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Usage Guidelines: Please refer to usage guidelines at https://eprints.bbk.ac.uk/policies.html or alternatively contact lib-eprints@bbk.ac.uk. Complementary Person-Supervisor Fit: An investigation of Supplies-Values (S-V) Fit,

Leader-Member Exchange (LMX) and Work Outcomes

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#### Abstract

By applying the supplies-values (S-V) fit approach from the complementary personenvironment (P-E) fit literature to the leader-employee perspective, and drawing upon social exchange theory, we examine how fulfillment of different work values is related to Leader-Member Exchange (LMX) and work outcomes. First, polynomial regression analyses combined with response surface analysis of data collected at two time points (N = 316) showed that LMX (Time 2) was higher the more the leader fulfills the employee's work values (Time 1). Second, LMX (Time 2) was higher when leader supplies (Time 1) and employee work values (Time 1) were both high than when both were low. Third, analyses of data from a sub-sample of employees and their leaders (N = 140), showed that LMX (Time 2) played a mediating role on the relation between S-V fit (Time 1) and work outcomes (Time 2). Specifically, we found eight out of 10 relationships between S-V fit (Time 1) and leaderrated task performance and OCB (Time 2) to be fully mediated by LMX (Time 2). LMX (Time 2) partially mediated the relation between S-V fit (Time 1) and job satisfaction (Time 2) as only two out of five relationships were fully mediated.

*Keywords:* supplies-values (S-V) fit, leader-member exchange (LMX), job satisfaction, task performance, organizational citizenship behavior (OCB)

# **1. Introduction**

A great number of studies have examined value congruence and the importance of supplementary fit in work environments as well as its implications for leadership processes (e.g., Ashkanasy & O'Connor, 1997; Dose, 1999; Edwards & Cable, 2009; Hoffman, Bynum, Piccolo, & Sutton, 2011; Saks & Ashforth, 2002). Yet, the role of *complementary fit*, such as Supplies-Values (S-V) fit has not received significant attention by prior leadership research. According to person-environment (P-E) fit research, supplementary fit focuses on the similarity between the person and other individuals in the environment whereas *complementary fit* occurs when one part (person or organization) provides the other part with what they want (Edwards & Shipp, 2007). In the leadership domain, the supplementary fit tradition of the P-E fit field, which includes research on person-supervisor (P-S) fit), has focused on the importance of person-organization value congruence (Kristof, 1996) and person-supervisor value congruence (e.g., Dose, 1999; Hoffman et al., 2011). More specifically research has explored the role of leader-follower value congruence on Leader-Member Exchange (LMX) relationships (Markham, Yammarino, Murry, & Palanski, 2010) and transformational leadership (Hoffman et al., 2011; Jung & Avolio, 2000). Nevertheless, results remain inconclusive (e.g., Ashkanasy & O'Connor, 1997; Dose, 1999; Steiner, 1988; Steiner & Dobbins, 1989). Only one study (Dose, 1999) has found support for a significant positive effect of leader-follower value congruence on LMX quality. There are, thus, several questions that remain unanswered regarding the role of P-E fit variables for LMX suggesting a need for examining different types of P-E fit in this context.

Similar to *supplementary fit* the role of *complementary fit*, such as S-V fit, has received significant attention in P-E fit research and shown to be a good predictor of employee work outcomes (Kristof-Brown, Zimmerman, & Johnson, 2005). However, the role

of complementary fit for leadership dynamics remains unexplored. Building on this, our study aims at introducing the complementary fit approach in the LMX field by specifically addressing the role of S-V fit on LMX quality. We specifically draw from both the P-E fit literature and social exchange theory to build our hypotheses and explain the theoretical mechanisms of the proposed relationships.

According to LMX theory, leaders develop exchange relationships of different quality with their followers (Liden, Wayne, & Stilwell, 1993). Using social exchange theory (SET, Blau, 1964), LMX researchers have argued that the quality of the relationship depends on the exchanges between the leader and the follower where each party provides the other with a service or something that the other party values (Wayne, Shore, & Liden, 1997). The norm of reciprocity underlies social exchange relationships (Gouldner, 1960) suggesting that when the leader provides the follower with what the follower values LMX quality is enhanced, which leads the employee to reciprocate in terms of positive attitudes and behaviors (Masterson & Lensges, 2015; Masterson, Lewis, Goldman, & Taylor, 2000). One could thus argue that complementarity (and mutuality) are at the heart of LMX theory suggesting that

In the *complementary* (P-E) fit research it is argued that employees' work values are fulfilled when they receive what they value at work (Butler, 1983) and that it is mainly the organization that fulfills employees' values (e.g., Cable & DeRue, 2002). The organization is not, however, an abstract entity that delivers promises and fulfills the values. The leaders, especially the immediate supervisors, are important representatives of the organization and influence employee-organization exchanges (Henderson, Wayne, Shore, Bommer, & Tetrick, 2008). They are, thus, likely to play a vital role with respect to the fulfillment of the employees' work values. Consequently, an empirical examination of *complementary person*-

*supervisor* (*P-S*) *fit* can offer important insights on the dynamics of leader-follower interactions.

Based on the norm of reciprocity, that underlies leader-follower relationships, and given the strong theoretical support in SET for a positive relationship between the leader's fulfillment of the employee's work values and LMX (Masterson & Lensges, 2015), we argue that this is a fruitful area of study that can potentially contribute to both the LMX and the P-E fit literatures. We further argue that LMX will be a critical mediating mechanism explaining the relationships between complementary fit variables and employee outcomes found in previous research (Cable & Edwards, 2004). Given that the leader is a key actor who can fulfill (or not fulfill) the employees' values in organizational contexts, the quality of the relationship an employee has with the manager will filter the effect of value fulfillment on employee outcomes. To the best of our knowledge no research has directly examined the founding assumption in LMX about how the leader's fulfillment of the employee's work values will enhance LMX quality leading the employee to reciprocate in terms of positive attitudes and behaviors (Masterson et al., 2000).

In summary, by building on SET and P-E fit theories we examine the role of complementary P-S fit for the quality of leader-follower relationships and work outcomes. We specifically apply the supplies-values fit approach (e.g., Edwards, 1996; Edwards & Rothbard, 1999) and further respond to the call for examining the mediating role of LMX (Dulebohn, Bommer, Liden, Brouer, & Ferris, 2012) in the relationship between S-V fit and outcomes. By integrating these two theoretical approaches and by examining a neglected strand of the P-E fit research (i.e., *complementary fit*) in the leadership field our research aims to cast additional light on the dynamics of P-E fit and leadership in organizational settings.

#### 2. Theory and hypotheses

# 2.1. Supplies-values fit and LMX

Values can be categorized as general life values and domain-specific values (e.g., work) and according to Schwartz and Bilsky (1987, p. 551) values can be seen as "(a) concepts or beliefs, (b) about desirable end states or behaviors, (c) that transcend specific situations, (d) guide selection or evaluation of behavior and events, and (e) are ordered by relative importance". According to Ros, Schwartz, and Surkiss (1999) work values concern what a person wants out of work. Thus, work values could be seen as beliefs about desirable objects, behaviors, situations at work and refer to what a person wants out of work in general. Work values guide and determine behavior. However, it should be noted that what employees desire from work has often been referred to as 'work values', 'needs' and 'job characteristics'. Although these terms indicate different constructs, the content dimensions on which they have been evaluated are similar and include aspects such as having influence on how the work is done, being sure the job will last, working on different tasks at work and receiving a high pay (Cable & Edwards, 2004; Lyons, Higgins, & Duxbury, 2010).

A range of work values have been identified in work value measures such as the Work Values Inventory (WVI) by Super (1970), the Minnesota Importance Questionnaire (MIQ) by Gay, Weiss, Hendel, Dawis, and Lofquist (1971), the Work Aspect Preference Scale (WAPS) by Pryor (1981) and the Work Values Questionnaire (WVQ) by Elizur, Borg, Hunt, and Beck (1991). Lyons, Duxbury, and Higgins (2006) used work values from all of the above measures and conceptualized five work value factors (i.e., extrinsic, intrinsic, altruistic, prestige and social work values). These dimensions were later expanded with additional items by Lyons et al. (2010). They specifically developed a 32-item measure, which included several work values such as: fairness, information, training, feedback, recognition, benefits, salary, job security, challenge, interesting work, intellectually stimulating, co-workers, fun, social interaction, impact, influence, and authority, among others. Given that Lyons et al. (2010) built on several work value measures, it could be argued that it is a more comprehensive representation of work values. We build on Lyons and colleagues' work and specifically focus on five work value dimensions (i.e., *interesting and challenging work, influence and authority, access to information and training, salary and benefits*, and *social work environment*).

Doing *interesting and challenging work* includes working on interesting tasks and being mentally challenged at work and has received much attention across different work value measures (e.g., Elizur et al., 1991; Super, 1973). Work value researchers have also found that it is important for employees to have *influence and authority* at work suggesting that some people value having influence on outcomes and organizing other people's work (Elizur et al., 1991; Gay et al., 1971; Pryor, 1981; Super, 1970). Research also suggests that employees value resources that can help them to do their work and to improve their skills. For example, Lyons et al. (2010) note that having access to information and training is important to employees. Furthermore, work value measures have consistently found that employees place high value on salary and benefits as a work (e.g., Cable & Edwards, 2004; Elizur et al., 1991). Finally, a value found across work value measures is social work environment, which concerns employees' preference for having friendly colleagues and working in a fun environment (Elizur et al., 1991; Gay et al., 1971; Lyons et al., 2006; Pryor, 1981; Super, 1970). Given their prominence across different work value measures, we focus on the above five dimensions of work values (i.e., interesting and challenging work, influence and authority, access to information and training, salary and benefits, and social

*work environment)* in our research and specifically examine their fulfillment in organizational settings.

