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The interaction of self-leadership and psychological climate on job performance

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The purpose of the present study was to examine the interactive effect of self-leadership and psychological climate on job performance and to evaluate the extent to which psychological climate facilitates or inhibits the demonstration of self-leadership on job performance. Hierarchical multiple regression analyses were conducted in a sample of 213 employees. The results clearly showed that the interaction between self-leadership and psychological climate explained an additional variance in job performance scores over and above the effects of self-leadership and psychological climate alone. Self-leadership was positively related to job performance among employees reporting high levels of psychological climate. Conversely, the relationship was nonexistent among employees reporting low levels of psychological climate. Implications for future research and practice are discussed.

Key words: Self-leadership, psychological climate, job performance, Turkey.

INTRODUCTION

Self-leadership is a process through which individuals influence and lead themselves by utilizing specific sets of behavioral and cognitive strategies (Manz, 1986; Manz and Neck, 2004; Manz and Sims, 2001). Previous research has found that the application of self-leadership strategies may result in numerous predictable individual or organizational outcomes; therefore, self-leadership is critical for individual and organizational success (Neck and Houghton, 2006). While it is obvious that self-leadership is associated with positive individual and organizational outcomes, there are several important questions unaddressed. For example, researchers have questioned whether self-leadership is "a universally applicable theory that will work with all employees under all circumstances" (Markham and Markham, 1998:199). It has also been noted that there are several important situational factors that influence the appropriateness of practicing self-leadership strategies (Manz and Sims, 2001). Consequently, understanding the influence of situations within which self-leadership strategies can be examined is necessary for gaining additional insight into the complexities of work behavior, including the prediction individual and organizational outcomes (Neck

and Houghton, 2006).

Self-leadership processes do not exist in a vacuum; they develop within a work environment (Renn and Huning, 2008). Researchers have long proposed that several features of the work environment can affect self-leadership quality (Manz, 1986; Neck and Houghton, 2006; Renn and Huning, 2008; Roberts and Foti, 1998). Although recent studies have suggested that there are several situational factors that influence the appropriateness of practicing self-leadership strategies, a sparse amount of empirical research took into account the organizational context (Neck and Houghton, 2006). Consequently, several scholars have claimed that self-leadership research should examine the interaction between self-leadership and the organizational context (Neck and Houghton, 2006; Renn and Huning, 2008).

The present study contributes to the extension of self-leadership research by investigating the moderator role of psychological climate (that is an individual's perception and interpretation of his or her work environment) in the relationship between self-leadership and job performance. This study provides an empirical test of how self-leadership and psychological climate interact to influence

job performance. To summarize, the main objective of the present study is to examine the interactive effect of self-leadership and psychological climate constructs and to investigate the extent to which psychological climate facilitates or inhibits the demonstration of self-leadership on job performance.

LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

Self-leadership

Self-leadership refers to the process of influencing oneself to achieve the self-motivation and self-direction needed to behave in desirable ways (Manz, 1986; Manz and Neck, 2004). Self-leadership is a normative theory that provides certain behavioral and cognitive strategies while operating within and through the theoretical contexts provided by self-regulation, social cognitive, self-control and intrinsic motivation theories (Neck and Houghton, 2006). Specifically, drawing from these theoretical foundations, three distinct but complementary sets of strategies has been hypothesized: (1) behavioral focused strategies, (2) natural reward strategies (3) constructive thought patterns (Manz and Neck, 2004; Manz and Sims, 2001; Neck and Houghton, 2006; Prussia et al., 1998).

Behavioral focused strategies are aimed at heightening an individual's self-awareness leading to behavioral management, especially the management of behaviors related to necessary but unpleasant tasks (Manz and Neck, 2004). Five primary behavioral focused strategies contribute to enhanced self-leadership. These strategies include self-observation, self-goal setting, self-reward, self-punishment and self-cueing (Manz and Neck, 2004; Neck and Houghton, 2006). Overall, the foundation for behavioral focused strategies of self-leadership focus on increasing of one's awareness about when and why to act, the decision about what goals to pursue and how should be pursued, compensations to energize oneself, constructive self-feedback and external signaling (Manz and Neck, 2004; Manz and Sims, 2001; Neck and Houghton, 2006).

