lambda = .89$, $p < .05$) and type of leader responsibility ($F(4, 130) = 3.24$, Wilk's $\lambda = .91$, $p < .05$). Box's test of equality of covariance matrices provided significant results (Box's M = 80.26, F(30, 49258) = 2.54, p < .001), indicating that our sample violates the assumption of homogeneity of variance-covariance . However, we disregard this as we have a relatively large sample and fairly equal sample sizes (Tabachnick & Fidell, 2014, p. 294).

The first univariate ANOVA revealed differences in followers' self-reported work effort for the four different SLMX relationship types ($F(3, 142) = 4.34, p < .05$). The strength of association (eta-squared) was medium at .08 (Cohen, 1988, pp. 284-287), indicating that approximately 8% of the variance in self-reported work effort can be accounted for by SLMX balance type. The pattern of results for followers' self-reported work effort was as follows: Balanced high was highest (mean = 4.76), follower over-estimation was next (mean = 4.73), followed by leader over-estimation (mean = 4.57), and balanced low (mean = 4.47). Post-hoc comparisons indicated several significant differences between groups at the $p < .05$ level. The balanced high group was significantly different from the balanced low group, whereas the balanced low group was significantly different the balanced high and follower over-estimation groups. The follower over-estimation group was significantly different from the balanced low group. We receive partial support for hypothesis 1 in that the ordering of follower-reported work effort means along the four SLMX relationship types was consistent with our predictions.

A second univariate ANOVA revealed statistically significant differences in followers' self-reported work quality across the different SLMX relationship types ($F(3, 144) = 4.93, p < .05$). The strength of association was medium at .09 (Cohen, 1988, pp. 284-287), indicating that approximately 9% of the variance in self-reported work quality can be accounted for by SLMX balance type. The pattern of results for followers' self-reported work quality was as follows: Follower over-estimation was highest (mean = 4.11), balanced high was next (mean = 4.09), followed by leader over-estimation (mean = 3.81), and balanced low (mean = 3.74). Post-hoc comparisons using the Tukey HSD test indicated several significant differences between groups at the $p < .05$ level. The balanced high group was significantly different from the balanced low group, the balanced low group was significantly different the balanced high and follower over-

estimation groups, and the follower over-estimation group was significantly different from the balanced low group. Thus, the ordering of followers' self-reported work quality across the different SLMX relationship types, was not in accordance with H1.

SLMX balance and leader-reported work performance. Levene's test of homogeneity of variances generated significant results for both univariate ANOVAS with leader-reported outcome variables (Work effort: Levene statistic(3, 144) = 19.43, $p < .001$; work quality: Levene statistic(3,143) = 3.55, $p < .001$), indicating that assumptions of homogeneity had been violated. However, as the different groups included in the analyses were roughly equal in size with a variance ratio below 1.5, we can assume that the ANOVAS are robust to violations of this assumption (Blanca, Alarcón, Arnau, Bono, & Bendayan, 2018; Field, 2013; Hair, 2013; Stevens, 2009).

The first ANOVA revealed a statistically significant difference in leader-reported work effort for the four different SLMX relationship types ($F(3,144) = 9.05$, $p < .001$). The strength of association was large at .16 (Cohen, 1988, pp. 284-287), indicating that approximately 16% of the variance in leader-reported work effort can be accounted for by SLMX balance type. The pattern of results for leader-reported work effort was as follows: Balanced high was highest (mean = 4.88), leader over-estimation was next (mean = 4.71), followed by follower over-estimation (mean = 4.52), and balanced low (mean = 4.38). Post-hoc comparisons indicated several significant differences between groups at the $p < .05$ level. The balanced high group was significantly different from the balanced low group, while the balanced low group was significantly different from all other groups except for follower over-estimation. The leader over-estimation group was significantly different from balanced low group, and the follower over-estimation group was significantly different from the balanced high group.

The second ANOVA for H2 revealed significant mean differences in leader-reported work quality ($F(3, 143) = 4.28$, $p < .05$). The strength of association was medium at .08 (Cohen, 1988, pp. 284-287), indicating that approximately 8% of the variance in leader-reported work quality can be accounted for by SLMX balance type. The pattern of results was: Balanced high was highest (mean = 4.42), followed by leader over-estimation (mean = 4.15), follower over-estimation (mean = 3.98), and finally balanced low (mean = 3.85). Post-hoc comparisons indicated that only the balanced high and the balanced low groups were significantly different from one another at the $p < .05$ level. H2 was, therefore, also partially supported.

