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Effect of leader-member exchange on employee envy and work behavior moderated by self-esteem and neuroticism

Chin-Yi Shu*, Jangul Lazatkhan

Ming Chuan University, Taipey, Taiwan

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ABSTRACT

This study investigates the impact of leader-member exchange (LMX) on envy in the workplace and the subsequent effects of envy on work engagement and socially undermining behavior. In addition, the moderating roles of personality traits, such as self-esteem and neuroticism, are examined in this relationship. Paired questionnaires were personally collected from 245 subordinates and 82 of their immediate supervisors. Empirical analysis of the responses revealed: (a) the quality of LMX is negatively related to employee envy in the workplace, (b) employee envy mediates the relationship between LMX and work engagement, (c) self-esteem boosts the relationship between envy and work engagement, but decreases the relationship between envy and social undermining, and (d) neuroticism exacerbates the relationship between envy and social undermining.

El efecto del intercambio líder-subordinado en la envidia del empleado y el comportamiento en el trabajo: la autoestima y el neuroticismo como moderadores

Palabras clave:
Intercambio líder-subordinado (LMX)
Envidia del empleado
Autoestima
Neuroticismo
Compromiso con el trabajo
Comportamiento de debilitamiento social

RESUMEN

En este estudio se investigó el impacto del LMX en la envidia de los empleados en el lugar de trabajo y su efecto en el comportamiento laboral de los empleados, tales como el compromiso con el trabajo y el comportamiento de debilitamiento social. Además, se analizó el rol moderador de rasgos de personalidad tales como la autoestima o el neuroticismo en relación a la envidia y el comportamiento en el trabajo de los empleados. Se recogieron personalmente cuestionarios emparejados de 245 empleados y de 82 de sus supervisores directos (la media era de 3 empleados por supervisor). Los hallazgos de la investigación pueden generalizarse de la siguiente manera: (a) la calidad del LMX está negativamente relacionada con la envidia del empleado en su lugar de trabajo, (b) la envidia del empleado media en la relación entre LMX y el compromiso laboral, (c) la autoestima fomenta las relaciones entre envidia y compromiso laboral pero disminuye la relación entre envidia y debilitamiento social y (d) el neuroticismo sólo potencia la relación entre envidia y debilitamiento social.

Envy is triggered when someone lacks or desires others' superior qualities, achievements, or possessions (Parrott & Smith, 1993). Accordingly, envy is prevalent in the workplace (Lange & Crusius, 2015a; Smith & Kim, 2007), especially when employees perceive an imbalance in the distribution of job promotions, the time and attention of organizational authorities, and other resources that they must compete for (Tai, Narayanan, & McAllister, 2012). This may result in positive or negative consequences for employees seeking to overcome the comparative advantages of those they envy (Duffy, Shaw, & Schaubroeck, 2008; Smith & Kim, 2007). Managing envy is imperative for employees and

* Corresponding author. No. 79, Lane 6, Section 1. Yangde Blvd. Shilin District. Taipei City, 111, Taiwan.
E-mail address: chinyushu@hotmail.com (C.-Y. Shu).

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employers, because it influences behavior and attitudes in the workplace.

Traditionally, envy has been regarded as a hostile feeling. Envious people are less willing to share information with, and are more inclined to harm, those they envy (Cohen-Charash & Mueller, 2007; Kim & Glomb, 2014); furthermore, they refrain from helping the envied target (Gino & Pierce, 2010) and engage in socially undermining behaviors (Duffy & Shaw, 2000). However, research by Van de Ven, Zeelenberg, and Pieters, 2009, Zeelenberg, and Pieters (2009) demonstrates that envy can also yield positive consequences, such as motivating increased performance or attempts at self-improvement (Hill, Del Priore, & Vaughan, 2011; Schaubroeck, Shaw, Duffy, & Mitra, 2008), which can trigger innovative action to achieve desires. These contradictory understandings illustrate that the study of envy and its work-related consequences have been surprisingly sparse, and given that work environments have a surfeit of potential envy-inducing situations (Duffy et al., 2008) research has not clearly established the relationship between envy and harmful or favorable behaviors (Cohen-Charash, 2009; Hill et al., 2011; Schaubroeck et al., 2008).