Natural reward strategies focus on positive perceptions and experiences that are realized from the specific tasks which need to be accomplished (Manz and Neck, 2004; Manz and Sims, 2001). There are two natural reward strategies that enhance self-leadership. The first strategy is to build more naturally enjoyable features into activities so that the task itself becomes naturally rewarding (Neck and Houghton, 2006). The second natural reward strategy consists of shaping perceptions by focusing attention on the naturally rewarding aspects of activities (Manz and Neck, 2004; Manz and Sims, 2001). In general, natural reward strategies aim the increase of feelings of competence and self-determination through the awareness and focus on enjoyable task features, which eventually increase performance of task-related behaviors (Manz and Neck, 2004; Manz and Sims, 2001; Neck and Houghton, 2006).

Constructive thought pattern strategies focus on establishing and altering thought patterns that can positively impact performance (Neck and Houghton, 2006). Constructive thought pattern strategies include three tools to help facilitate this cognitive approach to self-leadership (Manz, 1986; Manz and Neck, 2004; Neck and Manz, 1996). These identified and replaced dysfunctional beliefs and assumptions, mental imagery and positive self-talk (Neck and Houghton, 2006). In short, constructive thought pattern strategies are an internal approach focused on altering and establishing more constructive and adaptable thought patterns, minimizing destructive and ineffective thinking for personal effectiveness (Manz and Neck, 2004; Neck and Houghton, 2006; Neck and Manz, 1996).

Self-leadership is conceptualized as an intrapersonal process of influencing oneself (Manz, 1986; Manz and Neck, 2004). As such, previous research and related literature has shown that each component of self-leadership contributes to performance (Neck and Houghton, 2006). For example, Neck (1993) found that individuals who received the training of constructive thought pattern strategies experienced enhanced states of positive affect (enthusiasm) and job satisfaction as well as decreased states of negative affect (nervousness) relative to those not receiving the training. In another study, Prussia et al. (1998) showed that self-leadership strategies had a significant effect on self-efficacy evaluations and self-efficacy directly affected performance.

According to Konradt et al. (2009), self-leadership impact on individual performance was partially mediated by self-efficacy and instrumentality. A study by Politis (2006) found a direct, positive and significant relationship between self-leadership behavioral-focused strategies and job satisfaction. Usually, it has been suggested that an individual who exhibits self-leadership behaviors is more likely to improve his or her performance and thus, organizational performance, than an individual who does not exhibit self-leadership behaviors (Neck and Houghton, 2006; Neck and Manz, 1996). Considering the arguments and findings presented above, the following hypothesis is proposed:

Hypothesis 1: Self-leadership will be positively related to individual's job performance.

Psychological climate as a moderator

In the work place, several social and structural features of an organization (such as support and cooperation among superiors, peers, subordinates, and clients; training and guidance; rewarding and information system; the tools

and technologies) can affect the practicing of self-leadership (Renn and Huning, 2008; Neck and Houghton, 2006). In order to facilitate incorporation of social and structural features of the workplace in self-leadership research, Renn and Huning (2008: 4) showed how psychological climate construct can explain "the essential features believed to influence the quality of self-leadership" in the workplace.

Psychological climate refers to an individual's perception and interpretation of his or her work environment (James and Jones, 1974; Jones and James, 1979). Individuals interpret their perceptions and predict outcomes in a way that is meaningful to them, creating a psychological climate. Psychological climate can be conceptualized as an "individual's psychologically meaningful representations of proximal organizational structures, processes and events" (Parker et al., 2003: 390). Individuals cognitively perceive and assess every aspect of their work environment (Parker et al., 2003; Rousseau, 1988). This indicates that psychological climates in work settings have multiple facets (Rousseau, 1988). Previous research has found that individual's perceptions of various psychological climates are critical determinants of individual or organizational outcomes; such as the relation between psychological climate for safety and accident rates (Zohar, 2000), the relation between psychological climate for service and service quality (Schneider and Bowen, 1985). It is important to study psychological climate because individuals' perceptions and interpretations of their work environment has significant relationships with individuals' work attitudes and behaviors (James and Jones, 1974; Jones and James, 1979; Parker et al., 2003). Therefore, it is reasonable to suspect that these perceptions and interpretations can affect the relationship between self-leadership behaviors and individual or organizational outcomes (Renn and Huning, 2008).

