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The Impact of the Quality of a Relationship with Supervisors on Employee Work Attitude and Behaviors

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THE IMPACT OF THE QUALITY OF A RELATIONSHIP WITH
SUPERVISORS ON EMPLOYEE WORK ATTITUDES AND BEHAVIORS

A Thesis

Presented to

The Faculty of the Department of Psychology

San José State University

In Partial Fulfillment

of the Requirement for the Degree

Master of Science

By

Dylan Gilstein

August 2019

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The Designated Thesis Committee Approves the Thesis Titled

THE IMPACT OF THE QUALITY OF RELATIONSHIP WITH SUPERVISORS
ON EMPLOYEE WORK ATTITUDES AND BEHAVIORS

by

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ABSTRACT

THE IMPACT OF THE QUALITY OF A RELATIONSHIP WITH SUPERVISORS ON EMPLOYEE WORK ATTITUDE AND BEHAVIORS

By Dylan Gilstein

It has been shown that leader member exchange (LMX) relationships are related positively to subjective career success and negatively to counterproductive work behaviors (CWBs). However, few studies have examined the possible mediators of these relationships. The present study proposed that need satisfaction and intrinsic motivation would mediate the relationship between LMX and both outcomes. It was hypothesized that high-quality leadership relationships would satisfy employees' psychological needs and intrinsically motivate them which, in turn, would lead them to perceive themselves as more successful in their careers and to engage in fewer CWBs. Using data from 160 participants from an online survey, results showed that the satisfaction of the need for autonomy and relatedness and intrinsic motivation mediated the relationship between LMX and subjective career success. Results also showed that the satisfaction of the need for competence mediated the relationship between LMX and subjective career success and that the satisfaction for the need for relatedness mediated the relationship between LMX and CWBs. Results of the study contribute to the current literature by better understanding the underlying mechanism of why high LMX leads to positive individual and organizational outcomes. It is recommended that organizations train leaders to develop high-quality relationships with their followers and develop effective methods for satisfying the needs of their followers.

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To my Mother...Although you may not have a chance to read this, your impact on my life cannot be measured. I miss you every day and hope to be achieving the heights you always imagined possible for me. I send you my love, my warmest thoughts, and my memories.

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Introduction

Leaders play important roles in organizations. For example, they help guide employees to achieve the goals and mission of the organization. They also provide support to employees, which helps to increase their capabilities within the workplace. Leaders can motivate employees by providing feedback, job discretion, and strong interpersonal relationships they can depend on (Martin, Guillaume, Thomas, Lee, & Epitropaki, 2016). The relationships leaders have with their subordinates can influence subordinates' ability to perform their work by utilizing the resources a leader can provide (Kim, Liu, & Diefendorff, 2015).

The quality of the exchange relationship between leaders and their subordinates is known as Leader-Membership Exchange (LMX). According to Dansereau, Graen, and Haga (1975), leaders differentiate their subordinates into two groups, an in-group and an out-group, and form strong interpersonal relationships with in-group members but more formal professional relationships with out-group members. In other words, leaders develop leadership exchange relationships (interpersonal influence without authority) with a select subset of their members (i.e., in-group) and develop supervision relationships (influence based primarily upon their authority) with other members (i.e., out-group).

LMX theory proposes that subordinates who have positive interpersonal relationships with their leaders will experience high-quality LMX relationships, which lead to positive organizational outcomes such as increased organizational citizenship behaviors (Ilies, Nahrgang, & Morgeson, 2007), reduced counterproductive behaviors (CWBS) (Jawahar,

Schreurs, & Mohammed, 2018), and reduced turnover intentions (Gerstner & Day, 1997). There are also positive individual outcomes from high-quality LMX relationships, including increased career commitment (Kang, Stewart, & Kim, 2011), improved subjective career success (Raghuram, Gajendran, Liu, & Somaya, 2017), and higher levels of work involvement (Atwater & Carmeli, 2009).

Although high-quality LMX has been linked to many positive outcomes, not much is known about the underlying mechanisms of such relationships. Researchers have tested motivation as a mediator of the relationship between LMX and outcomes (creativity and work performance) (Martin et al., 2016; Meng, Tan, & Li, 2017), whereas others have found empowerment mediated the relationship between LMX and creativity (Pan, Sun, & Chow, 2012). In addition, Graves and Luciano (2013) developed a model that included need satisfaction and intrinsic motivation as mediators of the relationship between LMX relationships and several outcomes (job satisfaction, vitality, and organizational commitment). Need satisfaction is defined as the satisfaction of an individual's basic psychological needs (i.e., competence, autonomy, and relatedness). Intrinsic motivation is defined as when one engages in an activity for its inherent value. According to Graves and Luciano, as employees with high-quality LMX relationships work closely with their leaders, and leaders provide encouragement, support, and information, employees' psychological needs are likely to be satisfied, which then motivates them intrinsically and eventually leads to positive outcomes such as increased job satisfaction and organizational commitment. Their results supported this model.

Martin et al. (2016) argued that the relationship between LMX and work performance (i.e., task performance, citizenship performance, and counterproductive behavior) would also be mediated by motivation due to leaders' support of an individual's experience of the three components of need satisfaction (autonomy, competence, and relatedness). Although they did not explicitly examine need satisfaction as a mediator, they implied that need satisfaction led to motivation. In their meta-analysis, they found that motivation mediated the relationships between LMX and two forms of work performance: task and citizenship performance. However, because there were not enough studies which examined counterproductive work behaviors, it is unclear whether motivation would also mediate the relationships between LMX and counterproductive work behaviors.

In line with Graves and Luciano's (2013) and Martin et al.'s (2016) arguments, this study proposes that need satisfaction and intrinsic motivation act as mediators of the relationship between LMX and other outcomes. Thus, the purpose of the present study is to examine whether need satisfaction and intrinsic motivation mediate the relationship between LMX and two important outcomes for individuals and organizations, namely subjective career success and counterproductive work behaviors. The following sections describe LMX theory, review literature on consequences of LMX, discuss need satisfaction and intrinsic motivation as mediators of the relationships between LMX and several outcomes, and present the hypotheses which were tested.

Leader-Member Exchange Theory (LMX)

LMX has been studied extensively for more than 40 years and has focused on the dyadic nature of the relationship between a leader and a subordinate along with its

organizational implications (Dansereau et al., 1975). LMX developed from an earlier model, known as Vertical Dyad Linkage (VDL), which identified the dyadic relationship between leaders and their direct reports and suggested that direct reports could experience high-quality exchanges (“in-group”) or low-quality exchanges (“out-group”) with their leader (Graen & Uhl-Bien, 1995). According to VDL, individuals in the in-group receive more responsibilities and greater access to the leader’s resources, whereas those in the out-group have a more formal relationship with the leader with less leader attention and support (Dansereau et al., 1975).

Whereas VDL focused on identifying the dyadic relationship between leaders and members, LMX began to investigate the implications of this relationship for organizations and the characteristics of these relationships (Dansereau et al., 1975). Thus, further research was conducted to understand the characteristics of this relationship and to analyze the relationship between LMX and organizational outcomes, such as turnover and performance (Graen & Uhl-Bien, 1995).

Employees who are a part of the in-group develop an exchange relationship with their supervisor based on influence without the needed use of authority. Employees within the in-group experience a high level of mutual trust, respect, and obligation with the leader and are treated as trusted assistants whose responsibilities can outgrow their original job role. High-quality LMX relationships develop through social interactions due to increased resource sharing, which leads to ‘mature’ partnerships between the leader and subordinate (Graen & Uhl-Bien, 1995). The subordinates in these relationships may

experience higher levels of positive outcomes through their work, interpersonal relationships with their leader, and increased job performance.

Employees within the out-group develop an authority-focused relationship with their supervisors and are considered hired helpers who handle what is expected within their job responsibilities (Graen & Uhl-Bien, 1995). These employees experience lower levels of trust, respect, and obligations and may receive reduced leader support and fewer social exchanges. These low-quality LMX relationships limit the resources and opportunities offered to subordinates by their leaders and can lead to limited growth or development and an increased chance for turnover. Therefore, improving LMX relationships helps avoid negative outcomes (Meng et al., 2017; Townsend, Phillips, & Elkins, 2000) and increases positive outcomes (Gerstner & Day, 1997; Lu & Sun, 2017).

Consequences of LMX

As mentioned earlier, research has been conducted which investigated consequences associated with LMX relationships within organizations. These consequences can be separated into individual and organizational outcomes.

Individual outcomes. Employees can benefit on an individual level from high-quality LMX relationships through the resources they gain from leaders, such as supervisor support. For example, Atwater and Carmelli (2009) found that high-quality LMX increased an employee's levels of energy through the support and engagement they received from his or her leader. Their findings indicate that having strong interpersonal connections between leaders and followers generates energy and vigor in the followers' work.

Lu and Sun (2017) also found that employees who experienced high-quality LMX relationships with their leaders experienced greater levels of motivation towards completing their work. When leaders valued employee's contributions, created effective communication, and provided beneficial feedback, employees became more enthusiastic and involved in their work (Atwater & Carmelli, 2009). This increased involvement led to an increased effort towards their work (Lu & Sun, 2017), which led to increased individual job performance. Other individual outcomes associated with high-quality LMX relationships include better pay, higher job satisfaction (Gerstner & Day, 1997), higher levels of creativity (Atwater & Carmeli, 2009), higher career satisfaction (Han, 2010), higher levels of career commitment (Kang et al., 2011), and higher levels of empowerment (Audenaert, Vanderstraeten, & Buyens 2017; Chen, Kirkman, Kanfer, Allen, & Rosen, 2007).