Johnson (2012) notes that social comparisons, especially unfavorable ones, provide a diagnostic perspective on the self, which are the building blocks of envy (Lange & Crusius, 2015b). In organizations, leaders differentiate among their subordinates by creating close and high-quality relationships with some and maintaining formal and distant relationships with others (Li & Liao, 2014), which is reflected in the leaders' control and distribution of tangible and intangible resources. Employees may be driven to socially compare themselves with their coworkers on the basis of accumulated resources, such as promotions, salary, opportunities, and "insider" information; the employee who has greater resources than everyone else often becomes the subject of envy by others (Hill & Buss, 2008; Wobker, 2015).

Building on this body of research, this study contributes to the literature by advancing our understanding of the cause-effect relations regarding envy. First, we examine leader-member exchange (LMX) as a cause of envy. Given that managerial practices (e.g., performance appraisals and compensation systems) substantially influence employees' lives in an organization (Li & Liao, 2014), leaders' differential treatment of employees may induce unfavorable social comparisons that promote feelings of envy (Duffy et al., 2008). Second, this research seeks to understand the varying consequences of envy. Tai et al. (2012) argue that the manifestation of envy can vary according to an individual's in-group personality and how the envious parties view themselves relative to those they envy, which is determined by their core self-evaluation.

Core self-evaluation is a higher order construct (Judge, Van Vianen, & De Pater, 2004) that incorporates primary traits such as self-esteem, self-efficacy, neuroticism, and locus of control. Here we focus on two dimensions of core self-evaluation, self-esteem and neuroticism, both relating to an individual's emotional state. Overall, employees with favorable core self-evaluations are more likely to behave constructively (Tracy & Robins, 2003). Individuals with high self-esteem treat envy as a stimulus to engage in constructive behavior, such as work engagement, which aligns with their favorable self-evaluation and suppresses behavior inconsistent with it (e.g., undermining envied targets) (Rosenberg, 1965). By contrast, individuals with high neuroticism are likely to treat envy as a source of stress and anxiety (Muris, Roelofs, Rassin, Franken, & Mayer, 2005), which drives reactive behaviors, such as social undermining, to relieve their negative self-view and feelings of inferiority (Tracy & Robins, 2003). In short, this research seeks to determine whether a favorable core self-evaluation (high self-esteem) elicits positive behavior and whether an unfavorable core self-evaluation (high neuroticism) elicits negative behavior in response to envy.

Theoretical Framework and Hypothesis

Envy in the Workplace

Envious individuals vary in how they narrow the gap between themselves and those they envy. They strive either to attain the level of the other or pull the other down to theirs; thus, envy can be either benign or malicious (Smith & Kim, 2007).

The traditional view of envy considers inferiority and animosity to be its core components, focusing on malicious envy, which is aligned with negative outcomes (Van de Ven et al., 2009). People experiencing malicious envy are more likely to be emotionally sensitive to frustration and to interpret social comparison as exposing inferiority. This relates to a number of damaging behaviors (Crusius & Mussweiler, 2012) that harm the person feeling envious and others in the workplace (Duffy & Shaw, 2000; Kim & Glomb, 2014). However, empirical studies on benign envy suggest that envy without hostility resembles admiration and can be a positive feeling (Van de Ven et al., 2009). Here, envy serves as a motivational force driving people to work harder to achieve their goal of obtaining what others have (Van de Ven et al., 2009). Therefore, envy can be a predictor of an increased admiration for and a willingness to learn from envied targets and enhance work motivation.

Two action tendencies thus appear to initiate the behavioral consequences of envy, which are threat- and challenge-oriented; both of these play a prominent role in alleviating the pain of envy. From this understanding, we suggest that when people experience envy, they use strategies to alleviate its unpleasantness that are either positive or negative (Tai et al., 2012; Wobker, 2015). We believe that both types of envy are crucial in shaping employee attitudes and behavior toward organizations and their leaders.

The Mediating Effect of Envy

LMX theory assumes that leaders vary in how they treat their subordinates in ways that can be classified on a continuum from high-quality (in-group) to low-quality (out-group) (Liden, Erdogan, Wayne, & Sparrowe, 2006). Within an organization, leaders may develop close relationships with only a few employees because of limited time and resources (Erdogan & Bauer, 2010; Liao, Liu, & Loi, 2010; Nie & Lämsä, 2015). High-quality-LMX employees receive extra tangible and intangible resources from their leaders, such as information, opportunities, trust, respect, and obligation (Li & Liao, 2014; Liden, Wayne, & Sparrowe, 2000), from which their low-quality-LMX employees (who have failed to develop close relationships with their leaders) cannot benefit. Therefore, differential treatment by a supervisor can result in conflicts between in-group and out-group members (Li & Liao, 2014), and may induce feelings of envy (Yukl, 2009) in employees who share a lower LMX relationship with a supervisor than a peer, especially if that peer is perceived to be similar to themselves.