Table 4

Follower- and Leader-Reported Work Effort and Quality Under Four SLMX Relationship Types

Outcome variable	Balanced relationships		Unbalanced relationships		*ANOVA*	Eta-
	SLMX balanced high	SLMX balanced low	Follower over-estimation	Leader over-estimation	*F*	squared
Follower-reported work effort						
n	38	40	30	38		
M	4.76a	4.47b	4.73ac	4.57abc	4.34**	.08
SD	0.33	0.44	0.38	0.42		
Follower-reported work quality						
n	39	40	31	38		
M	4.09a	3.74b	4.11ac	3.81abc	4.93**	.09
SD	0.52	0.46	0.45	0.61		
Leader-reported work effort						
n	38	41	31	38		
M	4.88a	4.38b	4.52bc	4.71ac	9.05**	.16
SD	0.20	0.66	0.45	0.37		
Leader-reported work quality						
n	38	41	31	37		
M	4.43acd	3.85bcd	3.98abcd	4.15abcd	4.28**	.08
SD	0.58	0.91	0.75	0.70		

Note. SLMX = Social leader-member exchange. *p < .05. **p < .01.

aMeans with the same letters in subscript are not significantly different from each other ($p < .05$).

ELMX balance and work performance. The MANCOVA model for ELMX relationship types was not significant ($F(12, 342) = 1.18$, Wilk's $\lambda = .90$, $p > .05$), indicating that there were no significant and overall differences among the means for the set of dependent variables across the four ELMX relationship types. We therefore failed to find support for H3 and H4.

Moderation Analyses

In order to test the moderation effects proposed in hypotheses 5-8 we conducted several regression analyses using the PROCESS macro for SPSS (Hayes, 2017). We used model no. 1 (appendix A). To make for easier interpretation of interaction effects, the categorical SLMX- and ELMX balance variables were introduced into the model as moderators (M) rather than the continuous relational schema variables. Relational schema (expressive or instrumental) was added to the model as predictor variable (X), and work effort and quality were used as outcome variables (Y). In order to test all possible rotations and interaction influences, a total of 64 moderation analyses were conducted. Four of these yielded significant results. Leaders' and followers' sex and tenure were used as covariates, as well as type of leadership responsibility, dyadic tenure, and the number of followers paired with each leader in the survey. PROCESS utilizes the *Exclude cases listwise* function in SPSS, which means that observations with missing data in any of the relevant variables are excluded from the analysis.

Expressive relational schemas. In relation to H5, we found a statistically significant interaction influence of followers' expressive relational schema and one of the SLMX relationship types on followers' self-reported work effort. Specifically, we found that followers' expressive relational schema had a positive influence on the relation between leader over-estimation and self-reported work effort ($b = .22$, $t = 3.23$, $p < .05$). The interaction influence was