One important individual outcome that needs to be studied is subjective career success. Subjective career success is defined as an individual's subjective evaluation of factors such as career satisfaction, job satisfaction, and opportunities to achieve goals and expectations (Park, Kang, Lee, & Kim, 2017). Individuals aim to improve their subjective career success through where they work, who they work with, and the actions they take to improve their situation. Subjective career success is vital to employees and organizations as employees who experience higher subjective career success are more driven to advance in their organization (Ng, Eby, Sorensen, & Feldman, 2005). Subjective career success can also lead to important outcomes for both individuals and organizations, including reduced turnover (Spurk, Hirschi, & Dries, 2019).

Employees who experience lower levels of career success may struggle with work-life balance and experience a lower sense of identity within the organization and lower levels of job satisfaction (Heslin 2005). These issues can impact employees' work performance and reduce their efficiency within their occupation. Building a strong interpersonal relationship based on trust can lead to an employee having more attention and support from his or her leader, which leads to an increased number of opportunities and greater integration into the leader's network (Park et al., 2017). By expanding their resources, employees can obtain greater levels of subjective career success.

Studies have shown that high-quality LMX relationships can increase employees' subjective career success (Zhao, Gu, & Zhao, 2017). This may be due to how leaders support their employees' sense of competence and meaning in their work (Park et al., 2017). Employees who perceive their contributions to decision-making as valued and have control over their career paths can experience higher levels of subjective career success (Breland, Treadway, Duke, & Adams, 2007). Breland et al. (2007) examined the interaction between the quality of LMX relationship employees had with their leader and their political skill on their subjective career success. Political skill was defined as the ability to interact with others to enhance one's own outcomes. Their results showed that LMX relationships were positively related to subjective career success and this positive relationship was stronger for those with lower levels of political skill than for those with higher levels of political skill. Overall, these findings indicate that increasing the quality of LMX relationships employees have with leaders can increase their individual outcomes.

Organizational outcomes. Research has also found that high-quality LMX relationships can benefit organizations. For example, Gerstner and Day (1997) conducted a meta-analysis to examine the relationships between LMX and several outcomes including organizational commitment, turnover intentions, and job performance. Results showed that employees who experienced high-quality LMX relationships showed increased levels of organizational commitment and job performance and reduced levels of turnover intentions.

Other studies have also shown that higher quality LMX relationships lead to increased organizational commitment (Kang et al., 2011) and more frequent organizational citizenship behaviors (Ilies et al., 2007). These findings indicate that by receiving support, confidence, and encouragement from their leaders, employees experience higher levels of satisfaction towards their leaders and feel obligated to reciprocate in the form of organizational commitment and organizational citizenship behavior (Kang et al., 2011).

In contrast, employees who experience inadequate exchange relationships with their leaders may engage in a negative reciprocity by acting out against the organization. Townsend et al. (2000) examined how low-quality LMX relationships influence employee retaliation behaviors taken in response to perceived mistreatment. Results showed that employees who experienced low-quality LMX relationships engaged in more retaliatory behaviors towards their leaders and the organization. When employees experience poor relationships with leaders or receive less support and communication

than members with high-LMX relationships, such employees are more likely to retaliate against the organization.

Similar to retaliatory behaviors, counterproductive behaviors are harmful to an organization and its employees. Counterproductive work behaviors (CWBs) are behaviors that are intended to hurt the organization or other members of the organization (Specter & Fox 2002). These include acts such as avoiding work, physical aggression, sabotage, theft, doing tasks incorrectly, and hostile insults. Some of these acts may be directed at those around them, such as aggression, whereas others are targeted at the organization, such as doing tasks incorrectly. CWBs can be harmful to organizations (Sackett 2002) such that employees who engage in CWBs can end up costing organizations billions of dollars (Robinson & Bennett 1995).

The relationships employees have with their leaders can reduce the occurrence of CWBs as leaders can act as a job-based resource for employees to counteract experienced stress and pressure and as a good role-model (Lebron, Tabak, Shkoler, & Rabenu, 2018). Employees who receive job resources from their leaders are likely to become more engaged in their work through this support and demonstrate fewer CWBs. This is what Lebron et al. (2018) found when they examined the relationship between LMX and CWBs as mediated by work engagement and emotional exhaustion. They found that employees with high-quality LMX relationships experienced high levels of work engagement and lower levels of emotional exhaustion, which, in turn reduced how frequently these employees engaged in CWBs. Employees engage in workplace deviance when there is a need to 'restore the balance' due to a low level of support and resources

from their supervisors and their organization (Akremi, Vandenberghe, & Camerman, 2010). Employees who are treated unfavorably by their leaders are likely to question their competence in their work and to act against their leader (Jawahar et al., 2018). Leaders can influence employees' needs and reduce the negative behaviors they engage in by creating positive exchange relationships (Lebron et al., 2018).

Although research has shown that high-quality LMX leads to increased positive outcomes and reduced negative outcomes for both individuals and organizations, little attention has been paid to examine the mechanisms underlying the relationships between LMX and these outcomes. As mentioned earlier, Graves and Luciano (2013) posited that high-quality LMX relationships would fulfill psychological needs of employees, which leads to motivation, which then leads to positive outcomes. In other words, they assert that the potential reason why high-quality LMX relationships lead to positive outcomes is that leaders satisfy basic psychological needs of their employees and consequently they become motivated. The following section describes these mediators and explains how high-quality LMX relationships influence these mediators.

Need Satisfaction and Intrinsic Motivation as Mediators

Need satisfaction. Self-Determination Theory (Graves & Luciano, 2013) focuses on the dynamics of self-determined behavior and describes the main conditions and processes that facilitate this behavior. This theory proposes that individuals are motivated based on the satisfaction of their psychological needs as they work towards valued outcomes (Deci & Ryan 2000).

Within need satisfaction, three needs are important in fostering ongoing psychological growth and well-being: competence, autonomy, and relatedness. The need for competence is the desire to obtain preferred outcomes and influence one's environment (Deci & Ryan 2000). The need for autonomy refers to how individuals identify themselves as initiators of their own actions or when they act with a sense of freedom of choice. Although individuals can take responsibility for actions initiated by others, autonomy is when a person identifies an action as being his or her own (Deci & Ryan 2000). The need for relatedness is the fundamental desire for close ties with others through secure and satisfying interpersonal connections, which include reciprocal respect, caring, and reliability (Deci & Ryan 2000).

Need satisfaction is an important factor when considering the optimal state of an employee (Deci & Ryan 2000). Employees who experience high-quality LMX relationships with their leader are encouraged by their leader and share in resources provided by their leader. With these opportunities, employees can become more competent in their work and can enhance their performance, leading to a cycle of leader delegation and further performance enhancement. By working closely with their leader, employees can develop their capabilities, sense of personal choice, and the sense of being valued by the leader and the organization (Graves & Luciano 2013). As leaders satisfy the psychological needs of their followers, employees find greater meaning in their work as their effort is considered valued, which intrinsically motivates employees.

Aside from Graves and Luciano (2013), research has not looked at need satisfaction directly as a mediator of the relationship between LMX and outcomes. However, several

studies have looked at need satisfaction indirectly through a similar construct known as psychological empowerment, a multidimensional concept consisting of impact, competence, meaningfulness, and choice (Audenaert et al., 2017; Chen et al., 2007; Pan et al., 2012). Both need satisfaction and empowerment outline how providing support and resources to employees gives greater meaning to their work and provides a sense of competence, autonomy, and a strong relationship with their leader (Graves & Luciano, 2013; Pan et al., 2012). For example, Audenaert et al. (2017) examined psychological empowerment as a mediator of the relationship between LMX and well-being and found that employees with high-quality LMX relationships were psychologically empowered, which was then related to well-being. Other studies have found psychological empowerment mediated the relationship between LMX and other outcomes such as creativity (Pan et al., 2012) and engagement (Villiers & Stander, 2011).

When an individual's needs are satisfied, they may become motivated to put in greater effort as they consider their work to be valuable. As employees' needs are satisfied, they find greater value in their work through the autonomy, competence, and encouragement they receive from their supervisor (Graves & Luciano, 2013). Employees who find this inherent value in their work are intrinsically motivated to engage in work-related activities (Martin et al., 2016).

Intrinsic motivation. Intrinsic motivation is a motivational state in which an individual is driven by his or her interest in work and engages in it for the sake of the work itself (Ryan & Deci, 2000). Employees who are intrinsically motivated find their work inherently valuable, interesting, and enjoyable. When intrinsically motivated,

employees focus their interest on their work and apply their highest levels of effort (Kuvaas, Buch, Weibel, Dysvik, & Nerstad 2017).

Intrinsic motivation has been shown to lead to several positive outcomes, such as increased idea submission (Saether & Saetre, 2017), increased job satisfaction with decreased anxiety (Gillet, Fouquereau, Lafreniere, & Huyghebaert, 2016), and increased effort and engagement (Gillet, Morin, & Reeve 2017). When employees experience high levels of support from leaders, they become motivated by the work they are doing and experience higher levels of positive outcomes, such as higher performance and reduced levels of burnout (Kuvaas et al., 2017).

There is evidence that intrinsic motivation serves as a mediator of the relationship between LMX and outcomes. For example, Meng et al. (2017) found that low-quality LMX relationships were mediated by intrinsic motivation to influence creativity. Results showed that employees who experienced low-quality relationships with leaders experienced lower levels of intrinsic motivation toward their work and, in turn, showed lower levels of creativity. As employees received low levels of support and encouragement, they felt a reduced value in their work and demonstrated less creativity.