The comparison process occurs more often with people to whom an individual is closer (friends or coworkers), and it often originates from leaders' attitudes toward their subordinates, because the immediate manager is a central agent in the employee-organization exchange who is the primary representation of the organization for employees (Erdogan & Bauer, 2010; Liden, Bauer, & Erdogan, 2004). Thus, subordinates working together under the supervision of a common leader are susceptible to a comparison-based relationship. For instance, in the context of a job promotion, Cohen-Charash (2009) describes how envy arose when a similar coworker had something (the promotion) that the target employee desired but lacked. This situation has been conceptualized into the LMX domain by Kim, Ok, and Lee (2009), who argue that when a low-quality-LMX employee notices the superior rapport between a high-quality-LMX employee and the leader and realizes that the

high-quality-LMX employee is more often rewarded for it, then the low-quality-LMX employee can experience envy. Experiencing envy in these situations may shape employee attitudes and behavior toward work.

Envy and Work Engagement

Most psychological studies have determined that employee engagement is related to emotional experiences and the well-being of individuals. For example, Schaufeli, Salanova, González-Romá, and Bakker (2002) define work engagement "as a positive, fulfilling, work-related state of mind," (Bakker & Demerouti, 2007, p. 221) and explain work engagement through the three dimensions of vigor, dedication, and absorption. Vigor is characterized by high levels of energy and mental resilience while working, the willingness to invest effort in one's work, and persistence in the face of difficulty. Dedication is characterized by a sense of significance, enthusiasm, inspiration, pride, and challenge in one's work. Finally, absorption is characterized by being fully concentrated and deeply engrossed in one's work, whereby time passes quickly and one experiences difficulty detaching oneself from work (Schaufeli & Bakker, 2004).

Thus, in studying work engagement, emotions are a natural feature of human psychological makeup that influence not only personal life but also behavior at work (Wilson, 2004). Benign envy positively influences work behavior by enhancing work motivation and increasing job performance (Cohen-Charash, 2009; Lange & Crusius, 2015a; Schaubroeck & Lam, 2004), reflecting envy's emulative and admiration-inducing aspects.

To distinguish the mediating effect of envy in the relationship between LMX and work engagement requires an awareness of how these two factors are related. As previously indicated, subordinates engaged in high-quality-LMX relationships receive benefits that are not afforded to their low-quality-LMX peers (Liden et al., 2006). As such, high-quality-LMX employees are sometimes referred to as "trusted assistants" (Ilie, 2012, p. 9) who are committed to and enhance their leader's effectiveness (Erdogan & Bauer, 2010). Therefore, employees in high-quality-LMX relationships are more likely to be engaged in their work because of this sense of obligation and reciprocity. Conversely, employees in low-quality-LMX relationships perform obligations that are limited to their basic employment contract, and their task performance and overall contribution to the organization are lower than those of employees who have high-quality relationships with their immediate supervisor.

Given the vertical socialization between authority figures and subordinates in organizations, employees consider their supervisors to be the key source of information, as well as administrators of rewards, wages, promotions, and job assignments (Magee & Galinsky, 2008). Thus, if an employee perceives an imbalance in financial outcomes because of high-quality-LMX relationships between the supervisor and other subordinates, envy can be triggered. However, because envy can produce emulative behaviors, employees may subsequently be motivated to increase their engagement at work and to excel and be recognized for their own inputs and worth in the organization. Thus, we propose:

*H***1a.** Envy mediates the relationship between LMX and work engagement.

Envy and Social Undermining Behavior

Social undermining refers to actions aimed at destroying another's favorable reputation, ability to accomplish their work, or ability to build and maintain positive relationships (Duffy, Scott, Shaw, Tepper, & Aquino, 2012). Social undermining takes different forms and may vary in how it damages a relationship. For example, it may manifest as a direct behavior, where derogatory things are expressed about the target, the target is rejected outright, or the target's ideas are belittled. Alternatively, it may be indirect, where needed information is withheld to weaken the target gradually (Duffy, Ganster, Shaw, Johnson, & Pagon, 2006).