not significant for the other three SLMX relationship types (balanced high: $b = .05$, $t = .64$, $p > .05$; balanced low: $b = -0.02$, $t = -.30$, $p > .05$; follower over-estimation, $b = .09$, $t = 1.54$, $p > .05$). However, the slopes for the leader over-estimation and the balanced low relationship types were significantly different from each other ($t = -2.57$, $p < .05$). We also found a significant relationship between followers' sex and self-reported work effort ($b = -.27$, $t = -3.68$, $p < .001$). Figure 2 demonstrates the nature of the moderating relation of expressive relational schema on the different SLMX relationship types and followers self-reported work effort. The results provide partial support for hypothesis H5, which stated that followers' expressive relational schema would moderate the relation between SLMX relationship type and work effort.
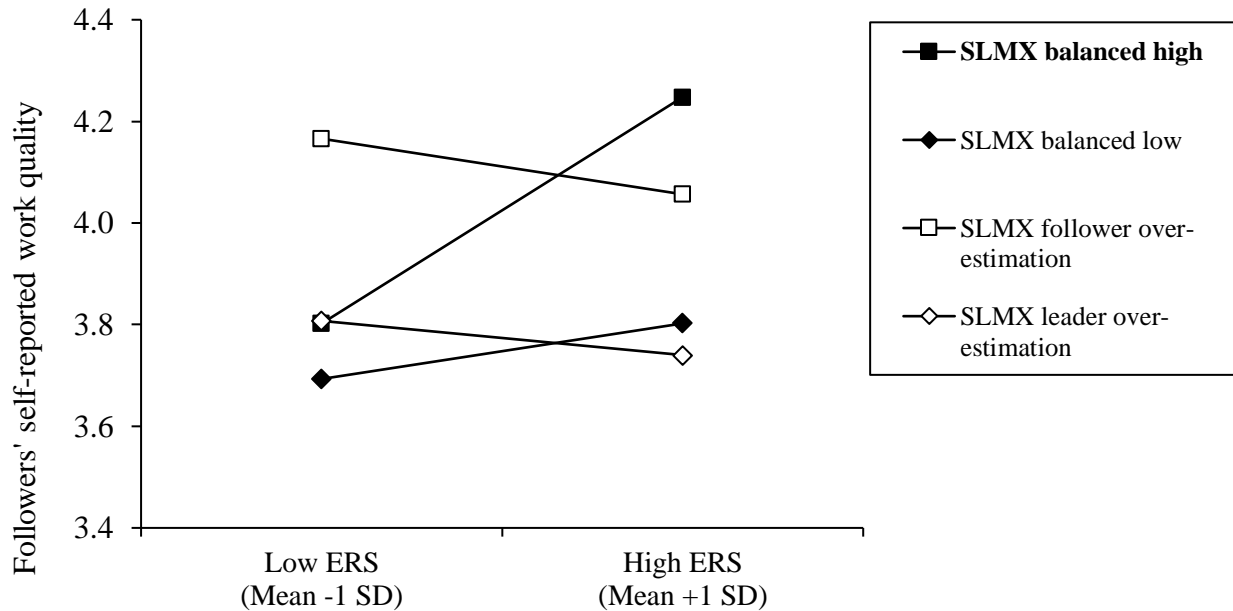
Figure 2

The Interaction Influence of ERS and SLMX Relationship Type on Self-Reported Work Effort
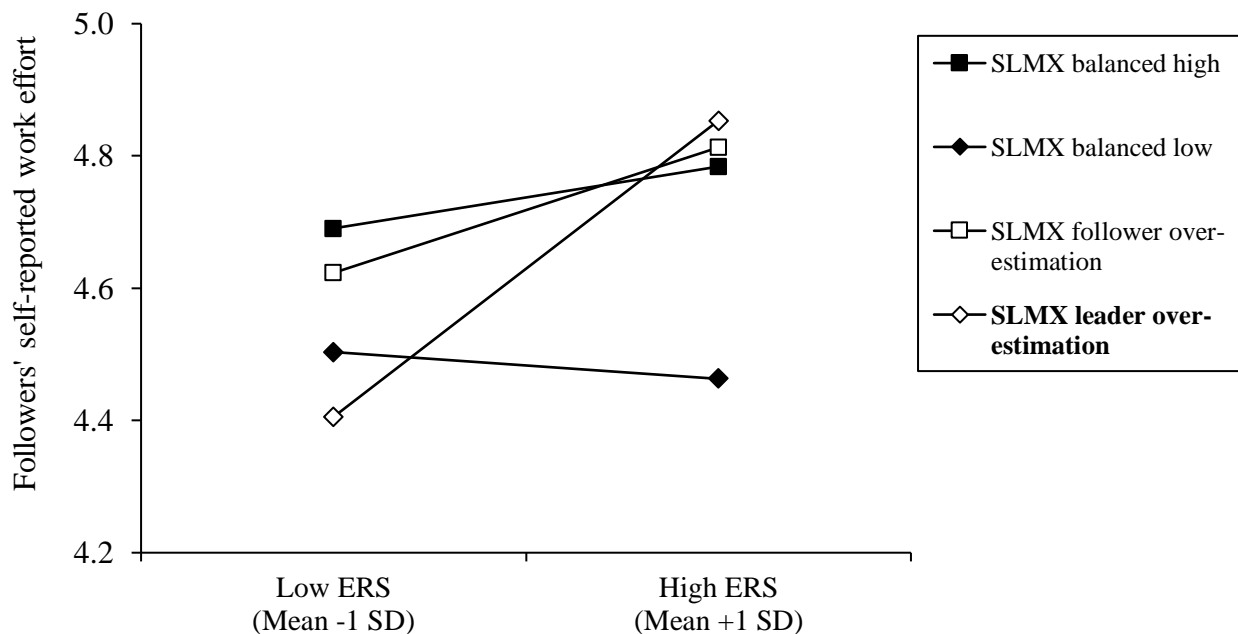
Note. ERS = Emotional relational schema, SLMX = Social leader-member exchange. The significant slope is marked with bold text in the figure.