Graves and Luciano (2013) conducted a study that examined need satisfaction and autonomous motivation, which is a combination of intrinsic and identified motivation that occurs when one pursues an activity because it aligns with one's identity or values, as mediators of the relationship between LMX and three positive outcomes: vitality (positive feelings of aliveness and energy at work), job satisfaction, and affective organizational commitment. Their results showed that employees in high-quality LMX

relationships felt their three psychological needs were satisfied and were more intrinsically motivated in their work, which led to increases in vitality, job satisfaction, and affective organizational commitment. The researchers argued that leaders who provided resources (i.e., access to social networks, greater control over meaningful decisions, and opportunities to work independently) supported their employees' development and satisfied their psychological needs. These resources intrinsically motivated employees and they, in turn, reciprocated favorable treatment from their leader in the form of increased vitality, job satisfaction, and affective organizational commitment.

Martin et al. (2016) conducted a meta-analysis which examined whether motivation mediated the relationship between LMX and different forms of performance (i.e., task, extra-role, and counterproductive). Although they described the components of need satisfaction as being factors of motivation, they did not directly examine need satisfaction as a mediator of the relationship between LMX and motivation. However, they implied that need satisfaction was a precursor to motivation. Their results showed that motivation mediated the relationship between LMX and task performance and extra-role behavior, such that higher quality relationships with leaders led employees to become motivated, which then led them to perform better on tasks and higher engagement in extra-role behaviors.

Although research has shown high-quality LMX leads to higher levels of subjective career success and reduced occurrences of CWBs, the underlying mechanisms that lead to these changes in subjective career success and CWBs have not been clearly identified.

Need satisfaction and intrinsic motivation can provide a possible explanation of this mechanism. Subordinates whose needs are satisfied through the support and resources provided by their leaders are likely to experience growth and development, which intrinsically motivates them (Luciano & Graves, 2013). Employees receiving this support become intrinsically motivated to perform more effectively because they have the ability to engage in meaningful work that can influence positive organizational outcomes (Chen et al., 2007). Through this motivation, employees find inherent value in their work and engage in positive reciprocity with their leaders (Jawahar et al., 2018). With this inherent value and positive reciprocity, employees should experience a greater level of subjective career success (Park et al., 2017), and have fewer reasons to engage in CWBs (Akremi et al., 2010). Figure 1 describes the relationships between LMX and subjective career success and counterproductive behavior as mediated by need satisfaction and intrinsic motivation. The following hypotheses are tested:

Hypothesis 1a: Psychological need for competence and intrinsic motivation will mediate the relationship between LMX and subjective career success.

Hypothesis 1b: Psychological need for autonomy and intrinsic motivation will mediate the relationship between LMX and subjective career success.

Hypothesis 1c: Psychological need for relatedness and intrinsic motivation will mediate the relationship between LMX and subjective career success.

Hypothesis 2a: Psychological need for competence and intrinsic motivation will mediate the relationship between LMX and CWBs.

Hypothesis 2b: Psychological need for autonomy and intrinsic motivation will mediate the relationship between LMX and CWBs.

Hypothesis 2c: Psychological need for relatedness and intrinsic motivation will mediate the relationship between LMX and CWBs.

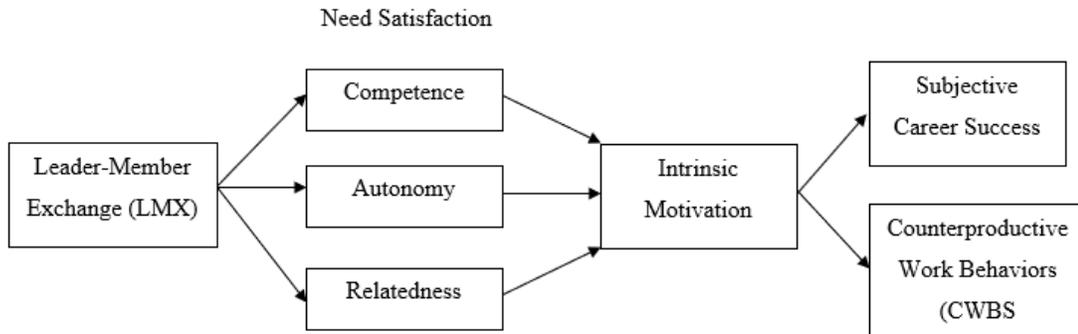


Figure 1. The three components of need satisfaction and intrinsic motivation as mediators of the relationship between LMX and subjective career success and CWBs.

Method

Participants

A total of 174 individuals participated in this study. Data were collected through an online survey. More than 600 individuals were invited through social networks (i.e. Facebook, LinkedIn, and Discord). Criteria for participation in the study were that participants needed to be at least 18 years of age and have worked under their supervisor for a minimum of 6 months. Participants with a substantial amount of missing data ($n = 14$) were excluded from further analyses. Therefore, the final sample consisted of 160 participants.

Demographic information of the sample is reported in Table 1. The sample consisted of 69.4% ($n = 111$) female, 28.8% ($n = 46$) male, 1.3% ($n = 2$) “Other”, and .6% ($n = 1$) transgender participants. More than half of the participants were under the age of 35, 47.5% ($n = 76$) between the ages of 25 and 34 years, 19.4% ($n = 31$) between the ages of 35-44 years, 11.9% ($n = 19$) between the ages of 45-54 years, and 10.6% ($n = 17$) between 18 and 24 years. In regards to ethnicity, the majority of participants ($n = 104$, 65.0%) identified as White, followed by 11.3% ($n = 18$) as multiple races, 8.8% ($n = 14$) as Latino/Latina, and 7.5% ($n = 12$) as Asian.

The length of the time participants reported working under their supervisor varied; 30.6% ($n = 49$) reported working for 1-2 years, followed by 25.6% ($n = 41$) working for 2-5 years, 18.1% ($n = 29$) working for 7 months to 1 year, 13.1% ($n = 21$) working for 6 months, 10 ($n = 6.3\%$) working for 5 to 10 years, and 6.3% ($n = 10$) working for 10 or more years.

In terms of the industry participants worked in, 48.1%, ($n = 77$) indicated that they worked in the profit industry, followed by 19.4% ($n = 31$) in non-profit, 12.5% ($n = 20$) in government, and 12.5% ($n = 20$) identified as other (12 participants did not report their industry).

Table 1

Demographic Information of the Sample (N = 160)

	Variable	<i>n</i>	%
Gender	Male	46	28.8%
	Female	111	69.4%
	Transgender	1	0.6%
	Other	2	1.3%
Age	18-24	17	10.6%
	25-34	76	47.5%
	35-44	31	19.4%
	45-54	19	11.9%
	55+	17	10.6%
Ethnicity	American Indian/Alaskan Native	2	1.3%
	Asian	12	7.5%
	Black/African American	6	3.8%
	Native Hawaiian/Other Pacific Islander	4	2.5%
	Latino/Latina	14	8.8%
	White	104	65.0%
	Multiple Races	18	11.3%
Length of Time Under Supervisor	6 months	21	13.1%
	7 months to 1 year	29	18.1%
	1 to 2 years	49	30.6%
	2 to 5 years	41	25.6%
	5 to 10 years	10	6.3%
	10 + years	10	6.3%
Industry	Profit	77	48.1%
	Non-Profit	31	19.4%
	Government	20	12.5%
	Other	20	12.5%

Procedure

Data were collected using the online survey Qualtrics. Participants were invited to participate in a survey that assessed their supervisor's leader behaviors, their work behaviors, and motivation. Participants were invited through two platforms: Facebook and LinkedIn. Approximately 15 individuals shared the survey with their networks, allowing for additional participants beyond my personal network to participate.

The invitation contained a message outlining the purpose of the study, the time it would take to complete the survey, contact information for questions, and a link to the survey. Participants who clicked the link were presented with a consent note and those who consented to participate were given access to the survey. The consent note stated the purpose of the study, contact information for questions, the benefits of the study, the anonymity and voluntary nature of the survey. Participants were made aware that their participation was completely voluntary and anonymous. Participants who did not consent were taken to the end of the survey where they could exit without participating. Participants were able to start and stop the survey freely by closing the window at any time. All responses were logged in Qualtrics. Once all surveys were finished, data were entered into the Statistical Package for the Social Sciences (SPSS v24) for statistical analysis.

Measures

Except for the measure of counterproductive work behaviors, all the variables were measured on a 5-point Likert type, ranging from 1 (*strongly disagree*) to 5 (*strongly agree*).

Leader-membership exchange (LMX). Leader-membership exchange was measured using the LMX-7 Scale, which was developed to measure the quality of working relationships between leaders and followers (Graen & UhlBien, 1995). In this scale, participants indicated the extent of mutual respect, trust, and obligation exchanged in their superior–subordinate relationships. Examples of the items were “I know where I stand with my supervisor,” “My supervisor recognizes my potential,” and “My working relationship with my supervisor is effective.” Cronbach’s alpha was .91, indicating high reliability. Responses were averaged to create a composite score.

Need satisfaction. Need satisfaction was measured using the Basic Psychological Need Satisfaction Scale at work (Deci, Ryan, Gagné, Leone, Usunov, & Kornazheva, 2001). This 21-item scale addresses need satisfaction at work (Deci et al., 2001; Ilardi, Leone, Kasser, & Ryan, 1993). Among the 21 items, only 18 items were used in this study to reduce potential survey fatigue in respondents. Need satisfaction for autonomy was measured with six items. Examples of the items were “I feel like I can make lots of inputs to deciding how my job gets done,” and “I am free to express my ideas and opinions on the job.” Cronbach’s alpha was .75, showing good reliability. Need satisfaction for competence was measured with five items. Examples of the items were “People at work tell me I am good at what I do,” and “I have been able to learn interesting new skills on my job.” Cronbach’s alpha was .67, showing somewhat low reliability. Need satisfaction for relatedness was measured with seven items. Cronbach’s alpha was .88, showing high reliability. Examples of items were “I really like the people I

work with” and “I get along with people at work.” Responses were averaged to create a composite score for each need satisfaction.