The verbal-physical dimension also varies undermining behaviors. Verbal undermining behaviors include making derogatory comments, giving the "silent treatment," or conveying misinformation to the target. Undermining behaviors that are physical include refusing to provide promised work resources or slowing work progress with intent to harm the target (Duffy et al., 2012; Smith & Kim, 2007).

Numerous studies have been conducted about the relationship between envy and social undermining. According to Dunn and Schweitzer (2006), social undermining refers to behavioral responses that focus on damaging the envied target, which reflects envy's threat-oriented action tendency (Duffy et al., 2012; Lange & Crusius, 2015b). Envy leads to social undermining behaviors such as belittling, gossiping about, withholding information from, or ignoring colleagues who do not identify with their coworkers or teams (Duffy et al., 2012; Wobker, 2015). Episodic envy also predicts unethical behaviors, such as acting dishonestly to hurt envied parties or refusing to help them (Gino & Pierce, 2009, 2010).

In the LMX literature, researchers have increasingly turned their attention to the relationship between LMX and organizational outcomes, such as employee behavior and job performance. However, most studies have focused on the relationship between LMX and positive employee behaviors (Volmer, Niessen, Spurk, Linz, & Abele, 2011), without investigating the potential correlation with negative behaviors. By definition, LMX relationships involve tangible and intangible resources being exchanged within the leader-employee dyad for employees who have a high-quality exchange (Liao et al., 2010). This leads to conflict between employees with high- and low-quality exchanges (Boies & Howell, 2006) because low-quality-exchange employees may undermine high-quality-exchange colleagues by diminishing their ability to maintain positive relationships with their supervisors, degrading their favorable reputation, and lessening their work-related success. Consistent with this reasoning, we propose:

*H***1b.** Envy mediates the relationship between LMX and social undermining behavior.

Moderating Role of Self-Esteem

People's core self-evaluations can form their orientations to life situations and events. Self-esteem is defined as the degree to which people see themselves as "capable, significant, successful, and worthy," and is considered to be a basic domain of human functioning (Duffy, Shaw, Scott, & Tepper, 2006; MacDonald & Leary, 2013). Additionally, behavioral plasticity theory (Brockner, 1988) suggests that high self-esteem protects people from negative conditions by reducing their impact, whereas individuals with low self-esteem lack such a buffer. Thus, the effect of negative circumstances on outcomes is less for individuals with high self-esteem compared with those with low self-esteem.

Buunk, Collins, Taylor, Van Yperen, and Dakof (1990) argue that individuals with high self-esteem treat envy as an impetus to engage in positive behaviors, such as work engagement, to raise themselves to the level of their envied target, which aligns with their favorable self-view (Brockner, Wiesenfeld, & Diekmann, 2009). Research conducted among Dutch employees indicates that high self-esteem correlates with optimism, and is defined as an exhibition of high levels of engagement (Xanthopoulou, Bakker, Demerouti, & Schaufeli, 2007). In addition, Mauno, Kinnunen, and Ruokolainen (2007) contend that high self-esteem is positively

related to elevated levels of work engagement (because it leads to feeling confident about oneself and one's work status), reduced anxiety, and available energy for personal engagement.

Low self-esteem individuals are the most likely to behave antisocially (Duffy, Shaw et al., 2006), perhaps because they are more critical of themselves and others (Duffy & Shaw, 2000) and are susceptible to influence by external and social cues (Brockner, 1988). Because low self-esteem individuals tend to be uncertain of their thoughts and actions, they are unlikely to have high performance standards for themselves or believe in their ability to overcome obstacles, as reflected in negative feedback (Brockner, 1988). All of this reduces their level of work engagement.