While work values refer to what a person wants out of work, supplies refer to environmental resources that may fulfill the employee's work values (Cable & Edwards, 2004). When employees receive what they value at work they experience fulfillment of their work values. Just as different terms have been used for work values, different terms have also been used for the fulfillment of employees' values at work in the extant literature. Prior research has used terms such as 'supplies-values fit', 'needs-supplies fit', 'value fulfillment', and 'need fulfillment', almost interchangeably (Butler, 1983; Edwards, 2008; Kristof-Brown et al., 2005). In our study, we follow Edwards (1996) and Edwards and Rothbard (1999) and use the term supplies-values (S-V) fit.

It is also important to note that our research falls under the broad umbrella of personsupervisor (P-S) fit which is one of the four core domains of P-E fit research: person-job, person-organization, person-group and person-supervisor. Prior P-S fit research has focused on supplementary fit variables such as leader-employee value congruence, leader-employee personality similarity and leader-employee goal congruence, but aspects of complementary fit such as S-V fit have not received attention (Kristof-Brown et al., 2005). Given the central position of the leader in the exchanges between the employee and the organization, we expect the leader to play a vital role with respect to the fulfillment of the employee's work values (Henderson et al., 2008; Lord & Brown, 2001). Cammann, Fichman, Jenkins, and Klesh (1983) noted that the leader generally controls what the employee receives and Jung and Avolio (2000) argued that the leader focuses on fulfilling the employees' work values. Dulebohn et al. (2012) also noted that the results of their meta-analysis on antecedents and outcomes of LMX showed that LMX is affected by the leader's behavior (e.g., the leader's contingent reward behavior, which includes feedback, recognition and rewards). In P-E research it has been argued that employees desire and value feedback (Edwards, 1991) recognition (Edwards & Shipp, 2007) and rewards (Edwards, Caplan, & van Harrison, 1998). This indicates that the leader's fulfillment of the employee's work values such as desires for feedback, recognition and rewards is important for LMX. In line with this, SET suggests that people return favors by engaging in cooperative behaviors towards the favor giver (Gouldner, 1960). Thus, when the leader provides the employee with something that the employee values (e.g., when the leader fulfills the employee's work value of interesting and challenging work) LMX quality is enhanced, which leads the employee to reciprocate in terms of positive attitudes and behaviors (Kamdar & Van Dyne, 2007; Masterson et al., 2000).

In relation to S-V fit, it is relevant to mention discrepancy theories of job satisfaction and the work by Locke (1976) who states that job satisfaction depends on the discrepancy between what the employee wants or desires from the job and what the job provides or supplies to the employee (Edwards, 2008). Specifically in relation to the leader-employee relationship and attraction in functional relationships, Locke (1976) notes that employees will like the leader when the leader satisfies the employee's important job values. Research has also argued that employees will be attracted to leaders who meet the employees' needs (Ehrhart & Klein, 2001) and when leaders provide the employees with what they value in their job (Kemelgor, 1982). Furthermore, positive feelings between the employee and the leader has been found to play an important role in interpersonal relationships (Liden et al., 1993).

Based on this, we argue that the leader's fulfillment of the employee's work values (i.e., when the leader supplies the employee with what the employee would like) evokes positive feelings in the employee towards the leader and results in a better LMX relationship. Thus, for the previously mentioned work values (i.e., *interesting and challenging work, influence and authority, access to information and training, salary and benefits*, and *social* 

*work environment*) it is proposed that when the employee believes these work values are fulfilled by the leader, the employee is more positively inclined towards the leader, which leads to a better LMX relationship. Thus, S-V fit will be positively related to LMX quality.

In P-E fit research, it is argued that well-being and job satisfaction improve as supplies (e.g., the amount of pay and interesting work) increase towards what the employee would like (Lambert, Edwards, & Cable, 2003). As previously mentioned, SET suggests that LMX quality will improve when the leader gives the employee what he or she would like at the job (Masterson et al., 2000). Thus in the situation where the employee receives less than he or she would like, it can be argued that LMX will be lower than when the employee experiences that the leader gives the employee what the employee would like. When this is coupled with the arguments from P-E fit research that work outcomes improve as supplies increase towards what the employee would like we argue that LMX will increase as the leader's supplies increase toward the employee's work values. While this follows the arguments in SET it may be less clear what happens when the leader gives/supplies the employee more than the employee would like. In P-E fit research this has been found to depend on the type of work value as well-being and job satisfaction may increase (monotonic relationship), decrease (parabolic relationship), or stay at the same level (asymptotic relationship) when supplies exceed values (Edwards & Rothbard, 1999; Lambert et al., 2003). Based on this, we will explore how the interaction between the leader's supplies and the employee's values is related to LMX for five types of work values (i.e., interesting and challenging work, influence and authority, access to information and training, salary and benefits, and social work environment).

For all five work values it is therefore expected that a) LMX will improve as the leader's supplies increase towards what the employee values, but b) depending on the work value dimension LMX *may decrease, stay the same or increase* as leader supplies exceed what the employee values.

## 2.2. Work value dimensions and LMX

In LMX research it has been argued that the leader assigns tasks to the employee who makes attributions about them, which then determines the nature of the LMX relationship (Dienesch & Liden, 1986). Therefore, LMX quality will generally increase as the employee is assigned more *interesting and challenging tasks* (Liden et al., 1993). From this, it could be expected that high supplies of interesting and challenging tasks are positively related to LMX. However, in LMX research it has not been discussed whether supplies of interesting and challenging tasks can be too high. By referring to Warr (1987) who developed the Vitamin Model, which examines relationships between job characteristics and mental health, Lambert et al. (2003) discuss the relationship between task variety and job satisfaction. They argue that task variety can produce meaningful work experiences, but high supplies of task variety may put too high a demand on an employee and reduce task performance. Based on this, they argue that job satisfaction will decrease as delivered levels of task variety exceed promised levels. Based on this we argue that the employee develops less positive feelings about the leader if the leader's supplies exceed what the employee would like leading to lower LMX quality. Thus, we expect that when the leader supplies the employee with excess amounts of interesting and challenging work compared to what the employee values, the employee experiences excessive job demands, which affects LMX negatively. Based on this, it is proposed that:

*H1A*: For *interesting and challenging work*, LMX will increase as leader supplies increase toward employee values and LMX will decrease as leader supplies exceed employee values.

Research suggests that high quality LMX relationships evolve as the leader supplies the employee with the *influence and authority* that the employee is interested in (Schriesheim, Neider, & Scandura, 1998). Edwards and Rothbard (1999) note that when employees receive high supplies of autonomy they may also receive high supplies of responsibility and authority. According to Warr (1987), high supplies of autonomy affect mental health negatively as high responsibilities follow from high autonomy. However, Edwards and Rothbard (1999) argue that some degree of excess supplies of autonomy can have a positive effect on well-being, as it signifies control that may be used to obtain other work values. They acknowledge that well-being will decrease when excessive supplies of autonomy are substantial compared to the valued amount, which also follows the argument by Warr (1987). When this is linked with the argument that authority is important for the employee to make decisions and solve tasks (Schriesheim et al., 1998), we argue that when the employee receives some degree of excess amount of influence and authority from the leader, the employee will experience increased control and opportunity for solving tasks, which would increase the employee's contribution and lead to a better LMX relationship. Building on the argument by Warr (1987), we expect that substantial supplies could make the employee feel pressured, as more responsibility follows with more autonomy. This could negatively affect the employee's feelings toward the leader and make the employee less interested in working with the leader, which would lead to lower LMX quality. Thus, it is proposed that:

*H1B*: For *influence and authority*, LMX will increase as leader supplies increase toward employee values and LMX will continue to increase as leader supplies exceed employee values, decreasing only when excess leader supplies are substantial.

Access to information is vital for solving tasks satisfactory (Moss, Sanchez, Brumbaugh, & Borkowski, 2009) and training can improve performance (Yang, Sanders, &

Bumatay, 2011). Thus, access to information and training is related to completion of work. Lambert et al. (2003) state that high levels of skill development and training can make the employee feel pressured and reduce the focus on task completion. When this is transferred to LMX, we propose that excessive supplies of training would reduce attention on task completion and make the employee feeling overwhelmed by having too many activities at work affecting LMX negatively. However, Lambert et al. (2003) discuss 'actual' supplies of training and not supplies of 'access to' training. Thus, access to information and training is an option the employee can choose to use, and it is therefore not a job requirement. Based on this, we argue that when the leader's supplies of access to information and training exceed the amount the employee would like, the employee can decide to take advantage of the access to information and training, which could be used to improve skills and complete tasks, leading to a better LMX relationship. Based on this, it is proposed that:

*H1C*: For *access to information and training*, LMX will increase as leader supplies increase toward employee values and LMX will continue to increase as leader supplies exceed employee values.