Figure 3

The Interaction Influence of ERS and SLMX Relationship Type on Self-Reported Work Quality

Note. ERS = Emotional relational schema, SLMX = Social leader-member exchange. The significant slope is marked with bold text in the figure.

We also found a significant interaction influence of followers' expressive relational schema and one of the SLMX relationship types on self-reported work quality. Specifically, we found that expressive relational schema had a positive influence on the relation between the SLMX balanced high relationship type and self-reported work quality ($b = .22$, $t = 2.19$, $p < .05$). The interaction influence was not significant for any of the other SLMX relationship types (balanced low: $b = .05$, $t = .09$, $p > .05$; follower over-estimation: $b = -.05$, $t = -.66$, $p > .05$; leader over-estimation: $b = -.03$, $t = -.35$, $p > .05$). However, the slopes for balanced high and follower over-estimation were significantly different from one another ($t = -2.11$, $p < .05$). None of the covariates contributed significantly to variance in self-reported work quality. Figure 3

demonstrates the nature of the moderating relation of expressive relational schema on the different SLMX relationship types and followers' self-reported work quality. The results provide partial support for hypothesis H5, which stated that followers' expressive relational schema would moderate the relation between SLMX relationship type and work performance.

The analyses carried out in order to test H6 did not generate significant results. Therefore, we were not able to gather support for an interaction influence of followers' expressive relational schemas on the relation between any ELMX relationship type and work performance.

Instrumental relational schemas. In relation to H7, we found a statistically significant interaction influence of followers' instrumental relational schema and one of the SLMX relationship types on leader-reported work effort. Specifically, instrumental relational schema had a negative influence on the relation between the SLMX balance low relationship type and leader-reported work effort ($b = -.20$, $t = -2.24$, $p < .05$). The interaction influence was not significant for the other three SLMX relationship types (balanced high: $b = -.05$, $t = -.34$, $p > .05$; follower over-estimation: $b = -.25$, $t = -1.94$, $p > .05$; leader over-estimation: $b = .07$, $t = .89$, $p > .05$). Furthermore, the slopes for balanced low and leader over-estimation were significantly different from one another ($t = 2.37$, $p < .05$). We also found a significant relationship between type of leader responsibility and self-reported work effort ($b = .13$, $t = 2.17$, $p < .05$). Figure 4 demonstrates the nature of the moderating influence of followers' instrumental relational schema on the relation between different SLMX relationship types and leader-reported work effort. This provides partial support for H7, which stated that followers' instrumental relational schema would moderate the relation between SLMX relationship types and work effort in a negative direction.