Given the supremacy of the self in social comparisons (Tai et al., 2012), variations in core self-evaluations are likely to predict the direction of envy and the magnitude of its effect. Spencer, Josephs, and Steele (1993) suggest that individuals who possess high levels of self-esteem act to enhance it, compare with others more favorably, and succeed generally. In this argument, high self-esteem individuals emphasize instrumental goals, such as status, favorable social comparisons, and behavioral confirmation (Duffy, Shaw et al., 2006; Ormel, Lindenberg, Steverink, & Verbrugge, 1999), and are more proactive about enhancing or maintaining their favorability. Thus, when envy is felt by high self-esteem employees, they are likely to exhibit challenge-oriented action tendencies such as work engagement. They do not view the target of envy as a threat, but instead focus on protecting their own self-image (Brockner, 1988; Duffy, Shaw et al., 2006) by responding constructively and performing more effectively. By contrast, envy experienced by low self-esteem employees is not a performance motivator; instead, they often react by withdrawing psychologically or physically from the task at hand (Brockner, 1988) and reducing their challenge-oriented action tendencies. Thus, we propose:

*H***2.** Self-esteem moderates the relationship between employee envy and work engagement.

Moderating Role of Neuroticism

Neuroticism is a fundamental personality trait in psychology that indicates emotional stability, as characterized by anxiety, moodiness, worry, envy, and jealousy (Thompson, 2008). Neuroticism makes individuals susceptible to negative emotions of varying intensity (Trnka, Balcar, Kuska, & Hnilica, 2012), while also reducing their threshold for negative emotions, decreasing their ability to cope with stress, and rendering them ineffective at regulating emotional states (Watson, 2000). Studies have found that individuals high in neuroticism generally experience greater exposure and reactivity to stressful events and are more likely to employ maladaptive coping strategies, such as self-blame and wishful thinking (Gunthert, Cohen, & Armeli, 1999; Wang, Repetti, & Campos, 2011). Furthermore, neuroticism is negatively linked to life satisfaction (DeNeve & Cooper, 1998).

High neuroticism can cause emotional instability, leading to harming behaviors such as social undermining; for example, Judge, Bono, Ilies, and Gerhardt (2002) identify higher levels of hostility and anger among emotionally unstable individuals, and Salmivalli (2001) concludes that emotionally unstable individuals are more vulnerable to various types of provocations in the external environment. Specifically, individuals with high neuroticism adjust poorly to negative situations, are highly sensitive to negative signals in the environment, and often interpret neutral stimuli negatively (Duffy, Ganster et al., 2006; Judge et al., 2002). When envy is regarded as a hostile feeling (Kim & Glomb, 2014), individuals high in neuroticism are led to engage in reactive behaviors in an attempt to alleviate their feelings of inferiority (Tracy & Robins, 2003) because they lack the emotional qualities and coping skills to otherwise protect their self-image. Low neuroticism, however, is associated with calmness, low levels of aggression, and less sensitivity to such emotions (Duffy, Ganster et al., 2006). Individuals low in neuroticism are therefore unlikely to exhibit harming behaviors such as social undermining. In accordance with this, we propose:

*H***3.** Neuroticism moderates the relationship between employee envy and social undermining behavior.

Method

Sample

This research was conducted with 38 companies across the central, western, and eastern parts of Mongolia. A total of 300 pairs of questionnaires were distributed directly to the organizations; 245 valid pairs of questionnaires were returned, from 245 subordinates (return rate = 98%) and 82 supervisors (return rate = 98%). On average, there were three subordinates per supervisor. Missing data rendered 55 pairs of questionnaires invalid. The data for the subordinates ($N = 245$) indicated that 57.6% were female and that the average age of respondents was 36.11 years ($SD = 7.84$). The average tenure of the subordinates in their respective organizations was 8.01 years ($SD = 4.48$), with a minimum tenure of 1 year and a maximum tenure of 22 years; their average tenure with their current immediate supervisor was 7.5 years ($SD = 3.84$), with a minimum tenure of 1 year and a maximum tenure of 21 years. Among the supervisors ($N = 82$), the data revealed that 51.4% were male and that the average age was 46.3 years ($SD = 5.08$). Their average tenure in their current organizations was 12.77 years ($SD = 3.34$), with a minimum tenure of 6 years and a maximum of 22 years; additionally, their average tenure in their current positions was 8.26 years ($SD = 2.16$), with a minimum tenure of 4 years and a maximum of 14 years.

Measures

This study involved the use of seven research variables such as leader-member exchange (LMX), envy, work engagement (WE), social undermining (SU), self-esteem (SE), and neuroticism (NEURO), with dispositional envy (D.envy) as the control variable. Two distinct formats of the questionnaire were prepared to prevent common method variance (CMV) biases. Subordinates were asked to answer questions about LMX, envy, SE, and NEURO while supervisors were required to rate their subordinate's WE and SU in the workplace. Two-way translations of all questionnaires were performed by bilinguals with English and Mongolian proficiencies to ensure equivalency in meanings (Mongolian version questionnaire for supervisors is presented in Appendix A and for subordinates in Appendix B).