According to Lambert et al. (2003), excess amounts of *pay* may increase job satisfaction and open the possibility for different material and psychological benefits, as pay signifies status and achievement. In line with this, Locke (1976) points out that excess amounts of pay increase pay satisfaction. Furthermore, Locke (1976) notes that to most people pay cannot be too high. Building on this, we argue that when leader supplies of salary and benefits exceed the amount the employee would like, the employee will feel that the leader is doing something positive for the employee, which will make the employee more attracted to the leader, thus leading to a better LMX relationship. Based on this, it is proposed that:

*H1D*: For *salary and benefits*, LMX will increase as leader supplies increase toward employee values and LMX will continue to increase as leader supplies exceed employee values.

According to Lyons et al. (2010), having friendly co-workers and a lively and fun work environment are social work values that are related to social interaction. Dasborough and Ashkanasy (2002, p. 615) note that "leadership is a process of social interaction" and Bauer, Erdogan, Liden, and Wayne (2006, p. 301) state that "LMX is a theory of social interaction. Therefore, its effects should be contingent on the extent to which employees interact effectively with others". Based on this, it can be seen that the work value factor 'social work environment' is related to social interaction, and that social interaction is a vital process in relation to leadership and a part of developing LMX relationships. In leadership research it is argued that leaders can create a positive social work environment (Rousseau, Aubé, Chiocchio, Boudrias, & Morin, 2008) and that leaders can facilitate social interaction between employees (Wang & Howell, 2010). Thus, leaders have an impact on the social interaction between their employees and the social work environment that employees engage in. While it might be argued that the social work environment the leader supplies to his or her employees does not vary among the employees, it can be argued that employees may value the social work environment differently as some might prefer a very social environment and other may desire a less social work environment. Based on this we argue that the relationship between employees' values and the leader supplies of a 'social work environment' in relation to LMX varies among employees. Edwards and Rothbard (1999) note that excess relationships may interfere with privacy, and Edwards et al. (1998) argue that people may be more irritated when they have too little privacy. However, Edwards and Rothbard (1999) also posit that excess supplies of relationships can increase the employee's potential for receiving social support, and therefore it will outweigh the negative effect on privacy. Based on that

they argue that well-being will increase as supplies exceed valued amount. Similarly, Lambert et al. (2003) argue that job satisfaction will increase as supplies exceed promised amount as relationships increase potential for social support. Thus, excess supplies of a positive social work environment generally lead the employee to develop positive attitudes about the job. When this is coupled with the argument that leaders can influence the social work environment (Rousseau et al., 2008) and that the social interaction between employees is important in relation to LMX (Bauer et al., 2006), we argue that when supplies of a social work environment exceed the amount the employee would like, the employee will experience better social interaction and develop more positive feelings about the leader, which will lead to better LMX. Thus:

*H1E*: For *social work environment*, LMX will increase as leader supplies increase toward employee values and LMX will continue to increase as leader supplies exceed employee values.

As seen, the previous hypotheses have focused on how the employee's values and the leader's supplies are related to LMX when the leader's supplies are lower or higher than the employee's values. However, Edwards (2008) has also emphasized that it is important to examine the relationship between an outcome and the absolute levels of the supplied and wanted amount when the supplied and wanted amount are equal. Thus for example, when the supplied and wanted amount of a work value are both equally high is the work outcome the same as when the supplied and wanted amount of the work value are both equally low? According to Edwards and Shipp (2007), the outcome is higher when the supplied and wanted amount are both high than when both are low as achieving high levels of what one would like from the job gives one a feeling of being competent and increases self-efficacy as the person has shown that he or she is able to achieve high aspirations successfully. On the other hand, having low levels fulfilled shows that the person can only achieve modest

aspirations (Edwards, 2002). Therefore, satisfaction will generally be higher when the supplied amount and the desired amount are both high than when both are low (Edwards & Shipp, 2007). Furthermore, what is important to employees at work affects what they want at work, and what the organization believes is important affects what the organization supplies to its employees (Cable & Edwards, 2004). Thus in the context of leader-member relationships the only difference to the P-E fit approach is that the leader acts a representative of the organization and therefore what the leader believes is important affects what the leader supplies to the employees.

The question is therefore whether high levels of both employee values and leader supplies for a work value factor will have a different effect on LMX than when there is a low level of both employee values and leader supplies for the same factor. Firstly, and from the employee perspective, when interesting work, authority, access to training, pay and the social work environment are important to the employee then the employee would like more of the work values (Cable & Edwards, 2004). Secondly, and from the leader perspective, leaders may find that certain work values are important. Leaders may view delegation of work and authority to employees as important as it can reduce the leader's own workload (Schriesheim et al., 1998) and evoke positive feelings in the employee leading to a better LMX relationship as the employee can see it as if the leader is focusing on developing the employee (Dienesch & Liden, 1986). Furthermore, leaders may find the employee's access to training and learning important (Bluedorn & Jaussi, 2008) as training can improve employee performance (Arthur, Bennett, Edens, & Bell, 2003). Similarly, the leader may find it important to sustain a good social work environment as the quality of the LMX relationship is dependent on how effectively employees interact with each other (Bauer et al., 2006). Thus not only has the employee an interest in having his/her values fulfilled, but the leader has an incentive too.

When this is coupled with the arguments from P-E fit research, it is proposed that when the leader supplies the employee with the high amount of interesting work, authority, access to training, pay and social work environment that the employee would like, it can be argued that the employee will experience a sense of competence and self-efficacy (Edwards, 2002; Edwards & Shipp, 2007). This will make the employee feel valued and make the employee exhibit more positive feelings toward the leader leading to higher LMX quality and increasing the likelihood of employee reciprocation in terms of improved employee performance (Masterson & Lensges, 2015; Masterson et al., 2000). From the leader's perspective it is suggested that fulfilling employees' work values at a high level compared to at a low level will be seen as an incentive to the leader as supplying more demanding employees with what they want is expected to produce more positive employee behaviors. For example, leaders could expect that high supplies of authority and access to training could produce higher employee performance and returns (Arthur et al., 2003; Dienesch & Liden, 1986). Thus fulfilling the employee's values for authority and access to training at a high level is suggested to lead to higher positive outcomes as higher authority and access to training will give the employee an opportunity to perform better in the long term.

Based on this, we argue that for the five types of work values (i.e., interesting and challenging work; influence and authority; access to information and training; salary and benefits; social work environment) LMX will be higher when the employee's values and the leader's supplies are both high than when both are low. Thus:

*H2*: LMX will be higher when employee values and leader supplies are both high than when both are low.

# 2.3. The mediating role of LMX

The relationship between LMX and work outcomes has been well established (Ilies, Nahrgang, & Morgeson, 2007). For example, studies have shown that LMX quality is

positively related to job satisfaction and organizational commitment (Epitropaki & Martin, 2015), task performance and individual and organizational-targeted citizenship behaviors (Xu, Huang, Lam, & Miao, 2012). Interestingly, various studies have found that LMX plays an important role as a mediating mechanism. For example, Jackson and Johnson (2012) found that LMX fully mediates the relationship between leader-employee identity similarity and job performance and in a longitudinal study, Tekleab, Takeuchi, and Taylor (2005) demonstrated that LMX played a mediating role on the effect of interactional justice on job satisfaction. However, the role of LMX as a mediating mechanism in the relationship between S-V fit and work outcomes has, to the best of our knowledge, not been examined. Based on the social exchange theory (SET) premises, we argue that when the leader provides the employee with something of value, the LMX quality will be enhanced which will then lead the employee to reciprocate in terms of positive attitudes and behaviors (e.g., Masterson et al., 2000). The leader-follower relationship is, thus, an important mediating mechanism through which S-V fit affects work attitudes and performance.

Prior research has established that LMX is affected by the leader's behavior, which includes the leader's supply of feedback, recognition and rewards (Dulebohn et al., 2012). The leader's behaviors may affect employees differently and lead employees to develop different LMX relationships, which then affects employees attitudinal and behavioral work outcomes. Building on this, Dulebohn et al. (2012) argued that work outcomes are directly affected by LMX quality and that the effect of the interplay between characteristics of the employee and the leader on work outcomes operates through the quality of the LMX relationship. Thus, characteristics of employees and leaders (e.g., the employee's work values and the leader's fulfillment of the employee's work values) affect the LMX relationship, which then affects work outcomes, suggesting that LMX plays a mediating role.

Employees value feedback, recognition and rewards (Edwards et al., 1998; Edwards & Shipp, 2007). Leaders are salient to employees as they assign employees with work, provide feedback and reward employees (Kamdar & Van Dyne, 2007). While the organization as an entity may control supplies such as pay and tasks the leader acts as the employee's interpersonal link with the organization where the leader provides supplies to the employee suggesting that the leader-employee relationship can be seen as a proximal extension of organizational supplies (Karriker & Williams, 2009). Rockstuhl, Dulebohn, Ang, and Shore (2012) argue that the leader's attention to the employee's work values affects LMX quality. In line with this, Walumbwa, Cropanzano, and Hartnell (2009) argue that the leader's treatment of the employee evokes positive evaluations of the LMX relationship, which then affects the employee's behavior. Rosen, Harris, and Kacmar (2011) extend this by highlighting that the leader's positive treatment of the employee makes the employee obliged to reciprocate in positive ways to maintain the quality of the LMX relationship. On the other hand, employees are more likely to experience feelings of anger and dissatisfaction when they receive unfavorable treatment making them more likely to reciprocate with negative work behaviors (Mount, Ilies, & Johnson, 2006). Masterson et al. (2000) argue that LMX will increase positive attitudes such as job satisfaction and positive behaviors that are directly related to the leader such as task performance and OCB. This finding is supported by several other scholars who have found that employees respond to the improved quality of the LMX relationship by reciprocating through improved task performance (Kamdar & Van Dyne, 2007) and OCB (Wang, Law, Hackett, Duanxu, & Zhen Xiong, 2005).