Figure 4

The Interaction Influence of IRS and SLMX Relation Type on Leader-Reported Work Effort
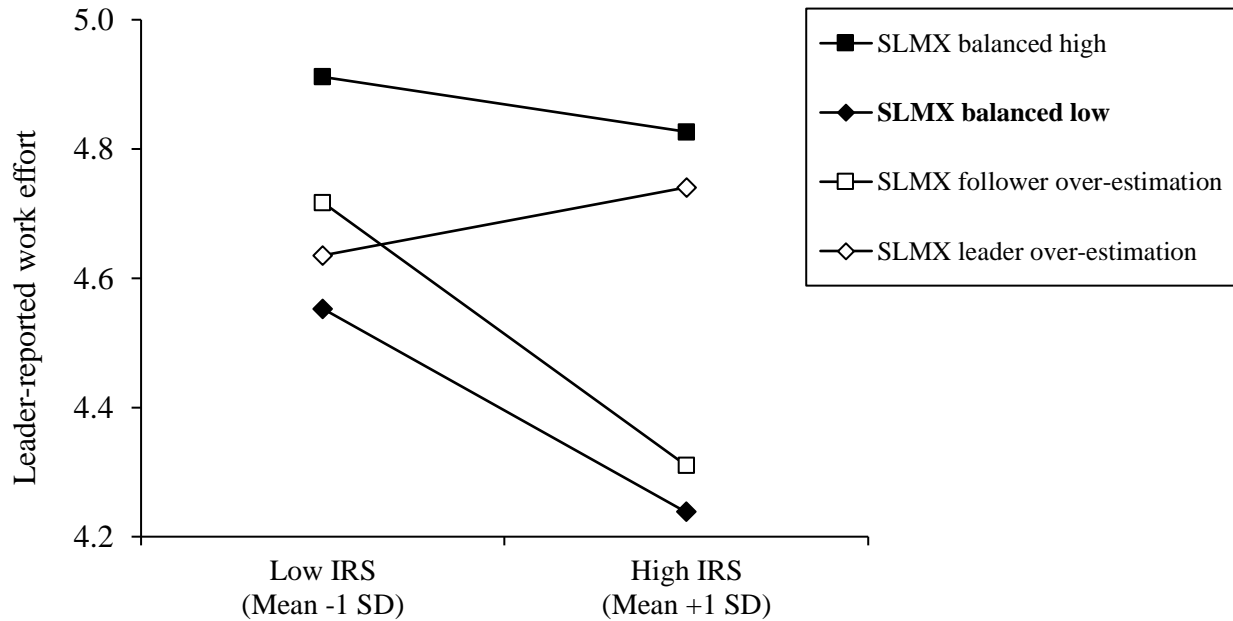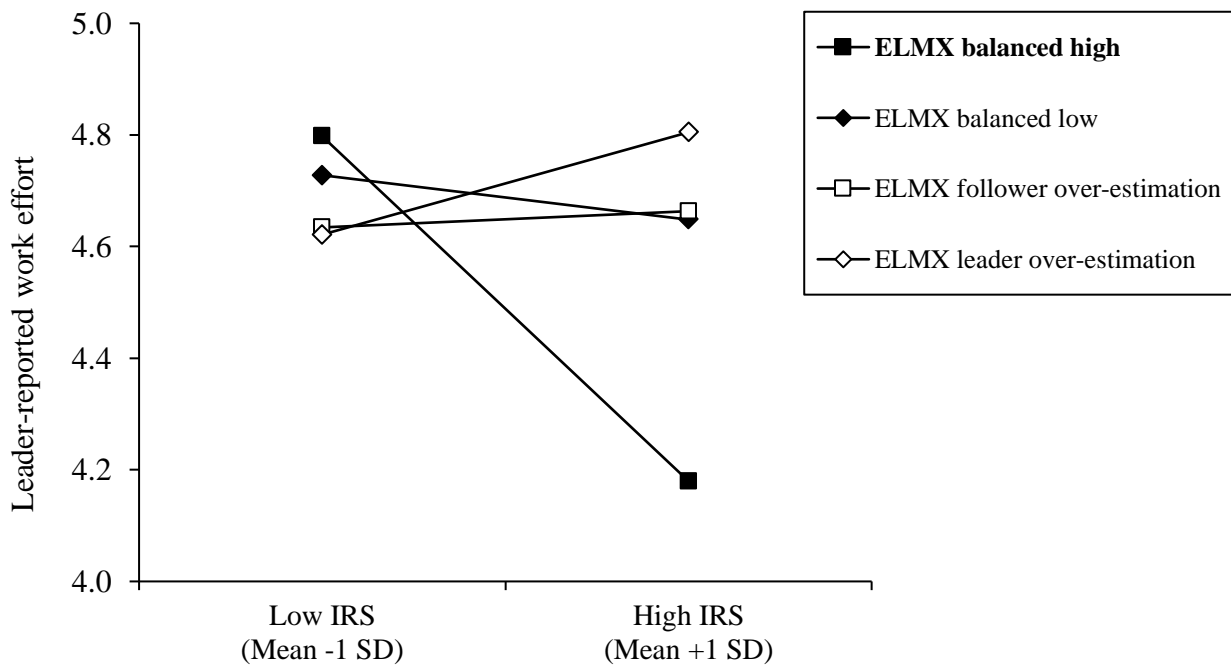

Note. IRS = Instrumental relational schema, SLMX = Social leader-member exchange. The significant slope is marked with bold text in the figure.