Intrinsic motivation. The motivation at work scale (MAWS) (Gagne, Forest, Gilbert, Aube, Morin, & Malorni, 2010) was used to measure intrinsic motivation. The scale consists of three items. Examples of the items were “I do this job because I enjoy this work very much,” “I do this job because I have fun doing my job,” and “I do this job for the moments of pleasure that this job brings me.” Cronbach’s alpha was .93, indicating high reliability. Responses were averaged to create a composite score.

Subjective career success. Subjective career success was measured with the five-item Career Satisfaction scale, which was developed to measure levels of career satisfaction for individuals (Greenhaus, Parasuraman, & Wormley, 1990). Individuals reported their levels of satisfaction with the progress they had made in their career. Examples of the items were “I am satisfied with the success I have achieved in my career,” “I am satisfied with the progress I have made toward meeting my goals for income,” and “I am satisfied with the progress I have made toward meeting my goals for advancement.” Cronbach’s alpha was .88, indicating high reliability. Responses were averaged to create a composite score.

Counterproductive work behaviors (CWBs). CWBs were measured with the short 33-item Counterproductive Work Behavior Checklist (CWB-C; Spector, Fox, Penney, Bruursema, Goh, & Kessler, 2005). The two versions (full 45-item and short 33-item) of the CWB-C assess counterproductive work behavior (e.g., aggression, sabotage, theft, withdrawal). However, 22 items were deemed not appropriate for this study because of

the violent and/or illegal nature. A few of these items were “Threatened someone at work with violence” and “Took money from your employer without their permission.” Only 11 items were used to measure CWBs. Participants indicated the frequency in which they engaged in each behavior on a 5-point Likert scale (*1 = never, 2 = Rarely, 3 = Occasionally, 4 = Often, 5 = very often*;). Examples of the items were “Taken a longer break than you were allowed to,” “Ignored someone at work,” and “started an argument with someone at work.” Cronbach’s alpha was .74, indicating good reliability. Responses were averaged to create a composite score.

Demographic information. Demographics were obtained with five items: gender, age, ethnicity, length of time working under current supervisor, and industry.

Results

Descriptive Statistics

Table 2 displays the descriptive statistics of the measured variables and the correlations among them. On average, individuals rated their relationship with their supervisors to be of moderately high quality ($M = 3.79$, $SD = .90$), indicating that they believed that their supervisors built strong relationships with their followers and provided support and trust.

Individuals reported their satisfaction with each need to be moderately high; autonomy ($M = 3.36$, $SD = .74$), competence ($M = 3.87$, $SD = .68$), and relatedness ($M = 3.66$, $SD = .73$). These results indicate that participants felt they had the flexibility to handle their work as they chose, that they were effective in how they handled their work, and that they were connected with others within the organization in meaningful relationships. Participants also reported their levels of intrinsic motivation to be moderately high ($M = 3.53$, $SD = 1.14$), suggesting that they felt there was an inherent value in the work they did which motivated them to engage in it.

Finally, individuals reported having moderate levels of subjective career success ($M = 3.43$, $SD = .91$) and engaging in low levels of CWBs ($M = 1.60$, $SD = .43$). These results indicate that participants perceived themselves as moderately successful in their career from the work they did and that they engaged in fewer deviant behaviors such as absenteeism and starting arguments.

Table 2

Descriptive statistics and Pearson correlations Among LMX, the mediators, and the outcomes (N = 160)

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7
1. LMX	3.79	.90	(.91)						
2. Need satisfaction: autonomy	3.36	.74	.75**	(.75)					
3. Need satisfaction: competence	3.87	.68	.54**	.58**	(.67)				
4. Need satisfaction: relatedness	3.66	.73	.44**	.55**	.52**	(.88)			
5. Intrinsic motivation	3.53	1.14	.39**	.50**	.65**	.50**	(.93)		
6. Subjective career success	3.43	.91	.47**	.48**	.61**	.30**	.49**	(.88)	
7. CWBs	1.60	.43	-.28**	-.28**	-.33**	-.34**	-.23**	-.21**	(.74)

Note: Reliability coefficients (Cronbach's Alpha) are in parentheses along the diagonal.
** $p < .01$

The results of Pearson correlations showed that LMX was positively and strongly related to the three forms of need satisfaction; autonomy, $r(158) = .75, p < .01$, competence, $r(158) = .54, p < .01$, and relatedness, $r(158) = .44, p < .01$, such that participants who experienced higher quality relationships with their supervisors were more likely to feel their needs for choice, competence, and connection in the organization were satisfied. LMX was also moderately related to intrinsic motivation, $r(158) = .39, p < .01$, such that participants who experienced higher quality relationships with their supervisors experienced higher levels of inherent value in their work. LMX was positively related to subjective career success, $r(158) = .47, p < .01$, and negatively related to CWB, $r(158) = -.28, p < .01$, such that participants with higher quality

relationships with their supervisors perceived themselves as being more successful in their career and were less likely to engage in counterproductive behaviors at work.

There was a strong and positive relationship between each of the three forms of need satisfaction and intrinsic motivation: with autonomy, $r(158) = .50, p < .01$, competence, $r(158) = .65, p < .01$, and relatedness, $r(158) = .50, p < .01$. These findings indicated that employees who felt their needs for choice, confirmed ability, and connection were satisfied found more inherent value in the work they did. Intrinsic motivation was strongly and positively related to subjective career success, $r(158) = .49, p < .01$, such that participants who felt their work was more inherently valued perceived themselves as being more successful in their careers. Lastly, there was a weak negative relationship between intrinsic motivation and CWBs, $r(158) = -.23, p < .01$, such that participants who felt their work was inherently valued were less likely to engage in deviant behaviors. Finally, subjective career success was weakly and negatively related to CWB $r(158) = -.21, p < .01$, such that participants who perceived themselves as being more successful in their careers were less likely to engage in counterproductive behaviors.

Test of Hypotheses

Six serial multiple mediation analyses were conducted using the SPSS macro PROCESS (model 6) to test the hypotheses. This procedure uses an ordinary-least-squares path analysis to determine the direct and indirect effects (Krieger & Sarge, 2013). Bootstrapping was used to calculate 95% bias-corrected confidence intervals (CIs) to assess the significance of an indirect effect. An indirect effect is significant if zero is not contained in the confidence interval (Hayes & Preacher, 2014). Following Hayes and

Preacher's recommendation, the bootstrap estimates were based on 10,000 bootstrap samples.

Hypothesis 1a stated that psychological need for competence and intrinsic motivation would mediate the relationship between LMX and subjective career success. Results of the analysis are shown in Figure 2 and Table 3. The total effect of LMX on subjective career success (c) was significant ($\beta = .48, t = 6.77, p < .001$). The direct effect of LMX on subjective career success (c'), removing the effect of the mediators was significant ($\beta = .20, t = 2.72, p < .01$). The total indirect effect, or the sum of all the specific indirect effects, was significant with a point estimate of .28 and a 95% bias-corrected confidence interval did not include zero (.17 and .39). As Table 3 shows, need satisfaction for competence mediated the relationship between LMX and subjective career success ($ab1 = .22$). These results showed that participants who experienced higher quality relationships with their managers perceived themselves as more successful in their career directly and indirectly through satisfying need for competence. These results show that Hypothesis 1a was partially supported.

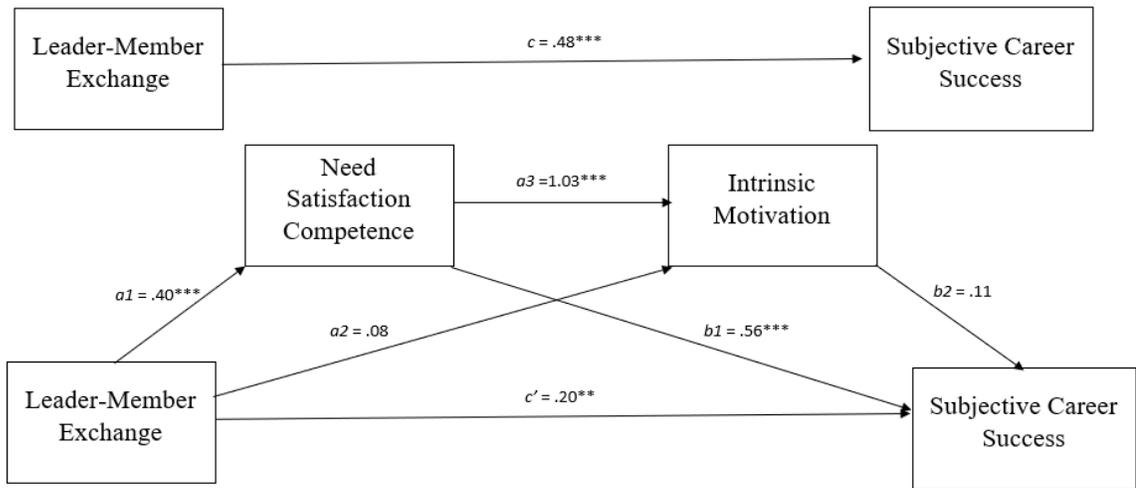


Figure 2. A serial multiple mediation model with need satisfaction for competence and intrinsic motivation as proposed mediators of the relationship between LMX and subjective career success.