Renn and Huning (2008) considered that core climate dimensions based on Kopelman et al. (1990) conceptualization of psychological climate capture the essential characteristics of a work environment expected to affect self-leadership practices. Kopelman et al. (1990) conceptualized psychological climate as a multidimensional construct composed of five common dimensions: goals emphasis (that is the extent that management informs individuals about the expectations regarding work outcomes and standards), means emphasis (that is the methods and procedures management expects individuals to use in order to perform their job), reward orientation (that is the degree that organizational rewards are believed to be contingent on job performance), task support (that is the degree that management provides the individuals with the resources essential to perform their job), and socioemotional support (that is the extent that management is perceived by individuals as fostering and protecting their welfare). Using these dimensions, Renn and Huning (2008:5) defined psychological climate for

self-leadership as "perceptions of the events, practices, procedures, and behaviors that management rewards, supports, and expects with respect to self-leadership"

Since individuals respond to their perceptions and valuations of their work environment rather than to the work environment itself (James and Jones, 1974; Jones and James, 1979), psychological climate for self-leadership may interact with self-leadership in predicting work related outcomes, such as job performance (Renn and Huning, 2008). It is expected that the five facets of psychological climate for self-leadership are considered to be moderators of the relationship between self-leadership and job performance. One of the reasons for expecting self-leadership to be related positively to job performance is its function as a source of support for subordinates, such as task support and socioemotional support. Perception of a supportive climate can be derived from many cues. But, the most important perceptual cues are derived from task related information (Campbell et al., 1970). Task related feedback from others in a work setting leads subordinates to experience higher level of mutuality and support. Beyond providing task related feedback, task support may also provide resources in the forms of materials, technology, or work equipment (Renn and Huning, 2008). On the other hand, socioemotional support assists subordinates in a work setting to meet challenges by providing additional resources and facilitating cooperation among the members of organizations. Support and co-operation among the members of organizations is generally believed to be linked with favorable job performance (Hochwarter et al., 2006). Therefore, task and socioemotional support are beneficial in that they can positively impact the relationship between self-leadership and job performance (Manz and Sims, 2001; Renn and Huning, 2008).

Organizations have high expectations of their subordinates; therefore, goals achievement is important for effectiveness (Manz and Sims, 2001). To emphasize self-leadership in measuring and tracking work outcomes and standards, organizations encourage their subordinates by helping them develop their own goals and expectations for themselves, self-set goals that will help the subordinate grow in reaching their own potential and enhance their performance (Manz and Neck, 2004; Renn and Huning, 2008). Consequently, the subordinates in a work environment where organizations encourage self-set goals will give more effort required to attain the goal than the subordinates in a work environments with a low self-set goals orientation.

In a work environment with high self-leadership culture, organizations emphasize the methods and procedures that are expected to be used by subordinates in order to perform their job (Manz and Sims, 2001). Self-leadership culture is important for organizations to be effective in part through the self-leadership behaviors of their subordinates (Manz and Neck, 2004). Previous research

has found that managers could contribute to the development of self-leadership behaviors of subordinates and play a crucial role in their success or failure. Furthermore, subordinates that were lead by a manager who practices self-leadership behaviors had higher levels of satisfaction, commitment, organization self-esteem, and communication effectiveness (Elloy, 2005). On the other hand, previous research reveals the important impact that being rewarded has on chosen actions (Manz and Neck, 2004). Thus, when subordinates observe that self-leadership behaviors are rewarded, they can be motivated to reach higher levels of success (Manz and Sims, 2001). Therefore, in a work environment where an organization emphasizes self-leadership and rewards self-leadership behaviors, subordinates are more likely to practice self-leadership behaviors than in a work environment with a low self-leadership and reward orientation.

Perceptions of work environment influence individuals' affective and cognitive states, which in turn influence organizational behaviors such as attachment and individual performance (Kopelman et al., 1990). Furthermore, climate perceptions provide clues to individuals about what is acceptable behavior and whether their work will be appreciated, which, in turn, will facilitate or inhibit the exhibition of certain behaviors (James and Jones, 1974; Jones and James, 1979; Parker et al., 2003). Stated simply, psychological climate for self-leadership can influence the practicing self-leadership strategies (Renn and Huning, 2008). Thus, self-leadership is likely to account for greater amounts of variance in job performance in situations characterized by high level of psychological climate for self-leadership. Considering the arguments and findings presented above, the following hypothesis is proposed:

Hypothesis 2: Psychological climate for self-leadership interacts with self-leadership in predicting job performance. The relationship between self-leadership and job performance are stronger among individuals reporting high than low levels of psychological climate for self-leadership.