In relation to H8, we found statistically significant interaction influence of followers' instrumental relational schema and one of the ELMX relationship types on leader-reported work effort. Specifically, that followers' instrumental relational schema had a negative influence on the relation between the ELMX balanced high relationship type and leader-reported work effort ($b = -.39$, $t = -3.61$, $p < .001$). The interaction influence was not significant for the other ELMX relationship types (balanced low: $b = -.05$, $t = -.41$, $p > .05$; follower over-estimation: $b = .02$, t, $.18$, $p > .05$; leader over-estimation: $b = .11$, $t = 1$, $p > .05$). Furthermore, the slopes for balanced high was significantly different from balanced low ($t = 2.14$, $p < .05$), follower over-estimation ($t = 2.80$, $p < .05$), and leader over-estimation ($t = 3.20$, $p < .01$). We also found a

significant relationship between type of leader responsibility and self-reported work effort (b = .17, t = 2.60, p < .05). Figure 5 demonstrates the nature of the moderating relation. This provides partial support for H8, which stated that followers' instrumental relational schema would moderate the relation between ELMX relationship types and work effort in a negative direction.

Figure 5

The Interaction Influence of IRS and ELMX Relationship Type on Leader-Reported Work Effort

Note. IRS = Instrumental relational schema, ELMX = Economic leader-member exchange. The significant slope is marked with bold text in the figure.

Discussion

This study has combined two emerging trends in LMX research (LMX balance and social and economic LMX) to examined them jointly. It has also investigated the moderating role of followers' relational schemas on the relation between social and economic LMX balance and follower work performance. Statistical analyses provided partial support for five out of eight hypotheses. The study contributes to the literature by adding depth and nuance to the LMX literature, thus enabling a more comprehensive and holistic understanding of the LMX concept.

SLMX Balance and Work Performance

In support of H1, analyses revealed significant mean differences in follower-reported work effort and follower-rated work quality across the four SLMX relationship types. For followers' self-reported work effort, the ordering of the four SLMX relationship types were in line with our assumptions. The ordering of self-reported work quality, however, was not in accordance with our hypothesis. Buch et al. (2014) argue that reciprocation through increased work effort is more straightforward than through work quality. This is because the latter is more dependent on factors outside of the dyadic relationship, such as skills, knowledge, and abilities than the former. These factors were not included in our study and may have influenced analyses and subsequent results. Furthermore, according to expectancy theory, effort is more likely to increase as a result of reciprocation than other facets of work performance, such as the quality of work outputs (Buch et al., 2014, p. 726). These arguments can, at least in part, explain our findings for self-reported work quality and why they differed from work effort.

Though the ordering of followers' self-reported work quality is contrary to our predictions, it is in line with our previous argumentation that followers' self-reported work performance is more dependent on their own perceptions of the dyadic relationship than those of

the other party. In other words, our findings refute arguments that balance is always preferable to unbalance in LMX relationships because the latter may lead to role confusion and subsequent negative outcomes (Matta et al., 2015). Furthermore, we note that mean differences in self-reported work quality between the SLMX follower over-estimation group and the SLMX balanced high group is a small one (mean difference = .02), and that the two groups were not significantly different from one another (see table 4). We conclude with partial support for H1, but maintain that more research is needed to make substantial conclusions.

Means across the SLMX relationship types were in accordance with the suggested order for both leader-rated work effort and leader-rated quality, and we conclude with partial support for hypothesis 2. Overall, the hypothesized order of work performance across different SLMX relationship types was supported in three out of four analyses. This is in line with our argumentation and with previous research using similar methodology (Cogliser et al., 2009).

ELMX Balance and Work Performance

The results did not provide evidence that ELMX relationship type accounts for differences in follower work performance, and we failed to find support for H3 and H4. As much of the variance in work performance has already been attributed to SLMX balance, findings may indicate that SLMX balance is a more important predictor of work performance than ELMX balance. Additional indications of this are provided when viewing associations between SLMX, ELMX, and the different outcome variables in isolation (table 2). Whereas SLMX is significantly related to several outcome variables, only one significant association is found for ELMX (association between leader reported ELMX and follower-reported work effort: $r(148) = -.20$, $p < .05$). Though not in line with our hypotheses, the lack of significant values for ELMX reinforces conceptualization of SLMX and ELMX as separate constructs (Kuvaas et al., 2012).