Table 3

The Results of the Relationship Between LMX and Subjective Career Success as Mediated by Competence and Intrinsic Motivation

	<i>b</i> (<i>SE</i>)	<i>t</i>	95% CI	
			<i>LL</i>	<i>UL</i>
LMX – SCS (<i>c</i>)	.48(.07)	6.77 ***		
LMX – NSC (<i>a1</i>)	.40(.05)	7.97 ***		
LMX – IM (<i>a2</i>)	.08(.09)	.84		
NSC – IM (<i>a3</i>)	1.03(.12)	8.65 ***		
NSC – SCS (<i>b1</i>)	.56(.12)	4.70 ***		
IM – SCS (<i>b2</i>)	.11(.07)	1.74		
LMX – SCS (<i>c'</i>)	.20(.07)	2.72 **		
Indirect Effects				
LMX – NSC – SCS (<i>a1b1</i>)	.22(.05)		.12	.33
LMX – IM – SCS (<i>a2b2</i>)	.01(.02)		-.03	.04
LMX – NSC – IM – SCS (<i>a1a3b2</i>)	.05(.03)		-.01	.12

Note: This table shows the path coefficients and indirect effects for the relationship between LMX and subjective career success as mediated by the need for satisfaction of competence and intrinsic motivation. * $p < .05$, ** $p < .01$, *** $p < .001$

Hypothesis 1b stated that psychological need for autonomy and intrinsic motivation would mediate the relationship between LMX and subjective career success. Results of the analysis are shown in Figure 3 and Table 4. The total effect of LMX on subjective career success (c) was significant ($\beta = .48, t = 6.77, p < .001$). The direct effect of LMX on subjective career success (c'), removing the effect of the mediators was significant ($\beta = .26, t = 2.62, p < .01$). The total indirect effect, or the sum of all the specific indirect effects, was significant with a point estimate of .22 and a 95% bias-corrected confidence interval did not include zero (.05 and .38). As can be seen in Table 4, results showed that need satisfaction for autonomy and intrinsic motivation mediated the relationship between LMX and subjective career success ($a1a3b2 = .12$). These results show support for Hypothesis 1b. These results showed that participants who experienced higher quality relationships with their managers were satisfied with their need for autonomy, then became more intrinsically motivated, which led them to perceive themselves as being more successful in their careers. Those with higher quality relationships with their managers also directly perceived themselves as being more successful in their careers.

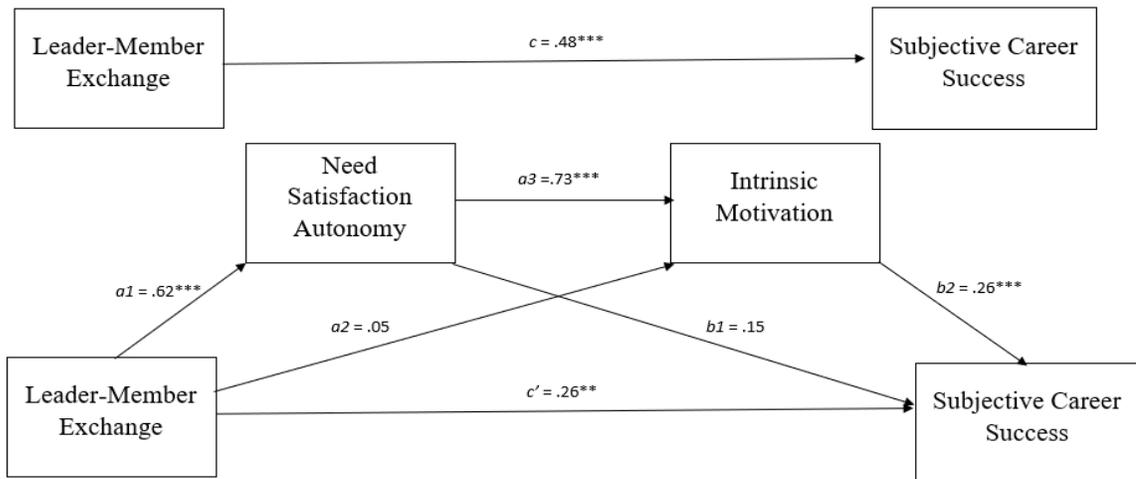


Figure 3. A serial multiple mediation model with need satisfaction for autonomy and intrinsic motivation as proposed mediators of the relationship between LMX and subjective career success.

Table 4

The Results of the Relationship Between LMX and Subjective Career Success as Mediated by Autonomy and Intrinsic Motivation

	<i>b</i> (<i>SE</i>)	<i>t</i>	95% CI	
			<i>LL</i>	<i>UL</i>
LMX – SCS (<i>c</i>)	.48(.07)	6.77 ***		
LMX – NSA (<i>a1</i>)	.62(.04)	14.06 ***		
LMX – IM (<i>a2</i>)	.05(.13)	.35		
NSA – IM (<i>a3</i>)	.73(.16)	4.61 ***		
NSA – SCS (<i>b1</i>)	.15(.13)	1.16		
IM – SCS (<i>b2</i>)	.26(.06)	4.33 ***		
LMX – SCS (<i>c'</i>)	.26(.10)	2.62 **		
Indirect Effects				
LMX – NSA – SCS (<i>a1b1</i>)	.09(.08)		-.07	.25
LMX – IM – SCS (<i>a2b2</i>)	.01(.04)		-.07	.08
LMX – NSA – IM – SCS (<i>a1a3b2</i>)	.12(.04)		.05	.22

Note: This table shows the path coefficients and indirect effects for the relationship between LMX and subjective career success as mediated by the need for satisfaction of competence and intrinsic motivation. * $p < .05$, ** $p < .01$, *** $p < .001$

Hypothesis 1c stated that psychological need for relatedness and intrinsic motivation would mediate the relationship between LMX and subjective career success. Results of the analysis are shown in Figures 4 and Table 5. The total effect of LMX on subjective career success (c) was significant ($\beta = .48, t = 6.77, p < .001$). The direct effect of LMX on subjective career success (c'), removing the effect of the mediators was significant ($\beta = .35, t = 4.60, p < .001$). The total indirect effect, or the sum of all the specific indirect effects, was significant with a point estimate of .13 and a 95% bias-corrected confidence interval did not include zero (.04 and .23). As can be seen in Table 5, consistent with Hypothesis 1c, need satisfaction for relatedness and intrinsic motivation mediated the relationship between LMX and subjective career success ($a1a3b2 = .07$). These results showed that participants who experienced higher quality relationships with their managers were more satisfied with their need for relatedness, then became more intrinsically motivated, and consequently perceived themselves as more successful in their careers. Results also showed that intrinsic motivation mediated the relationship between LMX and subjective career success ($a2b2 = .08$) such that those with higher quality relationships with their managers were more intrinsically motivated, which led them to perceive as being more successful in their careers.

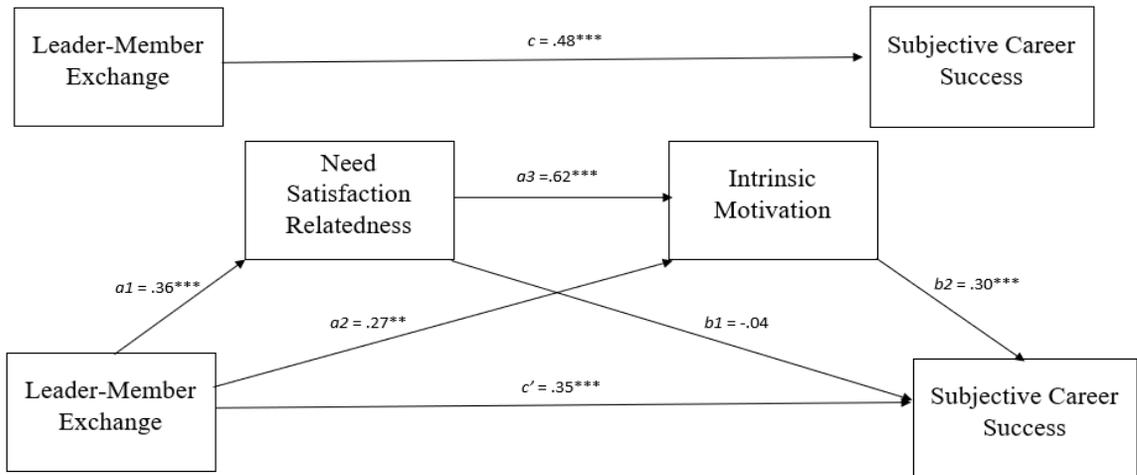


Figure 4. A serial multiple mediation model with need satisfaction for relatedness and intrinsic motivation as proposed mediators of the relationship between LMX and subjective career success.

Table 5

The Results of the Relationship Between LMX and Subjective Career Success as Mediated by Relatedness and Intrinsic Motivation

	<i>b</i> (<i>SE</i>)	<i>t</i>	95% CI	
			<i>LL</i>	<i>UL</i>
LMX – SCS (<i>c</i>)	.48(.07)	6.77 ***		
LMX – NSR (<i>a1</i>)	.36(.06)	6.24 ***		
LMX – IM (<i>a2</i>)	.27(.10)	2.84 **		
NSR – IM (<i>a3</i>)	.62(.12)	5.29 ***		
NSR – SCS (<i>b1</i>)	-.04(.10)	-.41		
IM – SCS (<i>b2</i>)	.30(.06)	4.78 ***		
LMX – SCS (<i>c'</i>)	.35(.08)	4.60 ***		
Indirect Effects				
LMX – NSR – SCS (<i>a1b1</i>)	-.01(.04)		-.09	.06
LMX – IM – SCS (<i>a2b2</i>)	.08(.04)		.01	.16
LMX – NSR – IM – SCS (<i>a1a3b2</i>)	.07(.02)		.03	.12

Note: This table shows the path coefficients and indirect effects for the relationship between LMX and subjective career success as mediated by the need for satisfaction of relatedness and intrinsic motivation. * $p < .05$, ** $p < .01$, *** $p < .001$

Hypothesis 2a stated that psychological need for competence and intrinsic motivation would mediate the relationship between LMX and CWBs. Results of the analysis are shown in Figure 5 and Table 6. The total effect of LMX on CWBs (c) was significant ($\beta = -.17, t = -4.76, p < .001$). The direct effect of LMX on CWBs (c'), removing the effect of the mediators was significant ($\beta = -.12, t = -2.83, p < .01$). The total indirect effect, or the sum of all the specific indirect effects, was not significant with a point estimate of $-.05$ and a 95% bias-corrected confidence interval included zero ($-.10$ and $.00$). As can be seen in Table 6, none of the indirect effect was significant. These results show that Hypothesis 2a was not supported. Results showed that there was a direct relationship between LMX and CWBs such that participants who had high quality LMX relationships with their managers were less likely to engage in counterproductive work behaviors.