By drawing from social exchange theory (SET) we argue that the leader's fulfillment of the employee's work values will positively affect leader-member interactions and that employees will reciprocate with positive attitudes and work behaviors. Because high LMX employees perceive that they are obligated to exert high effort on behalf of their leader as derived from a positive reciprocity norm, they are likely to achieve higher levels of task performance and OCB. Specifically with regard to OCB and due to the interpersonal nature and focus of LMX, it can be argued that LMX is more related to individual than organizational targeted citizenship behaviors (Ilies et al., 2007). In line with this, Wayne and Green (1993) found that LMX had no effect on organizational targeted citizenship behaviors, whereas LMX had a positive effect on individual targeted citizenship behaviors. In their meta-analytic study Ilies et al. (2007) found that LMX had a larger effect on individual targeted OCB than on organizational targeted OCB, which suggest that it is most relevant to examine the relationship between LMX and individual targeted OCB. Thus, when the leader fulfills the employee's work values, the employee experiences positive feelings about the leader and builds a high quality LMX relationship with the leader. This makes the employee does by improving his or her task performance and engaging in supervisor-directed OCB. In summary, this suggests that LMX mediates the relationship between S-V fit and work outcomes. We, therefore, hypothesize that:

H3A: The relationship between S-V fit and job satisfaction will be mediated by LMX.

*H3B*: The relationship between S-V fit and leader-rated task performance will be mediated by LMX.

*H3C*: The relationship between S-V fit and leader-rated OCB will be mediated by LMX.

The proposed relationships between S-V fit, LMX and work outcomes are shown in Figure 1.

#### <INSERT FIGURE 1 HERE>

## 3. Method

3.1. Sample and procedure

The hypotheses were tested using data from employees and their leaders employed at a consumer products manufacturer in Denmark. Using online surveys, data were collected at two points in time six months apart. As the study was conducted in Denmark, and as the measures were originally designed in English, the questionnaires were translated into Danish. The Danish version was back translated into English following the translation/backtranslation procedure recommended by Brislin, Lonner, and Thorndike (1973).

At Time 1, an e-mail was sent to 3,054 employees with an invitation to participate in the study and 468 employees completed the questionnaire online, which represented a response rate of 15.32%. At Time 2, the 468 employees who completed the questionnaire in the first wave were sent an invitation e-mail to complete the questionnaire in the second wave. Of the 468 employees, 316 employees had the same manager as in the first wave and completed the questionnaire in the second wave, which represented a response rate of 67.52%. Of the 316 employees who completed the questionnaire in the second wave, 212 gave the research team permission to collect data from their immediate manager. If employees gave this permission, an e-mail was sent to their immediate manager with an invitation to complete a short questionnaire online. Of the 212 employees, 140 were rated by their immediate manager, yielding a manager response rate of 66.04%. The 316 sample (complete matched data across the two time points) was used to test Hypothesis 1 and 2 as leader ratings were not needed to test these hypotheses. The 140 dyads sample (also complete matched data across the two time points) was used to test Hypothesis 3.

In the 316 sample, 54.11% of the participating employees were male, which followed the demographics of the general workforce in Denmark where 52.12% of employees were male. The mean age of the respondents was 45.09 years, and the respondents' age ranged from 25 to 66 years. The average work experience of the respondents was 23.02 years, they had worked for the company for 13.76 years, had been in their job for 6.96 years and had

worked with their manager for 4.52 years. The employees worked in different functional areas. 11.39% worked in administration, 0.95% in business development, 5.38% in Finance, 5.06% in HR, 4.75% in IT, 14.56% in logistics, planning and procurement, 25.63% in production, 6.65% in research and development, 11.08% in sales and marketing, and 14.56% in other functional areas.

77.14% of the participating managers were male. The mean age of the managers was 46.92 years, and their age ranged from 32 to 68 years. The average work experience was 25.69 years, and on average the managers had worked for the company for 16.85 years and been in their job for 7.18 years. The managers worked in different functional areas. 11.43% worked in administration, 6.43% in Finance, 6.43% in HR, 2.14% in IT, 17.14% in logistics, planning and procurement, 24.29% in production, 8.57% in research and development, 11.43% in sales and marketing, and 12.14% in other functional areas.

We compared the 316 employees, who participated at both Time 1 and Time 2 (Time 2 respondents) with the 152 employees who participated at Time 1 only (non-respondents), on demographics. Chi-square analyses indicated no significant differences between the two groups on demographic variables such as gender (1, N = 468) = .82, p > .05 and functional areas they worked in (8, N = 468) = 13.45, p > .05. Similarly, independent t-tests indicated there was no significant difference between the two groups with regard to job tenure (p = .12), whereas there was a significant difference between the two groups on age (p < .001), work experience (p < .01), organizational tenure (p < .05) and manager tenure (p < .05).

# 3.2. Measures

Employee values and leader supplies were assessed by employees at Time 1. At Time 2, employees rated LMX and job satisfaction and leaders rated task performance and OCB. By asking employees to evaluate both their own values and their leader's supplies we followed the approach used by other researchers in the P-E fit field (e.g., Edwards & Cable,

2009; Lambert et al., 2003), who have also collected evaluations of values and supplies from the same source.

#### *3.2.1. Employee values (Time 1)*

We used a 14-item scale based on the 32-item work value scale by Lyons et al. (2010) to assess employee values and asked respondents "How much of this would you like to have?". A sample item is "Access to the information I need to do my job". Items were rated on a 7-point scale ranging from 1 (*None at All*) to 7 (*Very Much*). Details about the 14-item scale development can be found in Appendix A.

## 3.2.2. Leader supplies (Time 1)

For leader supplies we also used the 14-item revised scale (based on Lyons et al., 2010) and asked respondents "How much of this does your immediate manager give you?" We used a 7-point scale ranging from 1 (*None at All*) to 7 (*Very Much*).

# 3.2.3. Leader-member exchange (LMX, Time 2)

The seven-item LMX-7 scale by Graen and Uhl-Bien (1995) was used to measure LMX. A sample item is "My manager understands my problems and needs". Items were rated on a 5-point scale ranging from 1 (*Strongly Disagree*) to 5 (*Strongly Agree*).

# 3.2.4. Job satisfaction (Time 2)

The three-item measure of job satisfaction by Cammann et al. (1983) was used to assess employees' satisfaction with their job. One item was reverse-coded and an example item is "All in all, I am satisfied with my job". Respondents were asked to rate the items on a 7-point scale, which ranged from 1 (*Strongly Disagree*) to 7 (*Strongly Agree*).

## 3.2.5. Leader-rated task performance (Time 2)

Leaders rated their employee's performance using the seven-item measure of in-role behaviors developed by Williams and Anderson (1991). A sample item is "He/she performs tasks that are expected of him/her". Two items were reverse-coded, and respondents rated the items on a 7-point scale, which ranged from 1 (*Strongly Disagree*) to 7 (*Strongly Agree*).

3.2.6. Leader-rated organizational citizenship behavior (OCB) individual (Time 2)

Leaders rated their employee's OCB with the seven-item individual-targeted OCB scale by Williams and Anderson (1991). A sample item is "He/she takes time to listen to co-workers' problems and worries". Respondents rated the items on a 7-point scale ranging from 1 (*Strongly Disagree*) to 7 (*Strongly Agree*).

## 4. Results

## 4.1. Descriptive statistics

As data were collected from employees working in different functional areas, we applied within and between analysis (WABA; Dansereau, Alutto, & Yammarino, 1984) to determine the operating level of analysis for the variables. E tests for all independent and dependent variables were significant (30° test) indicating strong variation within groups. F tests for all the variables, with one exception, however, were not significant. Only the F test for one variable (i.e., leader supplies - interesting and challenging work) was significant. As such, the overall results for the E ratios and the F tests when combined suggest that these effects are primarily non-grouped or equivocal. In accordance with Yammarino and Markham (1992), we therefore argue that the independent and dependent variables operate at the individual level of analysis suggesting that data from employees working in different functional areas can be pooled for subsequent analyses.

Means, standard deviations, zero-order correlations, and reliabilities of variables based on the sample of 316 employees are presented below the diagonal and results based on the sample of 140 employees and their managers are presented above the diagonal in Table 1.

#### <INSERT TABLE 1 HERE>

All correlations between employee values and leader supplies for the 316 sample on the same content dimensions are significant (p < .001 or p < .01) and all correlations between employee values and leader supplies for the 140 sample on the same content dimensions are significant (p < .001) except salary and benefits which is not significant. Correlations between factors on the same content dimension for employee values and leader supplies were moderate. The pattern found in Table 1 is similar to that found by Cable and Edwards (2004). 4.2. Supplies-values fit and LMX

We used polynomial regression as suggested by Edwards and Parry (1993) and followed the suggestion by Edwards (1994) to scale-center items. For H1 and H2 we used response surface methodology and examined the response surface pattern based on the slope and curvature of two lines (i.e., the congruence line and the incongruence line). Similar to other studies (e.g., Edwards & Rothbard, 1999; Lambert et al., 2003), tests of the curvature and slope of the incongruence line was used to test H1 and tests of the curvature and slope of the congruence line was used to test H2.