LMX. The LMX scale was adapted from the seven-item scale used by Scandura and Graen (1984). Subordinates filled out a questionnaire with items such as "Do you usually know how satisfied your supervisor is with your work?", which they were required to rate on a 5-point scale ranging from 1 (*rarely*) to 5 (*very often*). Higher scores indicated a higher quality of LMX. The Cronbach's alpha was calculated to be .96 and this variable had a normal distribution where skewness is .67 and kurtosis was -1.26.

Episodic envy. The episodic envy scale was modified from a nine-item scale of envy developed by Cohen-Charash (2009). To elicit episodic envy, participants were asked to choose a specific person in their organization with whom they work frequently, to whom they constantly compare themselves, and whom they perceive as more successful than themselves at gaining things that they strive for and consider vital to their own self-worth. These particular instructions were based on the literature regarding envy elicitation

(Salovey, 1991). Participants were not informed that the study was about envy, and the word "envy" was not mentioned during this part of the study. Participants were provided with a list of items that included statements such as "I lack some of the things X has" and "X has things going for him/her better than I do," and were asked to rate them on a 6-point scale ranging from 1 (*strongly disagree*) to 6 (*strongly agree*). The Cronbach's alpha for this measure was .94, and this variable had a normal distribution where skewness was -.60 and kurtosis was -.42.

Self-esteem. The self-esteem scale was modified from the 10-item scale of self-esteem developed by Rosenberg (1965). This is the most common measure of self-esteem, and considerable empirical data supports its validity (e.g., Blascovich & Tomaka, 1991). Subordinates were given a list of items, such as "I feel that I am a person of worth," and asked to rate them on 4-point scale ranging from 1 (*strongly disagree*) to 4 (*strongly agree*). The Cronbach's alpha for this variable was .75, and this variable had a normal distribution where skewness was -.37 and kurtosis was -.71.

Neuroticism. The neuroticism scale was adapted from the short-form revised personality scale developed by Eysenck and Eysenck (1964). It contains 12 items about emotional stability and instability (e.g., "I am a nervous person."), which participants were asked to rate on 4-point scale ranging from 1 (*strongly disagree*) to 4 (*strongly agree*). The Cronbach's alpha was .93, and this variable had a normal distribution where skewness was .22 and kurtosis was -.87.

Work engagement. A shortened, 9-item version of the Utrecht Work Engagement Scale and Well-Being Survey developed by Schaufeli and Bakker (2004) was used to measure work engagement, with items such as "He/she feels happy when he/she is working intensely." Supervisors were asked to rate their agreement on a 6-point Likert scale ranging from 1 (*strongly disagree*) to 6 (*strongly agree*). The Cronbach's alpha for this variable was measured at .95, the chi square result was 30.2, goodness of fit index (GFI) was .97, adjusted goodness of fit index (AGFI) was .94, root mean square residual (RMR) was .02, the root mean square error of approximation (RMSEA) was .05, normed-fit index (NFI) was .99, and comparative fit index (CFI) was .99. This variable also had a normal distribution where skewness was 1.5 and kurtosis was 1.74.

Social undermining. The social undermining behavior scale was adapted from a 13-item scale developed by Duffy (Duffy, Ganster, & Pagon, 2002), with items such as "How often have you felt him/her compete with colleagues for status and recognition?" This questionnaire was designed for supervisors participating in the study, who were asked to rate how frequently their subordinates direct each undermining behavior at their coworkers on a 5-point Likert scale ranging from 1 (*never*) to 5 (*every day*). The Cronbach's alpha for this variable was .86, the chi square result was 37.15, GFI was .98, AGFI was .95, RMR was .04, RMSEA was .03, NFI was .97, and CFI was .99. This variable had a normal distribution where skewness was -.41 and kurtosis was -.80.