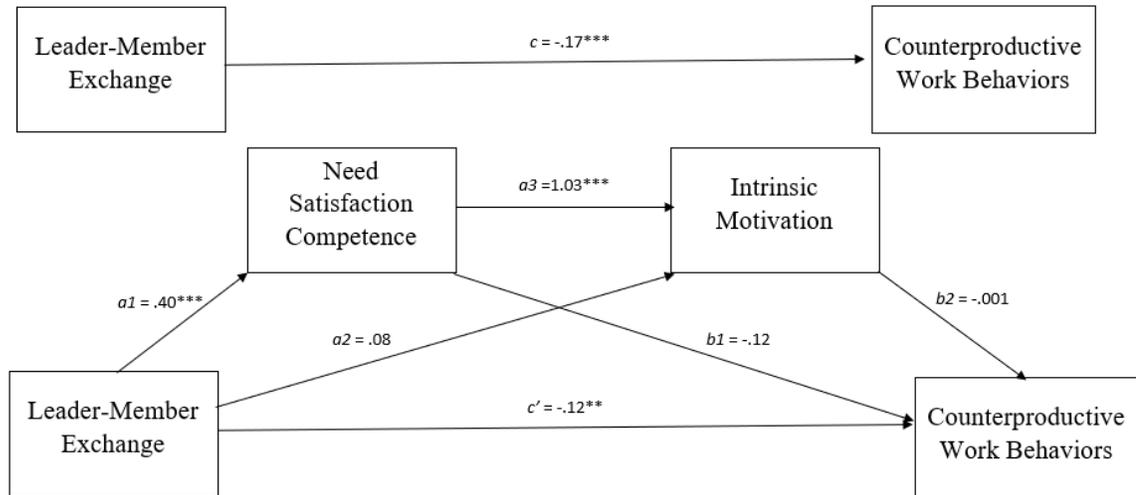


Figure 5. A serial multiple mediation model with need satisfaction for competence and intrinsic motivation as proposed mediators of the relationship between LMX and CWBs.

Table 6

The Results of the Relationship Between LMX and CWBs as Mediated by Competence and Intrinsic Motivation

	<i>b</i> (<i>SE</i>)	<i>t</i>	95% CI	
			<i>LL</i>	<i>UL</i>
LMX – CWB (<i>c</i>)	-.17(.04)	-4.76 ***		
LMX – NSC (<i>a1</i>)	.40(.05)	7.97 ***		
LMX – IM (<i>a2</i>)	.08(.09)	.84		
NSC – IM (<i>a3</i>)	1.03(.12)	8.65 ***		
NSC – CWB (<i>b1</i>)	-.12(.07)	-1.86		
IM – CWB (<i>b2</i>)	-.00(.04)	-.04		
LMX – CWB (<i>c'</i>)	-.12(.04)	-2.83 **		
Indirect Effects				
LMX – NSC – CWB (<i>a1b1</i>)	-.05(.03)		-.12	.01
LMX – IM – CWB (<i>a2b2</i>)	-.00(.01)		-.01	.01
LMX – NSC – IM – CWB (<i>a1a3b2</i>)	-.00(.02)		-.03	.04

Note: This table shows the path coefficients and indirect effects for the relationship between LMX and subjective career success as mediated by the need for satisfaction of competence and intrinsic motivation. ** $p < .01$, *** $p < .001$

Hypothesis 2b stated that psychological need for autonomy and intrinsic motivation would mediate the relationship between LMX and CWBs. Results of the analysis are shown in Figure 6 and Table 7. The total effect of LMX on CWBs (c) was significant ($\beta = -.17, t = -4.76, p < .001$). The direct effect of LMX on CWB (c'), removing the effect of the mediators was significant ($\beta = -.15, t = -2.85, p < .01$). The total indirect effect, or the sum of all the specific indirect effects, was not significant with a point estimate of $-.02$ and a 95% bias-corrected confidence interval included zero ($-.10$ and $.07$). As can be seen in Table 7, none of the indirect effects was significant. These results show that Hypothesis 2b was not supported. However, results showed that there was a direct relationship between a leader and CWBs such that participants who had high quality LMX relationships with their managers were less likely to engage in CWBs.

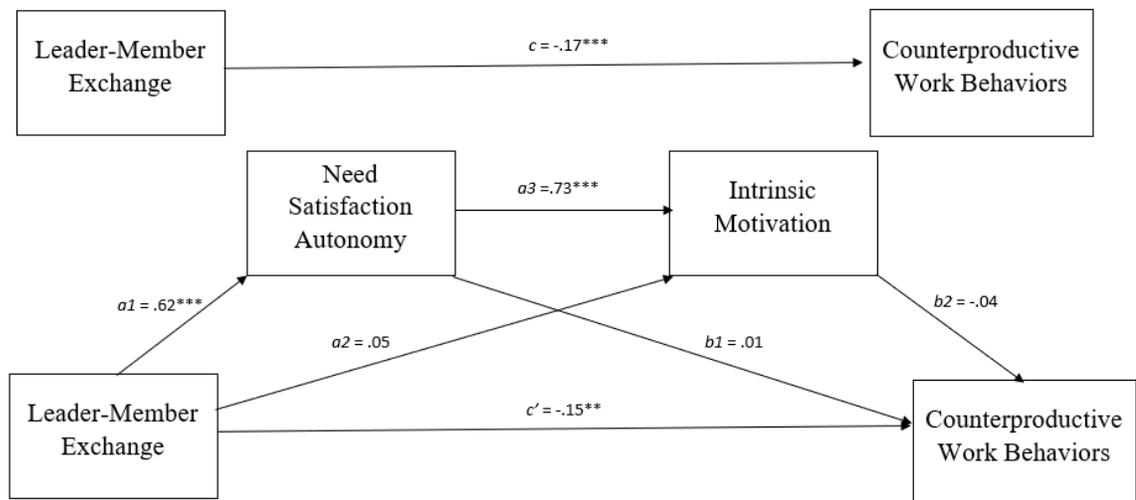


Figure 6. a serial multiple mediation model with need satisfaction for autonomy and intrinsic motivation as proposed mediators of the relationship between LMX and CWBs.

Table 7

The Results the Relationship Between LMX and CWBs as Mediated by Autonomy and Intrinsic Motivation

	<i>b</i> (<i>SE</i>)	<i>t</i>	95% CI	
			<i>LL</i>	<i>UL</i>
LMX – CWB (<i>c</i>)	-.17(.04)	-4.76 **		
LMX – NSA (<i>a1</i>)	.62(.04)	14.06 ***		
LMX – IM (<i>a2</i>)	.05(.13)	.35		
NSA – IM (<i>a3</i>)	.73(.16)	4.61 ***		
NSA – CWB (<i>b1</i>)	.01(.07)	.08		
IM – CWB (<i>b2</i>)	-.04(.03)	-1.26		
LMX – CWB (<i>c'</i>)	-.15(.05)	-2.85 **		
Indirect Effects				
LMX – NSA – CWB (<i>a1b1</i>)	.00(.04)		-.08	.09
LMX – IM – CWB (<i>a2b2</i>)	-.00(.01)		-.02	.01
LMX – NSA – IM – CWB (<i>a1a3b2</i>)	-.02(.02)		-.05	.01

Note: This table shows the path coefficients and indirect effects for the relationship between LMX and subjective career success as mediated by the need for satisfaction of competence and intrinsic motivation. * $p < .05$, ** $p < .01$, *** $p < .001$

Hypothesis 2c stated that psychological need for relatedness and intrinsic motivation would mediate the relationship between LMX and CWBs. Results of the analysis are shown in Figure 7 and Table 8. The total effect of LMX on CWBs (c) was significant ($\beta = -.17, t = -4.76, p < .001$). The direct effect of LMX on CWB (c'), removing the effect of the mediators was significant ($\beta = -.12, t = -2.98, p < .01$). The total indirect effect, or the sum of all the specific indirect effects, was significant with a point estimate of $-.05$ and a 95% bias-corrected confidence interval did not include zero ($-.10$ and $-.01$). As can be seen in Table 8, need satisfaction for relatedness mediated the relationship between LMX and CWBs ($a1b1 = -.04$). These results show that Hypothesis 2c was partially supported. The results showed that participants who experienced higher quality relationships with their managers experienced higher levels of satisfaction with relatedness with in their work and consequently engaged in fewer counterproductive behaviors at work.