Results of the polynomial regressions used to test H1A-H1E and H2 are shown in Table 2. LS and EV represent leader supplies and employee values, respectively. Furthermore,  $LS^2 LS^*EV$ , and  $EV^2$  represent leader supplies squared, the product of leader supplies and employee values, and employee values squared, respectively. As shown in Table 2, the five terms (i.e., LS, EV,  $LS^2$ ,  $LS^*EV$ , and  $EV^2$ ) account for significant variance in LMX with R<sup>2</sup> values ranging between .07 and .24 as (interesting and challenging work: R<sup>2</sup> = .24, p < .001; influence and authority: R<sup>2</sup> = .19, p < .001; access to information and training: R<sup>2</sup> = .23, p < .001; salary and benefits: R<sup>2</sup> = .07, p < .001; social work environment: R<sup>2</sup> = .15, p < .001). The polynomial regression results in Table 2 have also been used to develop the response surface plots shown in Figures 2-6.

## <INSERT TABLE 2 HERE>

For all five work value dimensions, we hypothesized that LMX will increase as leader supplies increase toward employee values. However, when leader supplies exceed employee values, we suggest that LMX can increase or decrease depending on which work value is examined.

For *interesting and challenging work*, we hypothesized that LMX will increase as leader supplies increase toward employee values and LMX will decrease as leader supplies exceed employee values. The curvature along the incongruence line is positive and significant and the slope of the surface along the incongruence line at the point where LS = 0, EV = 0, is positive and differs significantly from zero as (curvature = .15, p > .05; slope = .75, p < .05). Moving along the incongruence line from the left to the right to the congruence line, LMX increases as leader supplies increase toward employee values, after which LMX continues to increase. Especially LMX increases when the leader supplies the employee substantially more than the employee would like. Based on this, H1A is not supported. Inspection of the surface along the congruence line shows no significant and positive (curvature = -.02, p > .05; slope = .34, p < .05). This shows that LMX will be higher when leader supplies and employee values for interesting and challenging work.

# <INSERT FIGURE 2 HERE>

For the dimension *influence and authority*, we proposed that LMX will increase as leader supplies increase toward employee values and LMX will continue to increase as leader supplies exceed employee values, decreasing only when excess leader supplies are substantial. The curvature along the incongruence line is negative and significant and the slope of the surface along the incongruence line at the point where LS = 0, EV = 0, is positive but it does not differ significantly from zero as (curvature = -.15, p < .05; slope = .16, p >

.05). Based on this we did not find support for H1B. However, it should be mentioned that the response surface plot in Figure 3 shows that LMX increases as leader supplies increase toward employee values, and that LMX continues to increase as leader supplies exceed employee values, decreasing only when excess leader supplies are substantial. With regard to the surface along the congruence line, the curvature is significant and the slope at the point where LS = 0, EV = 0, is positive and not significant (curvature = .07, p < .01; slope = .05, p > .05). Due to the significant curvature, H2 is not supported for influence and authority.

# <INSERT FIGURE 3 HERE>

For the dimension *access to information and training*, we expected that LMX will increase as leader supplies increase toward employee values and LMX will continue to increase as leader supplies exceed employee values. The curvature along the incongruence line is not significant and the slope of the surface along the incongruence line at the point where LS = 0, EV = 0, is positive and differs significantly from zero as (curvature = .05, p > .05; slope = .47, p < .05). In line with this, the surface plot in Figure 4 shows that LMX increases as leader supplies increase toward employee values, and that LMX continues to increase as leader supplies exceed employee values. Thus, H1C is supported. The curvature of the surface along the congruence line is not significant and the slope of the surface along the congruence line is significant and positive at the point where LS = 0, EV = 0 (curvature = -.03, p > .05; slope = .36, p < .05). This indicates that LMX is higher when leader supplies and employee values are both high than when both are low, which provides support for H2 for access to information and training.

#### <INSERT FIGURE 4 HERE>

Similarly in relation to the dimension *salary and benefits*, we proposed that LMX will increase as leader supplies increase toward employee values and LMX will continue to increase as leader supplies exceed employee values. The curvature along the incongruence

line is not significant and the slope of the surface along the incongruence line at the point where LS = 0, EV = 0, is positive and differs significantly from zero as (curvature = .00, p > .05; slope = .21, p < .05). Thus, H1D is supported. Inspection of the surface along the congruence line shows that no significant curvature of the surface can be found and that the slope at the point where LS = 0, EV = 0, is negative and not significant (curvature = .06, p > .05; slope = -.05, p > .05). Based on this, H2 is not supported for salary and benefits.

#### <INSERT FIGURE 5 HERE>

For *social work environment*, we hypothesized that LMX will increase as leader supplies increase toward employee values and LMX will continue to increase as leader supplies exceed employee values. The curvature along the incongruence line is not significant and the slope of the surface along the incongruence line at the point where LS = 0, EV = 0, is positive and differs significantly from zero as (curvature = -.05, p > .05; slope = .34, p < .01). Thus, H1E is supported. When the surface along the congruence line is reviewed, it can be seen that the curvature of the surface is not significant and that the slope at the point where LS = 0, EV = 0, is significant and positive (curvature = -.05, p > .05; slope = .26, p < .001). Based on this, LMX will be higher when leader supplies and employee values for social work environment are both high than when both are low. Thus, H2 is supported for social work environment.

## <INSERT FIGURE 6 HERE>

The reported results above on the curvature of the surface along the incongruence line indicate a monotonic relationship between employees values (Time 1), leader supplies (Time 1) and LMX (Time 2) for the majority of the work value dimensions. Thus in general, LMX will increase as leader supplies increase toward employees values and LMX will continue to increase as leader supplies exceed employees values. Furthermore, LMX will generally be higher when leader supplies and employee values are both high than when both are low.

## 4.3. The mediating role of LMX

We used polynomial regression combined with the block variable approach as specified by Edwards and Cable (2009) to test H3, which focuses on the effect of S-V fit on LMX and work outcomes. We used block variables, where each summarizes the effects of its respective quadric terms and examines the effects of the quadric terms using a single coefficient. The path relating S-V fit to LMX is termed path 'A', the path relating LMX to work outcomes is termed path 'B' and the path relating S-V fit to work outcomes is termed path 'C''. The indirect effect of S-V fit on each work outcome is the product of path A and B (AB). The total effect of S-V fit on each work outcome is produced by adding the direct effect C' to the indirect effect AB. Like Edwards and Cable (2009), we used the bootstrap (Efron & Tibshirani, 1993) and constructed confidence intervals based on the bias-corrected percentile method to test the significance of the direct effects for paths A, B and C', and the indirect and total effects. The confidence intervals were based on estimates from 1,000 bootstrap samples. If path A and B are significant, LMX has a mediating role on the relationship between S-V fit and work outcomes. If C' is not significant, complete mediation is present, and if C' is significant, partial mediation is present. The effects of S-V fit on LMX and attitudinal and behavioral work outcomes are presented in Table 3.

#### <INSERT TABLE 3 HERE>

The effects relating S-V fit and LMX to work outcomes in Table 3 show that S-V fit (Time 1) is significantly positively related to LMX (Time 2) (path A) for all five dimensions. Similarly, LMX (Time 2) is significantly positively related to all three work outcomes (i.e., job satisfaction (Time 2), leader-rated task performance and leader-rated OCB (Time 2)) (path B) when the respective dimension is controlled. Based on this, it can be argued that for all five dimensions, LMX (Time 2) has a mediating role on the relationship between S-V fit

(Time 1) and the three work outcomes (Time 2). In line with this, all the indirect effects (AB) are significant.

Inspection of the coefficients for the C' paths shows that 10 of the 15 C' paths are not significant. The individual C' paths that are not significant are the paths from interesting and challenging work and influence and authority to job satisfaction, the paths from interesting and challenging work, influence and authority, access to information and training, and salary and benefits to task performance, and the paths from interesting and challenging work environment to OCB. The results indicate that for these dimensions, LMX completely mediates the relationship between S-V fit and the respective work outcomes. Thus, H3A is supported for interesting and challenging work, influence and authority, access to information and training, and salary densities and challenging work, influence and authority, access to information and training, and social work environment to and challenging work, influence and authority, access to information and training, and social work influence for interesting and challenging work, influence and authority, access to information and training, and social work, the solution and training, and social work, influence and authority, access to information and training, and social work environment.

The remaining five C' paths that are significant showing that for these dimensions and work outcomes LMX partially mediates the relationship between S-V fit and the respective work outcomes. Based on this, H3A for access to information and training, salary and benefits, and social work environment, H3B for social work environment, and H3C for salary and benefits are partially supported.

Overall, results show a tendency that LMX (Time 2) fully mediated the relationship between S-V fit (Time 1) and task performance (Time 2) and OCB (Time 2), whereas results indicate a tendency that LMX (Time 2) partially mediated the relationship between S-V fit (Time 1) and job satisfaction (Time 2). Similar to Edwards and Cable (2009), total effects are reported to provide an overview of the results. Although the results are based on separate regression analyses, results for both the average B effects and the average total effects indicate that S-V fit and LMX are generally more strongly related job satisfaction than to behavioral work outcomes.