Control variable. We regarded dispositional envy as our control variable and measured it with the dispositional envy scale developed by Smith (Smith, Parrott, Diener, Hoyle, & Kim, 1999). This is an eight-item self-reported measure developed to assess the tendency to feel envy. Four items explicitly assess the frequency and intensity of envy, and four items implicitly assess reactions associated with envy. Lind and Tyler's (1988) study on perceived unfairness suggests that a person has two reasons to be envious: the original envy-provoking disadvantage, and subsequent disadvantage-heightening treatment or procedures. They add that perceived unfairness can stem from someone inferring that he or she is not a valued member of the organization, compared with another person who receives fair or superior treatment. However, other research contends that regardless of the perception of fairness, envy can occur in any situation where an individual feels negatively about his or her inferior position compared with another (Feather & Sherman, 2002). This variable has a Cronbach's alpha of .91 and a normal distribution where skewness is -.28 and kurtosis is -1.03.

Procedure

In this research, directors of the 38 organizations chosen to participate in the study were asked to provide an employee name list, together with details of employee's work experience in the current organization and tenure with their current immediate supervisor. Three employees were selected per supervisor based on employee's work performance ranging from high, medium to low. The chosen subordinates were personally provided with the questionnaire which was sealed in an envelope. After filling out the questionnaire, the participants were asked to place the questionnaire back to the envelope, seal it, and return it to the researcher. The envelopes were then marked with the corresponding subordinate's name and the assigned letters A, B and C. Basic information of the subordinates were noted and listed on a sheet of paper in the following way: A = 1st subordinate's name; B = 2nd subordinate's name; C = 3rd subordinate's name. This list was then given to the supervisor and the supervisors were asked to rate subordinate's work behavior accordingly, following the list provided by the researcher. Lastly, answers of subordinates were matched with the supervisor's answer.

Common Method Variance

To mitigate common method variance (CMV), which can create false internal consistency in questionnaires answers (Podsakoff, Mackenzie, Lee, & Podsakoff, 2003), we used a different scale format (4- to 6-point scales) and different anchor points (extremely, always, never, strongly agree, disagree, strongly disagree). Furthermore, two distinct questionnaire formats were prepared: subordinates were asked to answer questions about LMX, envy, self-esteem, and neuroticism, whereas supervisors were asked to rate their subordinates' work engagement and social undermining behavior to obtain an external perspective about the subordinates' work behavior. In addition, to ensure equivalency in meanings, two-way translations of all questionnaires were performed by people bilingual in English and Mongolian.

Harman's single factor test and the common latent factor (CLF) were used to assess the significance of CMV in this research; specifically, Harman's single factor test was conducted to determine if the majority of the variance could be explained by a single factor. In this research, factors account for 33.94% of the total variance; however, because the first factor does not account for a majority of the variance, an insubstantial amount of CMV exists (Podsakoff & Organ, 1986). Nevertheless, less than 50% of the variance in Harman's single factor test was explained by common factors; therefore, the CLF test was conducted to control CMV.

The CLF captures the common variance among all observed variables in the model. We compared the standardized regression weights from the CLF model to the standardized regression weights of a model without the CLF. Although two-thirds of envy indicators were affected by CMV, we compensated for this by retaining the CLF and creating composites based on factor scores with lower values, and moving them into the new model structure. The difference of standardized regression weights was less than .2 (Podsakoff et al., 2003).

Analytic Techniques

Data gathered from the 245 pairs of valid questionnaires were entered and analyzed using SPSS 20.0 and the analysis and testing of the hypothesis in this research were done using AMOS 17.0.

Table 1
Reliability, Validity, and Correlation of all Factors.

	CR	AVE	MSV	ASV	Mean	SD	1	2	3	4	5	6	7
Control Variable													
1. D.envy	.92	.73	.40	.24	3.56	1.02	**(.91)**						
Independent Variable													
2. LMX	.98	.93	.31	.21	3.98	1.18	-.49**	**(.96)**					
Dependent Variable													
3. WE	.93	.83	.67	.33	1.97	.67	-.37**	.55**	**(.95)**				
4. SU	.89	.74	.33	.23	3.94	.96	.49**	-.23**	-.55**	**(.86)**			
Mediating Variable													
5. Envy	.94	.83	.40	.23	3.67	1.07	.63**	-.50**	-.45**	.42**	**(.94)**		
Moderating Variable													
6. SE	.88	.71	.67	.32	4.54	.82	-.43**	.50**	.82**	-.51**	-.44**	**(.75)**	
7. NEURO	.94	.77	.38	.27	3.10	1.01	.49**	-.38**	-.58**	.58**	.40**	-.62**	**(.93)**

Note. Initials in first row: CR = composite reliability, AVE = average variance extracted, MSV = maximum shared variance, ASV = average shared variance. Initials in first column: D.envy = dispositional envy, LMX = leader-member exchange, WE = work engagement, SU = social undermining, SE = self-esteem, NEURO = neuroticism. Correlations are Person's. Cronbach's alpha in parenthesis.
** $p < .01$ (two-tailed).