MATERIALS AND METHODS

Sample and procedure

Data for the present study were obtained by means of questionnaires given to employees working in two public sector organizations (a governmental agency and an educational institution) and three private sector organizations (finance, construction, and manufacture) in Aegean, western region of Turkey. In total 300 questionnaires were sent out and 244 were returned. A total of 213 questionnaires were usable, resulting in a response rate of 71%. The mean age of the participants was 28.46 years (SD = 4.73). The focal sample was almost equally split in terms of gender, with slightly more males (n = 107). Of those who reported their education level, 51.2% held a high school or a college degree, 31.5% held a bachelors degree, and the remaining 17.4% held a graduate school degree. Employees reported an average length of

tenure within their organization of 5.46 years (SD = 3.14).

Measures

Self-leadership

Self-leadership was measured using a 35-item questionnaire developed by Hougton and Neck (2002). The revised self-leadership questionnaire (RSLQ) measures employee's level of self-leadership behaviors manifested in three core strategies (for example behavior-focused strategies "I establish specific goals for my own efforts"; natural reward-focused strategies "I found my own favorite way to get things done"; constructive thought-focused strategies "I think about and evaluate the beliefs and assumptions I hold"). Employees were asked to indicate their level of agreement or disagreement on each item on a five-point scale ranging from not at all accurate (1) to completely accurate (5). Doğan and Şahin (2008) developed the Turkish version of the RSLQ and presented that psychometric properties of the scale were satisfactory. The items of the RSLQ were averaged to create general self-leadership behaviors. The Cronbach's alpha for the scale was 0.85.

Psychological climate

The psychological climate for self-management scale (PCSMS) was used to measure psychological climate. Renn and Huning (2008) have developed this instrument that captures the essential social and structural features of organizational context expected to affect self-leadership practices. The PCSMS consists of nine items that tap the five dimensions of the Kopelman et al. (1990) conceptualization of psychological climate (for example "The tools, technology and other resources provided for self- leadership"). Employees were asked to select one of the five responses to question such as, "How would you rate your employer's efforts to measure and track employees' self-leadership activities" using a 5-point Likert-type scale, ranging from poor (1) to excellent (5). Since the PCSMS was originally in English; two-way translations were performed and then a series of factor analysis was conducted. The results produced one-factor solution. The Cronbach's alpha for the scale was .93. These findings were similar to the results reported by Renn and Huning (2008).

Job performance

Employees' overall job performance was assessed with six items that were created in Turkish for the present study. The items were derived from the job performance literature (Motowidlo and Van Scotter, 1994). These items were as: (a) "I find effective solutions to problems"; (b) "I adapt readily to changing situations"; (c) "I assume a sense of ownership and responsibility in the quality of personal performance"; (d) "I strive to meet deadlines"; (e) "I encourage coworkers to do more than what is expected"; and (f) "I create effective work relationships with others." Employees rated on each item to question such as, "How would you rate your job performance" using a 5-point Likert-type scale ranging from poor (1) to excellent (5). Items were summed to yield a total performance score for each employee. The Cronbach's alpha for the scale was .90.

Data analyses

To test the interactive effect of self-leadership and psychological climate on job performance, hierarchical multiple regression analysis was used (Cohen and Cohen, 1983). In the first step, age, gender, education, and tenure (number of years in present

Table 1. Means, standard deviations, and intercorrelations of all variables.

Variable	*M*	*SD*	1	2	3	4	5	6	7
1. Age	28.46	4.73	-						
2. Gender	1.49	0.50	0.03	-					
3. Education	1.66	0.75	0.18**	0.02	-				
4. Tenure (in years)	5.46	3.14	0.21**	0.12	0.13*	-			
5. Self-leadership	3.07	1.26	0.19**	0.02	0.17*	0.02	(0.85)		
6. Psychological Climate	3.30	1.09	0.12	0.07	0.11	0.12	0.42**	(0.93)	
7. Job performance	2.97	1.24	0.10	0.07	0.12	0.09	0.36**	0.24**	(0.90)

Note. N = 213. Internal reliability estimates (α) are presented in parentheses along the diagonal. * $p < 0.05$. ** $p < 0.01$.

Table 2. Multiple regression results for variables predicting job performance.

Steps and variables	R^2	ΔR^2	*P*	β
Step 1: Control variables	0.030	-	0.167	
Age				0.007
Gender				0.042
Education				0.061
Tenure (in years)				0.108
Step 2: Main variables	0.151	0.121	0.000	
Self-leadership				0.327**
Psychological Climate				0.104
Step 3: Interaction term	0.167	0.016	0.000	
Self-leadership X Psychological Climate				0.147*

Note. The standardized regression coefficients presented are those derived at the third step. *$p < 0.05$. ** $p < 0.01$.

organization) were entered to minimize the spurious effects of these demographic variables (Kamdar and Van Dyne, 2007). In the second step, the main effects of self-leadership and psychological climate were entered. Finally, the interaction term between self-leadership and psychological climate was entered into the regression equation.