#### 5. Discussion

Our study expands existing work on the role of P-E fit for leadership processes by introducing a neglected strand of P-E fit, that of complementary fit. Prior studies on personsupervisor fit have examined the role of supplementary fit, such as value congruence but their results have been mixed. We are only aware of one study that found support for the positive effect of value congruence on LMX (Dose, 1999) and the majority of studies (e.g., Ashkanasy & O'Connor, 1997; Steiner, 1988; Steiner & Dobbins, 1989) reported nonsignificant effects. We, therefore, consider it of paramount importance to expand the P-E fit lens and introduce complementary P-S fit as an antecedent of the LMX quality in order to offer a more in-depth understanding for the role of P-E fit variables in this context. We specifically examined how the leader's fulfillment of the employee's work values (S-V fit) is related to LMX and work outcomes. Our results showed that for four work value dimensions (i.e., interesting and challenging work, access to information and training, salary and benefits, and social work environment) LMX (Time 2) generally increased as the leader's supplies (Time 1) increased toward the employee's work values (Time 1) and LMX (Time 2) continued to increase as the leader's supplies (Time 1) exceeded the employee's work values (Time 1). This indicates that the leader cannot supply too much to the employee. This follows the prevalent argument in LMX research that LMX quality is based on the exchange of desired tasks, influence, latitude, and information (Martin, Epitropaki, Thomas, & Topakas, 2010) suggesting that for some work values the focus should only be on what the leader supplies regardless of how much the employee would like. In other words, for some value dimensions there is no optimal level of fit or supplies-values balance that one can strive for.

The leader can continue supplying more to the employee than the employee would like leading to higher quality leader-follower interactions.

On the other hand, for the work value dimension influence and authority, LMX (Time 2) increased as the leader's supplies (Time 1) increase toward the employee's work values (Time 1) and LMX (Time 2) decreased as the leader's supplies (Time 1) exceeded the employee's work values (Time 1). While the above results focus on the importance of the leader's supplies for some work values, the results for influence and authority suggest that it is important not only to focus on supplies, but employee values also play an important role in relation to LMX. Furthermore, for three of the five work value dimensions we found that LMX (Time 2) was higher when the leader's supplies (Time 1) and the employee's work values (Time 1) were both high than when both were low.

Results also showed that S-V fit (Time 1) was positively related to LMX (Time 2) and that LMX (Time 2) played a mediating role on the relationship between S-V fit (Time 1) and job satisfaction (Time 2), leader-rated task performance and OCB (Time 2). For two work value dimensions (i.e., interesting and challenging work, and influence and authority), LMX fully mediated the relationship between S-V fit and job satisfaction. For four work value dimensions (i.e., interesting and challenging work, influence and authority, access to information and training, and salary and benefits), LMX fully mediated the relationship between S-V fit and authority, access to information and training work, influence and authority, access to information and training, and salary and benefits), for four work value dimensions (i.e., interesting and challenging work, influence information and training, and social work environment), LMX fully mediated the relationship between S-V fit and work outcomes, of which eight were to either leader-rated task performance or leader-rated OCB. For three work value dimensions (i.e., access to information and training, salary and benefits, and social work environment), LMX partially mediated the relationship between S-V fit and

job satisfaction. Similarly, for social work environment, the relationship between S-V fit and leader-rated task performance was partially mediated by LMX just as the relationship between S-V fit and leader-rated OCB for salary and benefits was partially mediated by LMX. Thus, LMX partially mediated five of the 15 relationships between S-V fit and work outcomes.

While LMX has consistently been found to be positively related to job satisfaction (Day & Miscenko, 2015), person-organization fit research has also reported S-V fit to be an important predictor of job satisfaction (Kristof-Brown et al., 2005). It is, therefore, plausible that the norm of reciprocity of social exchange that underlines the mediating role of LMX in the relationship between S-V fit and task performance and OCB may not be the strongest mechanism when it comes to attitudinal outcomes such as job satisfaction. Whereas employees may reciprocate through improved task performance and OCB, which are valued by the leader (e.g., Wayne et al., 1997), their increased job satisfaction may be both a direct response to S-V fit as well as to high LMX. This could explain why LMX only partially mediated the relationship between S-V fit and job satisfaction in our study. In summary, the results showed that LMX fully mediated the relation of S-V fit to job satisfaction. There are a number of important theoretical implications for these results.

First, by applying the S-V fit approach from P-E fit research and discrepancy theories of job satisfaction (e.g., Locke, 1976) to the study of leader-employee relationships and coupling it with SET, this research fulfills a critical gap in LMX research on the relationship between the leader's fulfillment of the employee's work values and LMX. To the best of our knowledge, the S-V fit approach has not been studied in relation to LMX, and therefore this study is the first to examine this. Not only is it the first study to show that S-V fit is positively related to LMX, but it also the first study to show how the interaction between the leader's

supplies and the employee's work values is related to LMX when the employee receives more or less than the employee would like. This interaction has been examined for five different work values (i.e., interesting and challenging work, influence and authority, access to information and training, salary and benefits, and social work environment) and it gives valuable insights into how fulfillment of different work values is related to LMX.

Our study extends current arguments in LMX research that LMX quality will improve when the leader gives the employee what he or she would like at the job (Masterson et al., 2000) by showing that it is not only about the leader's fulfillment of the employee's work values, but it is also about how the leader's fulfillment affects LMX when the leader gives the employee more than he or she would like at the job. Furthermore, it shows that the relationship between the leader's supplies and the employee's work values affects LMX differently depending on the work value factor suggesting that fulfillment of different work values cannot be treated in the same way. Thus, in addition to fulfilling the critical empirical gap in LMX theory on the relation of S-V fit to LMX, this research also makes theoretical and empirical contributions to the LMX field by shedding light onto how fulfillment of different work values is related to LMX.

Second, we built on SET and argued that LMX would mediate the relationship between S-V fit and LMX, which to the best our knowledge has not been examined before. As mentioned, there has been a lack of research on the argument by Masterson et al. (2000) that the leader's fulfillment of what the employee values at work improves LMX, which leads the employee to reciprocate in terms of positive attitudes and behaviors. Based on this, the call for more research on the relationship between work values and LMX (Dose, 1999) and on the mediating role of LMX (Dulebohn et al., 2012), we explored the mediating role of LMX between S-V fit and work outcomes. As hypothesized, our findings show that LMX plays a mediating role on the effect of S-V fit on the attitudinal work outcome (i.e., job satisfaction) and behavioral work outcomes (i.e., leader-rated task performance and leaderrated OCB). Thus, the mediating effect was found for both attitudinal and behavioral work outcomes. Specifically for behavioral work outcomes, these results have been found with leader ratings of task performance and OCB. Thus, by examining both antecedents and outcomes of LMX and by examining the mediating effect of LMX, this study fills the important gap in LMX research on the relationship between S-V fit, LMX and work outcomes. Furthermore, it responds to the call by Dose (1999) and Dulebohn et al. (2012) to conduct research on these areas and provides important insights into theory, which focuses on work values, LMX and work outcomes and on the mediating role of LMX.

Overall, the results suggest that the leader's fulfillment of the employee's work values (S-V fit) improves LMX quality leading to higher employee job satisfaction, task performance and OCB where the quality of the LMX relationship plays a more important role for the employee's reciprocation in relation to task performance and OCB than to job satisfaction.

## 5.1. Practical implications

The findings of the study have several important practical implications for employees and leaders. First, our results show that organizations can increase their employees' performance by ensuring that leaders fulfill their employees' work values. While LMX generally increases as the leader fulfills the employee's work values the findings also show that the leader can supply too much depending on the work value. Employees and leaders may, thus, need to become more aware of the importance of S-V fit via work value awareness training. Second, in research it has been argued that values can change over time (Jin & Rounds, 2012) and LMX training has shown to be effective for improving leader-employee relationships, job satisfaction and productivity (Scandura & Graen, 1984). The training could include increased interaction between the leader and the employee, which can reduce the psychological distance between the two parties and improve their relationship (Martinko & Gardner, 1987). Such programs can affect the leader's fulfillment of the employee's work values and lead to high quality leader-employee relationships and positive work outcomes. Based on this and the impact of S-V fit on LMX, it is suggested that leadership and management training programs could benefit from focusing on learning about employees' and leaders' values in general. Furthermore, we suggest that S-V fit should be evaluated as part of performance appraisals as lack of fulfillment of employees' work values (e.g., influence and authority and access to information and training) may negatively affect employees' task performance. When employees feel they are not enabled by the leader, they may not be able to achieve the set goals. Similarly, fulfillment of employees' work values (e.g., interesting and challenging work) may be important in relation to career development as lack of challenging work may reduce employees' opportunities for demonstrating their abilities and progressing in the organization.