We are hesitant conclude that ELMX and ELMX relationship types are unrelated to work performance. First, because previous research has revealed negative associations between ELMX and work performance (Buch et al., 2014; Kuvaas et al., 2012). Second, because our study represents a relatively new approach to investigating LMX as it combines both a balance perspective and a social/economic LMX perspective. Finally, we bring attention to the relatively low levels of ELMX in our sample (follower mean = 2.28, leader mean = 2.46), which may have contributed to the lack of significant results. Additional research efforts are needed for more robust conclusions to be drawn.

The Moderating Role of Followers' Expressive Relational Schemas

Moderation analyses conducted to test H5 revealed a moderation influence of followers' expressive relational schema on the relation between SLMX relationship types and work performance. Specifically, expressive relational schemas positively moderated 1) the relation between the leader over-estimation type and self-reported work effort, and 2) the relation between the balanced high type and self-reported work quality. In other words, followers in these types of dyads rely on their expressive relational schema when assessing their own work performance. A common factor in these two findings is that the leader in both cases reports a high presence of SLMX. When leaders experience a high degree of trust, expectations, obligation, and investment towards their followers (Kuvaas et al., 2012), it is likely to translate into their interactions with and feedback to that follower. Because expressive relational schemas prime individuals to pay more attention to SLMX-congruent behaviors (Tsai et al., 2017), followers with expressive relational schemas are, in turn, likely to notice and be positively affected by these leader behaviors. Followers without expressive relational schemas, on the other hand, are more likely to overlook these cues and go uninfluenced by them when evaluating their

own performance. This can explain why the interaction influence were significant for these two particular SLMX relationship type.

In relation to H6, we found no significant moderating influence of followers' expressive relational schemas on the relation between ELMX relationship types and work performance. Thus, we cannot conclude that expressive relational schema buffers negative outcomes of ELMX. In explaining this, we lean on the discussion from H3 and H4. First, we acknowledge that much of the variance in work performance has already been attributed to SLMX relationship types. Second, low levels of ELMX in our study may have influenced the results. Third, as neither of the previous hypotheses concerning ELMX relationship types and differences in performance were supported, the lack of moderating influence is not surprising.

The Moderating Role of Followers' Instrumental Relational Schemas

In partial support of H7, analyses revealed a negative moderation of followers' instrumental relational schema on the relation between the SLMX balanced low relationship type and leader-reported work effort. This indicates that leaders who are in agreement with their followers over a low presence of SLMX, depend on their followers' instrumental relational schemas when evaluating their work effort. Instrumental relational schemas provide followers with the social competence required to fulfill basic economic and transactional objectives. Thus, followers with instrumental relational schemas are likely to exhibit the kind of ELMX-congruent behaviors that have been negatively associated with work performance (Buch et al., 2014; Tsai et al., 2017). Furthermore, SLMX balanced low relationships are characterized by little experience of trust and mutual obligation by both dyadic parties (Kuvaas et al., 2012). In other words, there are few expressive elements present in these dyads to buffer the instrumental behaviors of

followers high in instrumental relational schemas. Without this buffer, leaders are more likely to rate follower performance unfavorably.

In relation to H8, analyses revealed that followers' instrumental relational schemas negatively moderated the relation between the ELMX balanced high relationship type and leader-reported work effort. This was the only analysis containing ELMX that generated significant results in our study. The results indicate that leaders who are in agreement with their followers over a high presence of ELMX, depend on their followers' instrumental relational schema when evaluating their work effort. ELMX balanced high relationships are characterized by short-term balancing of give and take, are contractual in nature, and have traditionally been understood as low-quality (Kuvaas et al., 2012). In other words, followers in ELMX balanced high dyads are already at risk for low evaluations of work performance. When an ELMX balanced high relationship is paired with the instrumental behaviors indicated by high levels of expressive relational schemas, the negative influence appears to become even stronger.

Methodological Considerations and Directions for Future Research

The main strength of this study is that it combines insights from different branches of LMX theory in a single study and framework. Researchers have pointed out the importance of collecting ELMX and SLMX data from both followers and leaders in order to draw conclusions regarding balance between leader and followers' perception of the quality of their relationship (Buch et al., 2014; Schyns & Day, 2010; Schyns & Wolfram, 2008). To our knowledge, our study is the first to do this. Accordingly, more research is needed to confirm our findings and assess their generalizability. We urge researchers in the field to examine relations between social and economic LMX balance and other outcome variables which may be of interest to organizations.