RESULTS

Descriptive data and correlation coefficients between all the variables are presented in Table 1. Of the control variables, age ($r = 0.19$, $p < 0.01$) and education ($r = 0.17$, $p < 0.05$) were slightly correlated with the predictor variable of self-leadership. Examination of correlations also revealed significant associations among self-leadership, psychological climate, and job performance. As shown, both self-leadership ($r = 0.36$, $p < 0.01$) and psychological climate ($r = 0.24$, $p < 0.01$) were related to job performance ratings. Also, self-leadership and psychological climate were significantly correlated ($r = 0.42$, $p < 0.01$).

Table 2 reports the standardized regression results. The addition of the main effects of self-leadership and psychological climate at Step 2 added significant incremental variance ($\Delta R^2 = 0.121$, $p < 0.001$). Furthermore, regression coefficient for self-leadership was 0.327 ($p < 0.01$), meaning that there was a significant positive relation between self-leadership and job performance in the sample. Thus, Hypothesis 1 was supported. For psychological climate, regression coefficient was 0.104, indicating no relation between psychological climate and job performance in the sample. As hypothesized, self-leadership and psychological climate interaction terms added significant variance at Step 3 ($\Delta R^2 = 0.016$, $p < 0.001$). In other words, the interaction between self-leadership and psychological climate explained an additional 1.6% of the variance in job performance scores over and above the 12.1% explained by the effects of self-leadership and psychological climate alone. The effect size of self-leadership and psychological climate interaction terms was within the typical range (that is $\Delta R^2 = 0.01$ to 0.03) for moderator effects in nonexperimental studies (Champoux and Peters, 1987).

To identify the forms of the interactions, the prediction of job performance scores at high and low levels of psychological climate (+1 and -1 standard deviations from
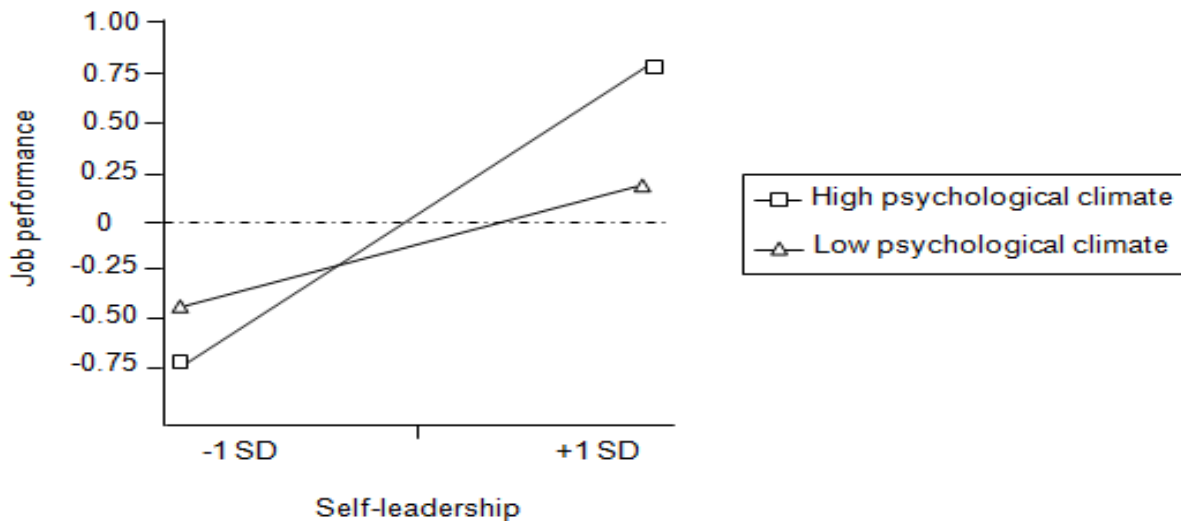
Figure 1. Job performance regressed on self-leadership scores for low and high psychological climate groups. Note: Low score equals one standard deviation below the mean; high score equals one standard deviation above the mean. Only scores plus or minus one standard deviation from the mean of self-leadership scores are plotted.

the mean) were plotted (Aiken and West, 1991; Cohen and Cohen, 1983). As hypothesized, Figure 1 revealed that self-leadership was more strongly related to job performance among employees reporting high levels of psychological climate than those reporting low levels of psychological climate. Whether the slopes representing the relation between self-leadership and job performance for reporting high and low levels of psychological climate significantly differs from zero, the simple slopes for each group were tested (Aiken and West, 1991).