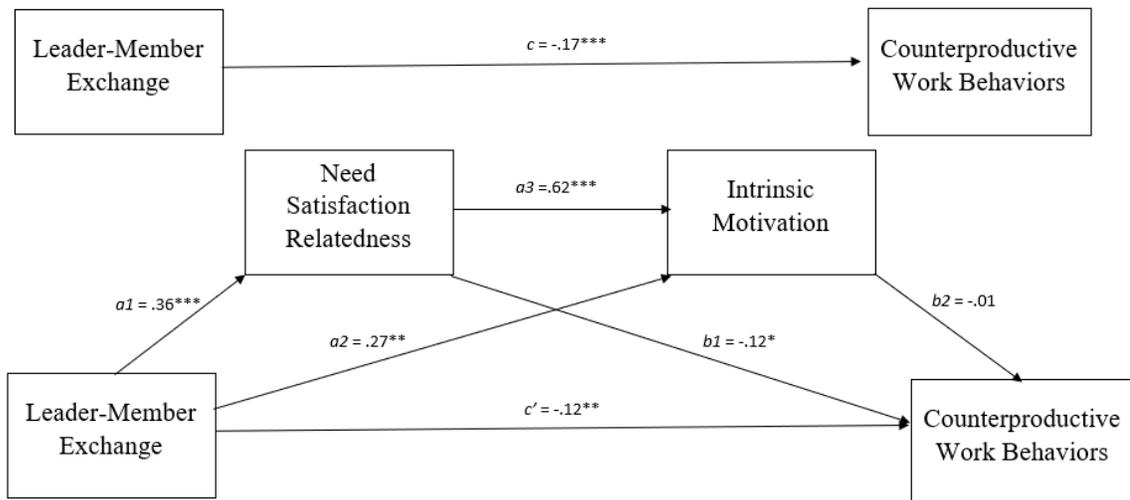


Figure 7. A serial multiple mediation model with need satisfaction for relatedness and intrinsic motivation as proposed mediators of the relationship between LMX and CWBs

Table 8

The Results of the Relationship Between LMX and CWBs as Mediated by Relatedness and Intrinsic Motivation

	<i>b</i> (<i>SE</i>)	<i>t</i>	95% CI	
			<i>LL</i>	<i>UL</i>
LMX – CWB (<i>c</i>)	-.17(.04)	-4.76 **		
LMX – NSR (<i>a1</i>)	.36(.06)	6.24 ***		
LMX – IM (<i>a2</i>)	.27(.10)	2.84 **		
NSR – IM (<i>a3</i>)	.62(.12)	5.29 ***		
NSR – CWB (<i>b1</i>)	-.12(.05)	-2.40 *		
IM – CWB (<i>b2</i>)	-.01(.03)	-.30		
LMX – CWB (<i>c'</i>)	-.12(.04)	-2.98 **		
Indirect Effects				
LMX – NSR – CWB (<i>a1b1</i>)	-.04(.02)		-.09	-.01
LMX – IM – CWB (<i>a2b2</i>)	-.00(.01)		-.02	.02
LMX – NSR – IM – CWB (<i>a1a3b2</i>)	-.00(.01)		-.02	.01

Note: This table shows the path coefficients and indirect effects for the relationship between LMX and subjective career success as mediated by the need for satisfaction of competence and intrinsic motivation. * $p < .05$, ** $p < .01$, *** $p < .001$

In sum, the results of the present study showed that LMX influenced subjective career success and CWBs directly and indirectly through the mediators. First, the satisfaction of the need for autonomy and relatedness and intrinsic motivation mediated the relationship between LMX and subjective career success such that high-quality LMX led to the satisfaction of the need for autonomy and relatedness among their subordinates, which led to them becoming intrinsically motivated and, in turn, made them perceive themselves as more successful in their careers and engage in fewer CWBs. Further, only satisfaction of the need for competence mediated the relationship between LMX and subjective career success, such that employees who experienced high-quality LMX relationships experienced higher levels of satisfaction of the need for competence and this led to them perceiving themselves as more successful in their careers. Results also showed that the satisfaction of the need for relatedness mediated the relationship between LMX and CWBs such that high-quality LMX led to the satisfaction of the need for relatedness which then led to employees engaging in fewer CWBs. Finally, each need satisfaction (i.e., competence, autonomy, and relatedness) mediated the relationship between LMX and intrinsic motivation.

Discussion

Relationships leaders have with their followers have a strong impact on their followers' attitudes and behaviors. More specifically, LMX has been shown to have relationships with both subjective career success (Breland et al., 2007; Park et al., 2017) and CWBs (Jawahar et al., 2018; Lebron et al., 2018). Yet, few studies have looked at the possible underlying mechanisms in these relationships. An examination of potential underlying mechanisms is important to understand why relationships with leaders lead their subordinates to perceive themselves as successful in their career and display fewer CWBs. Graves and Luciano (2013) developed a model that proposed that LMX leads to the satisfaction of psychological needs (i.e., competence, autonomy, and relatedness) and intrinsic motivation, which then leads to positive outcomes such as job satisfaction and organizational affective commitment and showed support for their model.

Therefore, using Graves & Luciano's (2013) model, this study set out to examine the mediating effects of the three forms of need satisfaction and intrinsic motivation on the relationships between LMX and subjective career success and CWBs. The primary goal of the study was to determine whether the quality of the relationship leaders have with their followers would satisfy specific psychological needs for their followers which would lead to them becoming more intrinsically motivated and consequently influence their sense of career success and the number of CWBs they engaged in.

Summary of Findings

Hypothesis 1a stated that psychological need for competence and intrinsic motivation mediate the relationship between LMX and subjective career success. The results

partially supported the hypothesis because only need for competence mediated the relationship between LMX and subjective career success. One reason that intrinsic motivation was not related to subjective career success through the satisfaction of need for competence might be that many employees who experience success in their work see the satisfaction of need for competence as an indicator of success in their overall careers. Rather than connecting the satisfaction of need for competence with the inherent value in their work (intrinsic motivation), employees may connect it directly to the perception that they are successful in their careers. Having a high-quality relationship with a leader makes subordinates feel competent in their jobs, which might be sufficient for subordinates to perceive themselves as successful in their careers.

Hypothesis 1b and 1c stated that psychological need for autonomy (1b) and relatedness (1c) and intrinsic motivation mediate the relationship between LMX and subjective career success. The results supported both hypotheses. Consistent with the model by Graves and Luciano (2013), results showed that having a high-quality relationship with leaders led to the satisfaction of need for autonomy and relatedness among their followers, which in turn, motivated them intrinsically, and consequently led to the perception of subjective career success. These results indicate that employees who are given more freedom in how they do their work (i.e., autonomy) and more connection within their organization and have a sense of belonging from their leaders (i.e., relatedness), are likely to experience that their work is valued (i.e., intrinsic motivation) and consequently perceive themselves as successful in their careers.

Hypothesis 2a stated that psychological need for competence and intrinsic motivation mediate the relationship between LMX and CWBs. Although results showed that high LMX led to the satisfaction of the need for competence, which then led to intrinsic motivation, intrinsic motivation was not related to CWBs. Thus, the results did not support the hypothesis. The lack of support for this hypothesis may be due to the low levels of reported CWBs in this study, possibly reducing the strength of the relationship between these variables. It is also possible that because CWBs are negative behaviors in nature, employees may not engage in actions against their organizations or their co-workers, regardless of whether they were intrinsically motivated or not.

Hypothesis 2b stated that psychological need for autonomy and intrinsic motivation mediate the relationship between LMX and CWBs. Results showed that high LMX led to the satisfaction of need for autonomy, which led to increased levels of intrinsic motivation, but intrinsic motivation did not lead to CWBs. Therefore, the results did not support the hypothesis. A possible reason for this is the same as above. Employees may not have engaged in CWBs regardless of whether they were intrinsically motivated or not.

Hypothesis 2c stated that the psychological need for relatedness and intrinsic motivation mediate the relationship between LMX and CWBs. Results showed that high LMX led to the satisfaction of the need for relatedness which then led to reduced levels of CWBs. In other words, need for relatedness mediated the relationship between LMX and CWBs. Therefore, the results only partially supported the hypothesis. It is possible that employees who felt more connected to the organization and their coworkers through

high LMX might have perceived CWBs as directly harmful to them. This would negatively impact their sense of belonging and therefore employees may be less likely to engage in such behaviors.

Another potential reason that Hypothesis 2a and 2b were not supported might have to do with the characteristics of the sample. It consisted mainly of female participants (69.4%) and given that females are less likely to engage in CWBs than men (Warren, Jané, Carlton, Kim, & Fiebert, 2019), intrinsic motivation might have not been related to CWBs.

Theoretical Implications

Graves and Luciano (2013) developed a model in which higher LMX leads to the satisfaction of various needs (i.e., competence, autonomy, relatedness), which then leads to higher intrinsic motivation, which consequently leads to positive outcomes (i.e., vitality, job satisfaction, and affective organizational commitment). Consistent with their model, the results of the study showed that the relationship between LMX and subjective career success was mediated by the satisfaction of two psychological needs (i.e., autonomy, and relatedness) and intrinsic motivation. These results indicate that as leaders build stronger exchange relationships with their followers, followers receive resources and support that satisfy their needs for freedom in their work (autonomy) and a sense of connection with others through their leaders' networks (relatedness).

Having a sense of autonomy in their work means that employees feel they can make meaningful choices and decisions and have a greater sense of influence over how their work is handled. Also, employees who connect through their leaders' networks may

increase their chance for opportunities to grow and learn. This sense of influence, freedom, and a chance for a growing number of opportunities can lead to employees having an inherent sense of value in their work and feeling that they are gaining more from their work, leading to perceiving themselves as more successful in their careers. Results from this study extend Graves and Luciano's (2013) model by examining another work-related attitude (i.e., subjective career success) which looks at how successful individuals perceive themselves to be beyond their job as compared to job satisfaction, which measures their affective evaluation of their job. This study also extends their study by looking at work-related behaviors (i.e., CWBs) instead of just attitudinal behaviors.