Another strength is the use of moderation analyses. Moderation analyses may provide us with an understanding of under which conditions or for which people a variable best predicts an outcome (Hayes, 2017). Hall and Rosenthal (1991), highlight the importance of examining moderation and argue that they are at the very core of scientific research. Future research on moderators in relation to social and economic LMX balance is encouraged.

Results from this study should be viewed in light of several limitations. One such limitation concerns the procedure used to get respondents. We recruited respondents by contacting people in our own professional and personal networks and having them refer participants back to us. Accordingly, we had little control over the pairing of specific dyads. This may have skewed our results in favor of high scores of SLMX and work performance as leaders are likely to recruit followers with whom they have a good relationship. For future research, a more randomized process for selecting dyads is recommended.

Second, several leaders reported on more than one follower each (mean = 2,7, median = 2). This constitutes a limitation as the leaders' responses may be influenced by the combination of followers, and the number of followers they reported on. When reporting on several followers, leaders are likely to compare the followers to one another, and to tire and respond less accurately as the length of the questionnaire increases. Furthermore, leaders and followers completed the questionnaire at different times. All respondents received a one-month deadline to complete the questionnaire. Incidents may have occurred in within this time frame, causing either the leader or the follower to see their relationship in a different light. Additionally, our analyses are based on correlations between variables and utilizes a cross-sectional design, we cannot be certain of the direction of the relation. Possible reverse and reciprocal associations should therefore be examined in alternative samples and populations.

Another limitation is related to methodology and the treatment of data. Inspired by Cogliser et al. (2009), we created the four SLMX and ELMX relationship types by performing median splits on our data. This method has been criticized because it involved splitting scales and forcing or designating respondents into artificially dichotomized groups (MacCallum, Zhang, & Rucker, 2002). It has been argued to weaken reliability, erode information, to be difficult to interpret, confound results, and create unrealistic restrictions (Matta et al., 2015). To overcome these methodological limitations, future studies should consider using polynomial regression and response surface methodology as an alternative approach.

Though we take a dyadic approach to examining social and economic LMX from both a leader and follower perspective, our measures of relational schemas include only followers. Our approach is, therefore, not purely dyadic and we would urge future research to complete the dyadic approach by including the relational schemas of both parties. Especially since relational schema congruence has been proven to influence LMX scores (Tsai et al., 2017). Our study falls into the ranks of many others which have focused almost exclusively on individual follower outcomes (Cogliser et al., 2009; Liden et al., 1997). As our study, to our knowledge, is the first one to examine LMX through the lens of both balance and social and economic exchanges, we consider it appropriate to include the most commonly used LMX outcomes. However, it would be interesting for future studies to also include leader outcomes, as this may yield new and more practical insights for leadership development.

Finally, we acknowledge that out of the 64 moderation analyses run to test our hypotheses, only four generated significant results. Though the discussion we have engaged in above offers explanations for why we found significant results for H5, H7, and H8, we cannot say for certain why we obtained significant interaction influences for some LMX types and not

others. Based on our findings, we cannot confidently draw inferences about the global

moderating roles of relational schemas for social and economic LMX relationship types. Rather,

we hope that our study may serve as inspiration for future research on the topic so that more

substantial conclusions may be drawn, and more practical implications be formed.

Conclusion

Although the field of LMX theory has a long history, it remains under progressive

development (Andersen et al., in press). This study has combined two trends within the LMX

literature, namely LMX balance, and social and economic LMX. The moderating role of

followers' relational schemas on the relation between social and economic LMX relationship

types and work performance was also investigated. Statistical analyses provided partial support

for five out of eight hypotheses. The key takeaways form this study are that 1) viewing balance

in the light of social and economic LMX specifically can produce fruitful results, and that 2) the

relation between balance and work performance is, sometimes, moderated by relational schemas.

It is our view that both of these findings should be examined further in different populations and

samples, preferably using alternative methods that allow for more nuanced interpretation than

what is possible within the scope of a master thesis project. In spite of its limitations, this study

constitutes an important theoretical contribution by refining the LMX literature and enabling a

more comprehensive and holistic understanding of the concept. We hope our findings will

motivate future researchers to examine these topics as well, and encourage further exploration of

social and economic LMX balance.

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Appendix

Appendix A

Conceptual diagram of model 1, used for moderation analysis in PROCESS