There was a significant positive slope for employees reporting high levels of psychological climate ($B = 0.474$, $p < 0.001$) but not for employees reporting low levels of psychological climate ($B = 0.180$, $p = 0.060$), even at the conventional 0.05 level. These results suggest that low level of psychological climate attenuates the relationship between self-leadership and job performance. Therefore, Hypothesis 2 was supported.

DISCUSSION

The aim of the present study was to analyse the interaction of self-leadership and psychological climate on job performance and to investigate the extent to which psychological climate facilitates or inhibits the demonstration of self-leadership on job performance. The results from regression analysis supported the hypothesis that the interaction between self-leadership and psychological climate explained an additional variance in job performance scores over and above the effects of self-leadership and psychological climate alone. Self-leadership was positively related to job performance among employees reporting high levels of psychological climate. Conversely, the relationship was non-existent

among employees reporting low levels of psychological climate. It is likely that a high level of psychological climate reflects the characteristics of work environment expected to facilitate the demonstration of self-leadership on job performance. Unlike low level of psychological climate environments, high level of psychological climate settings enables employees to use self-leadership strategies to behave and perform in desirable ways. In other words, perhaps perceiving high level of psychological climate provides those with high levels of self-leadership the "boost" necessary to increase job performance.

The findings of the present study lend support to the role of psychological climate on the relation between self-leadership and job performance. More importantly, however, results suggest that the interaction of self-leadership and psychological climate plays a small but noteworthy role in explaining job performance. Given the scarcity of empirical research on the situational factors that affect the demonstration of self-leadership on job performance, this study contributes to the literature by showing that employees' perceptions and valuations of their work environment influence the relation between self-leadership and job performance. These results support and extend prior researchers' argument that self-leadership is directly influenced by the work context (Neck and Houghton, 2006; Renn and Huning, 2008). Hence, organizations need to invest efforts in creating climate that reflects the essential social and structural features of work context expected to encourage self-leadership behaviors (Manz and Sims, 2001; Renn and Huning, 2008).

This study offers some practical implications. For example, organizations that wish to emphasize self-leadership can be more successful if they create such a climate that reflects the characteristics of work

environment expected to facilitate self-leadership practices. Thus, organizational leaders should create a work environment that encourages self-leadership behaviors (Manz and Sims, 2001). As a result, for organizations to be effective in part through the self-leadership behaviors of their employees, they should not only attract self-leaders but also create a climate which values self-leadership. Organizations might consider reviewing recruitment procedures to attract individuals that are more self-leaders.

Limitations and future directions

Several limitations in the present study warrant consideration for future research. First, all variables in this study were measured by the same source. This shortcoming may raise concerns about common method bias (Podsakoff et al., 2003). Although method bias may have inflated the magnitude of the linear effects, but the hypothesis of the present study focuses on the interaction effect. After conducting an extensive Monte Carlo study, Evans (1985: 305) concluded that "artifactual interactions cannot be created; true interactions can be attenuated". This finding suggests that the existence of an interaction between self-leadership and psychological climate on job performance tends to rule out the possibility of the results being an artifact of common method bias. Nevertheless, future research could use alternative data collection designs that may alleviate these concerns. Second, since a cross-sectional design was used in the present study, it is not possible to draw any inferences regarding causal relations among the considered variables. Perhaps, the existence of high level of psychological climate triggered the employee's self-leadership behaviors, which in turn may have led to higher levels of job performance. Clearly, future research with a longitudinal design should examine the causal relationships found here. Third, the sample used in this study consisted of Turkish respondents; therefore, the results found here should not be generalized until current findings have been replicated in other samples of interest as well as across nationalities and cultures.

In the present study, psychological climate was used as a moderator and job performance was used as a predictable outcome. Because central concern of this study was to examine the interaction effect of self-leadership and psychological climate on job performance; the other possible moderators that facilitate or inhibit the demonstration of self-leadership on predictable outcomes were not tested. Future research could choose to test the other possible factors that are of central concern to their studies.

Conclusion

Some scholars have suggested that the relationship between self-leadership and predictable outcomes might be moderated by psychological climate (Neck and Houghton, 2006; Renn and Huning, 2008). In conclusion, this study found the empirical support of how self-leadership and psychological climate interact to influence job performance. Thus, the study makes a contribution to the literature by demonstrating that psychological climate, as a moderator, interacts with self-leadership in predicting job performance.

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