## 5.2. Study strengths, potential limitations and future directions of research

There are a number of research strengths and potential limitations of the study. First, a key strength of the study is the use of data collected at two time points, six months apart, in line with prior research within the leadership field (e.g., Kelloway, Gottlieb, & Barham, 1999). This reduced common method bias concerns (Podsakoff, MacKenzie, Jeong-Yeon, & Podsakoff, 2003). Results from the analyses indicate evidence for the effects of S-V fit on LMX and work outcomes. While the study did not use a longitudinal design, our two-wave approach still responds to the call by Dulebohn et al. (2012) and Martin, Guillaume, Thomas, Lee, and Epitropaki (2016) for more research on LMX using longitudinal data by measuring independent and dependent variables at different points in time. Second, an important strength of the study is the use of multi-source data. By using employee ratings of employee values, leader supplies, LMX, and job satisfaction, and leader ratings of employee task

performance and OCB, the study reduces the risk of common source method variance (Podsakoff & Organ, 1986). Third, an important strength is the use of an indirect measure of congruence. As a result, our study avoids problems associated with direct measures of congruence, which prime the respondent to calculate a difference (Edwards, 1991) and therefore have a higher risk of common method, single-source bias (Kristof-Brown & Jansen, 2007). Fourth, a key strength lies in the use of polynomial regression analysis as recommended by (Edwards, 1993; Edwards, 1994). Much research on congruence and LMX have generally used difference scores (e.g., Ashkanasy & O'Connor, 1997; Dose, 1999), which has been highly criticized by Edwards (1994) as difference scores confound the effects of the components. By using polynomial regression analysis combined with response surface methodology (e.g., Edwards & Rothbard, 1999) and block variables (e.g., Edwards & Cable, 2009), we found support for the argument that S-V fit is positively related to LMX. Related to this, it should be noted that the block variable approach has not been used before in research on values and LMX and, in fact, only a few studies (e.g., Edwards & Cable, 2009; Zhang, Wang, & Shi, 2012) have used the polynomial regression analysis and block variable approach as specified by Edwards and Cable (2009).

Despite the significant contributions provided by the study and the strengths of the research, the current study like others in this area is not without potential limitations, which should be taken into account when interpreting the empirical findings. First, based on the central position of the leader (Lord & Brown, 2001) we examined the leader's role and not the organization's role with respect to the fulfillment of the employee's work values. However, as leaders' control of incentives and resources may vary (Sherman, 2002) the leader might not control availability of all resources, activities and conditions that are related to fulfillment of employees' work values. Thus, while the leader is an important representative of the organization it can also be argued that fulfillment of employees' work

values can happen from other organizational sources, such as the HR department. Consequently, it would be relevant to take the leader's control of resources into account when examining leaders' fulfillment of employees' work values. Second, while we generally found that the leader cannot supply too much to the employee it should be noted that the results may have been different if we had examined different work values or used another work value scale than the one by Lyons et al. (2010). Furthermore, while work value measures such as the MIQ (Gay et al., 1971), the WAPS (Pryor, 1981) and the Work Values Survey (Lyons et al., 2010) were developed based on data from people living in the US, Australia and Canada, respectively, our research is based on employees working in Denmark. As research by Hofstede (1984) on national culture patterns shows that the national culture of the US, Australia, Canada and Denmark are similar with regard to individualism and power distance we would expect to find a similar pattern for work values. Thus concerns about comparing our results with existing research due to cultural differences are reduced in this study. Finally, our research did not address the reciprocal relations between S-V fit and LMX. We proposed and examined a uni-directional relationship between S-V fit and LMX. However, it is possible that the relationships are bi-directional and that employees with a good relationship with their manager may perceive higher fulfillment of their values by the leader. This is a question future research can address.

The present study has generally provided a solid foundation for future research on S-V fit, LMX and work outcomes. First, it is recommended that future research measures S-V fit, LMX and work outcomes at multiple time points in order to get better support for the causal direction of the hypothesized relationships between S-V fit and LMX. Second, while our study offered significant insights on employee-centric S-V fit as it examined employee perceptions, future research can also examine leaders' perceptions when examining S-V fit. Polynomial regression analyses could be utilized to explore leaders' perceptions of S-V fit

and its impact on LMX quality. Such an approach could further reduce common method variance (Kristof-Brown et al., 2005). Third, as this research used the uni-dimensional LMX-7 scale it would be relevant to use a multi-dimensional scale in future research (e.g., LMX-MDM, Liden & Maslyn, 1998) as it would be possible to examine whether S-V fit is related to specific LMX dimensions. Fourth, while the study examined individual and organizational-targeted OCB and found that LMX was positively related to these two types of OCB it is likely that LMX may also affect leader-targeted OCB (van Dyne, Kamdar, & Joireman, 2008) suggesting a need for future research to examine this.

Fifth, as researchers in the LMX field have highlighted the need for examining potential moderators of the relationship between LMX antecedents and LMX (Martin et al., 2010), it would be relevant to examine whether potential moderator variables would be able to better explain the conditions where S-V fit would be more strongly related to LMX. In leadership research it has been argued that transactional leaders focus on fulfillment of what employees currently values (Ergeneli, Gohar, & Temirbekova, 2007) and transformational leaders are more visionary and focus on expanding and influencing the employees' work values (Jung & Avolio, 2000). Based on this it is likely that employees will experience a different S-V fit depending on the whether the leader is a transactional or transformational leader. Thus, it is possible that transactional and transformational leadership moderate the relationship between S-V fit and LMX. It is also possible that the employee's personality will moderate the relationship. As proactive people possess a behavioral tendency to take initiative to improve the environment (Crant, 2000) it is likely that they will take action if they experience that their work values are not fulfilled by the leader. This could be done by increasing their interaction with the employer to discuss the situation to better align values and supplies suggesting that proactive personality may moderate the relationship between S-V fit and LMX.

Overall, the current study demonstrates the importance of the leader's fulfillment of the employee's work values (S-V fit) for the quality of leader-employee relationships and employee attitudinal and performance outcomes. Our findings suggest that it is important to examine complementary person-supervisor fit for positive leader-employee relations and employee outcomes. Future research can follow this exciting path of research on LMX antecedents (e.g., Nahrgang & Seo, 2015) and further explore the joint effects of complementary and supplementary P-S fit variables on leadership dynamics and outcomes.

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Variables	Μ	SD	α	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Employee values (T1)								·			·						
1. Interesting and challenging work	5.92/5.96	0.67/0.62	.86/.84		.43	.50	.31	.30	.41	.24	.18	.10	.22	.23	.23	.09	.11
2. Influence and authority	5.11/5.21	1.07/0.98	.78/.72	.51		.21	.28	.00	.23	.48	.20	.06	.01	03	05	09	09
3. Access to information and training	5.94/5.95	0.75/0.72	.74/.73	.64	.33		.30	.28	.15	03	.28	.09	.24	.03	.07	08	.02
4. Salary and benefits	5.56/5.59	0.93/0.98	.69/.75	.20	.26	.25		.43	.04	04	.00	.08	.22	02	.03	02	.12
5. Social work environment	5.28/5.30	1.02/1.01	.68/.70	.29	.10	.23	.30		.13	08	01	.23	.55	.04	.24	04	.01
Leader supplies (T1)																	
6. Interesting and challenging work	5.28/5.42	0.94/0.83	.91/.89	.44	.30	.30	.04	.16		.68	.63	.51	.39	.45	.38	.17	.15
7. Influence and authority	4.70/4.81	1.23/1.22	.82/.82	.27	.51	.11	.04	.05	.70		.58	.33	.18	.36	.24	.09	.15
8. Access to information and training	5.25/5.38	1.04/0.93	.73/.65	.27	.20	.32	.08	.07	.73	.61		.31	.31	.44	.24	.10	.16
9. Salary and benefits	4.50/4.66	1.19/1.04	.70/.58	.11	.17	.17	.15	.21	.47	.46	.44		.41	.22	.29	.10	01
10. Social work environment	4.83/4.98	1.10/1.01	.72/.72	.21	.11	.17	.11	.52	.48	.34	.41	.44		.38	.48	.11	.10
11. LMX (T2)	3.76/3.91	0.67/0.61	.91/.90	.16	.05	.07	.11	.10	.49	.37	.48	.24	.38		.59	.33	.35
12. Job satisfaction (T2)	/6.18	/0.79	/.71													.21	.26
13. Leader-rated task performance (T2)	/6.08	/0.60	/.85														.61
14. Leader-rated OCB (T2)	/5.54	/0.77	/.87														

Table 1: Means, standard deviations, correlations, and reliabilities of variables

*Note.* Mean, Std. deviation and Cronbach's alpha ( $\alpha$ ) values for N = 316 and N = 140 are shown before and after /, respectively. Correlations for N = 316 and N = 140 are shown below and above the diagonal, respectively. For N = 316/140, Correlations equal to or greater than .11/.17 are significant at p < .05; correlations equal to or greater than .15/.22 are significant at p < .01; correlations equal to or greater than .20/.28 are significant at p < .001.