Although LMX led to the satisfaction of psychological need of competence, which then led to intrinsic motivation, intrinsic motivation did not lead to subjective career success. Instead, need satisfaction for competence mediated the relationship between LMX and subjective career success. Employees who received support from their leaders through opportunities to complete challenging tasks and received increasing levels of trust and resources were likely to perceive themselves as more successful in their work. As they receive additional resources, such as opportunities for training, employees may perceive themselves as more successful in their work. The lack of a significant path from need satisfaction for competence to intrinsic motivation to career subjective success might be due to how competence is a direct indicator of success in the workplace. As each job a person works at may act as a part of their career, being competent in the job may directly improve perceptions of success in one's career and this may not require inherent value to be perceived in the job.

Results also showed that satisfaction of various needs and intrinsic motivation did not mediate the relationship between LMX and CWBs. This might be due to the fact CWBs are inherently negative behaviors and most people do not engage in these behaviors, regardless of whether they are intrinsically motivated or not. These results indicate that perhaps Graves and Luciano's (2013) model might work for positive outcomes but not for negative outcomes.

I also found that the satisfaction of need for relatedness mediated the relationship between LMX and CWBs as employees who experienced a greater connection with their organization and the employees in it through their leaders may have developed a sense of belonging. This may reinforce the desire to reciprocate positively within their organization and with their leaders, rather than negatively, and reduce the chances that they will engage in CWBs at work.

Although results showed that the relationship between LMX and subjective career success and CWBs were mediated by either satisfaction of three psychological needs and intrinsic motivation, results showed that LMX was directly related to subjective career success and CWBs. These findings are consistent with the literature (Graves & Luciano, 2013; Martin et al., 2016) and indicate that leaders who have higher quality LMX relationships with their followers are likely to improve followers' sense of success in their careers and reduce the occurrence of CWBs in the workplace.

Practical Implications

Based on the results of the present study, several practical implications can be suggested. First, leaders should be aware of the benefits of providing high-quality LMX

relationships to their followers. Organizations should develop leaders who are able to build high-quality LMX relationships with all followers instead of creating in-groups and out-groups. By having strong, supportive relationships with their leaders, employees can feel their psychological needs of autonomy, competence, and relatedness are satisfied. Once their needs are satisfied, they become intrinsically motivated and might feel they are successful in their careers. Leaders should take the time to create opportunities for their followers to enhance their personal networks and build a greater sense of connection and belonging in the organization. Leaders should also provide employees with more influence over their work by allowing them to participate in decision-making on important aspects of their work, such as how the work is handled. Giving constructive feedback for employees to grow and additional training to improve their skills can increase their sense of accomplishment in their work.

It is important for leaders to understand that supporting the psychological needs of their followers can create a sense of value for followers in their work. By building a strong relationship with their leader, followers' need for connectedness is satisfied and they become less likely to engage in CWBs, which will save the organization money and avoid other possible issues such as conflicts between employees. Leaders should create opportunities to become familiar with their followers and connect them with other individuals in the same field from whom they may benefit. Using their network and resources through the organization, leaders can help followers feel their needs are being addressed and find a greater sense of growth within the organization.

Strengths and Limitations of the Study

This study has several strengths. First, this study is the first to look at the serial mediation effects of need satisfaction and intrinsic motivation on the relationship between LMX and subjective career success and CWBs. This contributes to the current literature for both LMX and self-determination theory in understanding how leadership can impact an employee's sense of success and desire to engage in costly negative behaviors at work. Past studies (Luciano & Graves, 2013; Martin et al., 2016) have looked at need satisfaction and different forms of motivation (i.e. autonomous motivation), but this study looked more directly at how intrinsic motivation acted as a mediator along with need satisfaction. This study provides insight on how leaders satisfying employees' needs is directly related to employees' inherent value in their work. With the consistent pathway found in this study (LMX to need satisfaction to intrinsic motivation), the results provide a method to consider for other possible outcomes which LMX influences, such as extra-role behaviors (Ilies et al., 2007).

Second, given the relatively large sample size in the present study, I was able to find significant mediating effects of need satisfaction and intrinsic motivation within these relationships. The sample was also mainly comprised of individuals who worked within organizations, such that these results could be applied directly to organizational situations and provide insights for leaders to act on.

Despite several strengths of the study, this study is not without limitations. First, the sample was mainly comprised of female individuals and mainly white or Caucasian individuals. This may be due to the use of my personal networks and this might have

reduced the overall ability to generalize results as it does not fully match the population of the general workforce. The lack of the significant relationship between intrinsic motivation and CWBs might be due to the nature of the sample. Given that men engage in more CWBs than women (Spector & Zhou, 2014), if I had more male participants, results of the relationship between intrinsic motivation and CWBs might have been different.

In order to make the length of the survey more manageable for participants, I eliminated several items in autonomy and competence from the measure of need satisfaction. This might have reduced the reliability within these measures and this may have impacted my overall results in regards to these two variables. The lack of the significant relationship between LMX and subjective career path through need satisfaction for competence and intrinsic motivation might be due to the low reliability of need satisfaction for competence items. Using the full list of items might have resulted in more significant relationships across the variables.

It is also possible that many participants may have responded to items referring to CWBs in more socially desirable ways and answered more towards the lower extremes on the survey. This would reduce reported occurrences of CWBs in the workplace and reduce the significance of the relationships between CWBs and the other variables in this study.

Future Research

With the results of the present study in mind, future studies should look at other possible outcomes to the LMX, need satisfaction, and intrinsic motivation pathway. As

need satisfaction and intrinsic motivation have been shown to act as mediators to LMX and its outcomes, exploring additional outcomes may show further implications for how leaders can influence positive outcomes for their followers. Examples of potential outcomes include creativity (Feng, Zhang, Liu, Zhang, & Han, 2018), job performance (Guo, Liao, Liao, & Zhang, 2014), and organizational commitment (Kuvaas et al., 2017).

Future studies should also look into the methods which leaders use to support need satisfaction in their followers and determine the most effective methods for supporting their followers. By asking more open-ended questions, research can determine which methods used by leaders are more effective at satisfying followers' needs for autonomy, competence, and relatedness.

Because it is not known from this study whether the lack of the relationship between LMX and CWBs through two mediators was due to the model not predicting negative work behavior or due to the characteristics of the sample (i.e., female participants), future research should be conducted with a sample which has more males or reports higher levels of CWBs, such as groups who are dealing with interpersonal conflict or perceived injustice (Fox, Spector, & Miles, 2001). Finally, exploring whether certain demographic traits of leaders, namely gender and ethnicity, influence these relationships is an important area to look into. Working under someone of the same or different gender or ethnicity may influence the impact of LMX.

Conclusion

The current study examined the underlying mechanisms of the relationship between LMX and two outcomes, subjective career success and CWBs. This study was able to

demonstrate that the relationship leaders have with their followers can have a strong impact on followers' subjective career success through satisfying the followers' needs and motivating them through the inherent value they perceive in their work. Although further research is needed to examine additional outcomes that may be influenced by the relationships between LMX, need satisfaction, and intrinsic motivation, this study contributed by addressing the underlying mechanisms in these relationships and explaining how relationships with leaders can impact employees' outcomes. It is important to continue to explore how leaders can influence organizational and individual outcomes in order to better understand how to train and prepare leaders into the future.

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Appendix

Demographic Questionnaire

Your preferred gender identity

- Male
- Female
- Transgender
- Other

Your current age

- 18-24
- 25-34
- 35-44
- 45-54
- 55+

Length of time worked under your supervisor (Minimum 6 months)

- 6 months
- 7 months to 1 year
- 1 to 2 years
- 2 to 5 years
- 5 to 10 years
- 10+ years

Your race/ethnicity

- American Indian/Alaskan Native
- Asian
- Black/African-American
- Native Hawaiian/Other Pacific Islander
- Latino/Latina
- White
- Multiple Races
- Other

The type of industry you work for

- Profit
- Non-Profit
- Government
- Other

Scale Items

Leader-Member Exchange Scale Items

I know where I stand with my supervisor.

My supervisor recognizes problems I have in my job.

My supervisor recognizes my professional development needs.

My supervisor recognizes my potential.

Regardless of how much formal authority my supervisor has, he or she uses his or her power to help solve my problems at work.

I would defend my supervisor's decisions to others if he or she were not present to do so.

My working relationship with my supervisor is effective.

Need Satisfaction Scale Items

I feel like I can make a lot of inputs to deciding how my job gets done.

I really like the people I work with.

I do not feel very competent when I am at work.

People at work tell me I am good at what I do.

I feel pressured at work.

I get along with people at work.

I pretty much keep to myself when I am at work.

I feel free to express my ideas and opinions on the job.

I consider the people I work with to be my friends.

I have been able to learn interesting new skills on my job.

When I am at work, I have to do what I am told.

Most days I feel a sense of accomplishment from working.

My feelings are taken into consideration at work.

At my job I do not get a chance to show how capable I am.

People at work care about me.

There are not many people at work that I am close to.

I feel like I can be myself at work.

The people I work with do not seem to like me much.

Intrinsic Motivation Scale Items

I do this job because I enjoy this work very much.

I do this job because I have fun doing my job.

I do this job for the moments of pleasure that this job brings me.

Career Satisfaction Scale Items

I am satisfied with the success I have achieved in my career.

I am satisfied with the progress I have made toward meeting my overall career goals.

I am satisfied with the progress I have made toward meeting my goals for income.

I am satisfied with the progress I have made toward meeting my goals for advancement.

I am satisfied with the progress I have made toward meeting my goals for the development of new skills.

Counterproductive Work Behavior Scale Items

Purposely wasted your employer's materials/supplies.

Came to work late without permission.

Stayed home from work and said you were sick when you were not.

Taken a longer break than you were allowed to take.

Left work earlier than you were allowed to.

Purposely worked slowly when things needed to get done.

Took supplies or tools home without permission.

Told people outside the job what a lousy place you work for.

Ignored someone at work.

Started an argument with someone at work.

Insulted or made fun of someone at work.