	Interesting	Influence and	Access to	Salary and	Social work	
	and	authority	information	benefits	environment	
	challenging		and training			
	work					
Constant: $b_0$ (se)	3.42*** (.14)	3.69*** (.06)	3.44*** (.13)	3.83*** (.08)	3.66*** (.06)	
LS: b <sub>1</sub> (se)	.55*** (.14)	.11* (.05)	.41*** (.11)	.08 (.06)	.30*** (.06)	
EV: b <sub>2</sub> (se)	20 (.19)	06 (.05)	06 (.13)	13 (.07)	04 (.06)	
$LS^{2}: b_{3} (se)$	.01 (.03)	.01 (.02)	.00 (.02)	.03 (.02)	03 (.03)	
LS*EV: $b_4$ (se)	09 (.07)	.11** (.03)	04 (.05)	.03 (.03)	00 (.04)	
$EV^2$ : b <sub>5</sub> (se)	.06 (.06)	05 (.03)	.00 (.04)	.00 (.03)	02 (.03)	
$R^2$	.24***	.19***	.23***	.07***	.15***	
Shape along the incongruence line						
Slope: b <sub>1</sub> . b <sub>2</sub>	75*	.16	.47*	.21*	.34**	
Curvature: b <sub>3-</sub> b <sub>4+</sub> b <sub>5</sub>	.15	15*	.05	.00	05	
Shape along the congruence line						
Slope: b <sub>1+</sub> b <sub>2</sub>	.34*	.05	.36*	05	.26***	
Curvature: b <sub>3+</sub> b <sub>4+</sub> b <sub>5</sub>	02	.07**	03	.06	05	

Table 2: The relationship between employee values, leader supplies and LMX

*Note.* N = 316. EV = Employee values, LS = Leader supplies. b = unstandardized regression coefficients for LS, EV, LS<sup>2</sup>, LS\*EV, and EV<sup>2</sup>. se = standard error.

\* p < .05; \*\* p < .01; \*\*\* p < .001.

Table 3: Effects relating S-V	fit and LMX to work outcomes
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Effects	Interesting and challenging work	Influence and authority	Access to information and training	Salary and benefits	Social work environment	Average
Effect of S-V fit on LMX (A)	.48** (.50, 1.59)	.47** (.57, 1.50)	.49** (.50, 1.68)	.26** (.13, 1.85)	.45** (.40, 1.70)	.43** (55, 1.48)
Effect of LMX on job satisfaction (B)	.51** (.34, 1.08)	.58** (.40, 1.15)	.58** (.42, 1.13)	.52** (.35, 1.06)	.45** (.28, .91)	.53** (.37, 1.06)
Effect of LMX on task performance (B)	.33** (.05, .53)	.35** (.08, .56)	.33** (.07, .54)	.31** (.04, .53)	.32** (.06, .51)	.33** (.07, .53)
Effect of LMX on OCB (B)	.36** (.19, .79)	.31** (.12, .72)	.36** (.18, .77)	.37** (.20, .79)	.37** (.19, .82)	.35** (.19, .79)
Effect of S-V fit on job satisfaction (C')	.13 (06, 2.29)	.14 (06, 2.15)	.18* (.12, 1.80)	.16* (.25, 1.97)	.37** (.56, 1.43)	.20** (.48, 1.71)
Effect of S-V fit on task performance (C')	.08 (-1.00, 2.45)	.15 (05, 2.08)	.15 (13, 2.41)	.11 (21, 2.08)	.15* (.20, 2.12)	.13** (.35, 1.76)
Effect of S-V fit on OCB (C')	.11 (36, 2.32)	.13 (45, 2.26)	.09 (88, 2.62)	.18* (.12, 1.87)	.08 (84, 2.51)	.12** (.27, 1.75)
Indirect effect of S-V fit on job satisfaction (AB)	.24** (.26, 1.36)	.27** (.35, 1.47)	.28** (.33, 1.55)	.13** (.07, 1.80)	.20** (.19, 1.38)	.23** (.27, 1.37)
Indirect effect of S-V fit on task performance (AB)	.16** (.05, .64)	.16** (.08, .67)	.16** (.07, .68)	.08** (.03, .85)	.14** (.06, .70)	.14** (.06, .65)
Indirect effect of S-V fit on OCB (AB)	.17** (.19, .85)	.14** (.12, .78)	.18** (.17, .88)	.10** (.05, 1.08)	.16** (.17, 1.00)	.15** (.16, .86)
Total effect of S-V fit on job satisfaction (AB+C')	.37** (.18, 3.52)	.41** (.16, 3.39)	.46** (.44, 3.16)	.29** (.56, 3.50)	.56** (.99, 2.51)	.42** (.94, 2.78)
Total effect of S-V fit on task performance (AB+C')	.24 (61, 2.80)	.31* (.27, 2.48)	.32* (.13, 2.87)	.19* (.11, 2.47)	.29** (.19, 2.77)	.27** (.61, 2.18)
Total effect of S-V fit on OCB (AB+C')	.29 (02, 2.87)	.28* (.02, 2.61)	.27 (57, 3.00)	.28** (.19, 2.81)	.25 (41, 3.12)	.27** (.46, 2.54)

*Note.* N = 140. LMX = Leader-member exchange; OCB = Organizational citizenship behavior. Standardized regression coefficients are reported. Confidence intervals are shown in parentheses. For nonsignificant effects the 95% confidence interval is shown.

\* *p* < .05; \*\* *p* < .01.

## Appendix A

We used a 14-item scale based on the 32 work value items from Lyons et al. (2010), which is based on a review of 13 existing work value scales such as the Work Values Inventory by Super (1970), the Minnesota Importance Questionnaire by Gay et al. (1971) and the Work Aspect Preference Scale by Pryor (1981). As this research explores how separate work value factors are related to LMX, we focused on work value factors that were distinct. However, Lyons et al. (2010) examined their 32-item work valued using smallest space analysis, which places items into regions depending on the similarity indices and is not designed to yield a factor model, and as the item groupings from the smallest space analysis are not factors they would not be suited to specify a factor model for a confirmatory factor analysis (CFA). Based on this, we set out to examine the factor structure of the work value items using exploratory factor analysis (EFA) and CFA.

In order to identify the structure of the 32 work value items from Lyons et al. (2010) we sent invitation e-mails to 1,460 employees from a manufacturing company in the UK and asked them to evaluate their work values. 167 employees completed the questionnaire yielding a response rate of 11.44%. The demographic characteristics of this sample were relatively similar to the sample in this study. More information about this sample can be provided upon request from the first author. We asked the 167 UK employees to evaluate how important the 32 work values were for them and afterwards we conducted EFA on the data to identify the underlying structure of the 32-item work value scale. Using varimax rotation Barlett's Test of Sphericity was 886.55 (df =120) and significant at p < .001. Kaiser-Meyer-Olkin Measure of Sampling Adequacy (MSA) was .78. Based on .50 cut-off points, 16 of the 32 items were removed and five factors with eigenvalues above 1.00 were obtained. The remaining 16 items had loadings larger than .60, and the five factors explained 65.55% of the total variance. Reliability estimates for the dimensions averaged .72.

Based on this, we applied CFA on employee values and leader supplies items from the 316 Danish employees to confirm the five dimensions. Two items were removed to increase the reliability of two of the factors. For employee values and leader supplies we ran separate analyses and compared a hypothesized model with alternative models. For example in the hypothesized model for employee values, items load on five correlated employee values factors with uncorrelated measurement error terms. The alternative model 1 has no relationship between the five employee values factors, for the alternative model 2 all employee values items load on one factor and the alternative model 3 is the null model with no relationships between items. For employee values the hypothesized model provided a good fit to the data with the following fit indices:  $\chi^2(67, N = 316) = 90.31$  (p < .001),  $\chi^2/df =$ 1.35, CFI = .99, NNFI = .99, RMSEA = .03. For leader supplies the hypothesized model also provided a good fit to the data with the following fit indices:  $\chi^2(67, N = 316) = 162.08$  (p < .001),  $\chi 2/df = 2.42$ , CFI = .98, NNFI = .97, RMSEA = .07. For both employee values and leader supplies, CFAs also showed that the hypothesized model fitted the data better than all of the three alternative models. Furthermore, significant Chi-square differences were found showing that the less restrictive hypothesized model provided a better fit to the data (The scale development is beyond the scope of this manuscript and full analyses can be provided upon request from the first author). As we measured employee values and leader supplies using the same item roots we conducted CFAs to examine whether the items tapped different constructs. In model 1, employee values items loaded on their respective five employee values factors, and leader supplies items loaded on their respective five leader supplies factors. The 10 factors were correlated. In model 2, items from the same employee values and leader supplies factor dimension loaded on one factor. The five factors were correlated. The results showed that model 1 provided a good fit to the data with the following fit indices:  $\chi^2(305, N = 316) = 589.79 \text{ (p} < .001), \chi^2/df = 1.93, \text{CFI} = .97, \text{NNFI} = .96, \text{RMSEA} = .05.$  Model 2 demonstrated a very poor fit to the data with fit indices as follows:  $\chi^2(340 N = 316)$ = 3018.99 (p < .001),  $\chi^2/df$  = 8.88, CFI = .72, NNFI = .68, RMSEA = .16. The significant  $\Delta\chi^2$  also showed that the less restrictive model 1, with its higher number of free parameters, provided a better fit to the data ( $\Delta\chi^2 = 2429.20$ ,  $\Delta df = 35$ , p < .001), which indicates that employee values and leader supplies measure different constructs.



Figure 1: Hypothesized model of the relationships between supplies-values fit, LMX and work outcomes.



Figure 2: Response surface relating LMX to employee values and leader supplies for interesting and challenging work.



Figure 3: Response surface relating LMX to employee values and leader supplies for influence and authority.



Figure 4: Response surface relating LMX to employee values and leader supplies for access to information and training.



Figure 5: Response surface relating LMX to employee values and leader supplies for salary and benefits.



Figure 6: Response surface relating LMX to employee values and leader supplies for social work environment.