Results

Reliability and Validity

Hair, Black, Babin, Anderson (2010) suggested that confirmatory factor analysis (CFA) is needed for all latent constructs involved in the study before modeling their inter-relationship in a structural model. It is absolutely necessary to establish convergent and discriminant validity, as well as reliability, when doing a CFA. If factors do not demonstrate adequate validity and reliability, moving on to test a causal model will be useless. A useful measurement for establishing validity and reliability is composite reliability (CR), which has a suggested threshold of .7 (Hair et al., 2010). Table 1 lists the CR values for all factors in the present study. These are greater than .7 and therefore all have significant reliability. We also used Cronbach's alpha to examine the reliability of all factors (which should similarly meet or exceed .7), and across all factors it ranged from .75 to .96, which confirms that all the measurements have significant reliability.

Establishing convergent and discriminant validity to define the construct validity is also necessary. Convergent validity is measured by the average variance extracted (AVE) value of factors, and the suggested threshold is more than .5 but less than the CR value of each factor (Hair et al., 2010). As shown in Table 1, the AVE values of all factors in this study were within this range, indicating that all measurements have significant convergent validity. Finally, we used a discriminant validity test to determine the degree to which measures of conceptually distinct constructs differ. According to Hair et al. (2010), discriminant validity can be measured by the maximum shared variance (MSV) and the average shared variance (ASV); the suggested threshold for these values should be less than the AVE value for each factor. Table 1 reveals that the MSV and ASV values of all factors meet these criteria, further verifying that all measurements have high discriminant validity.

Correlation of Variables

Table 1 displays the means, standard deviations, and correlations of all variables. The results indicate that LMX has a negative correlation with envy and social undermining (SU), and a positive correlation with work engagement (WE). Envy has a positive correlation with SU, but a negative correlation with WE. Moreover, Self-esteem (SE) is positively correlated with WE and negatively correlated with SU, whereas neuroticism (NEURO) is negatively correlated with WE and positively correlated with SU. As suggested by Cohen-Charash (2009), envy is experienced in two distinct ways: it can be a dispositional trait associated with personality, or a person may only feel envy in specific situations. In the present study, dispositional envy (D.envy) significantly correlates with all the major variables; hence, we control for D.envy in our models.

Model Fit Analysis

This study analyzed four models: a null model, a one-factor model, a multiple-factor model grouping the variables of LMX, envy, WE and SU, and SE and NEURO, and a theoretical model. The empirical results listed in Table 2 show the GFI, AGFI, RMR, RMSEA, NFI, and CFI values that assess the appropriateness of the four models. Specifically, the results of the CFA demonstrate that the theoretical model has a good overall fit because all factor loadings are statistically significant (GFI > .90, AGFI > .80, RMR < .05, RMSEA < .05, NFI > .90, CFI > .09) (Hair et al., 2010).

Mediating Effect of Envy

We tested the mediating effects of the variables by referring to Baron and Kenny (1986). First, we indicated the relationship between the independent variable LMX and the dependent variables work engagement and social undermining. Second, we determined the relationship between the mediating variable envy and the dependent variables work engagement and social undermining. Thirdly, we determined the relationship between the independent variable LMX and the mediating variable envy. Finally, we indicated the joint effect of the independent variable LMX and the mediating variable envy on the dependent variables work engagement and social undermining.

As outlined in Table 3, model M1 finds that the relationship between LMX and work engagement is significant ($\beta < .38, p < .001$), while the relationship between LMX and social undermining is nonsignificant. In model M2, the relationship of envy to work engagement is significantly negative ($\beta < -.45, p < .001$), while the relationship of envy to social undermining is significantly positive ($\beta > .40, p > .001$). Model M3 indicates that the relationship between LMX and envy is significant ($\beta < -.49, p < .001$), and the regression analysis in model M4 shows that the relationship between LMX and work engagement varies in the presence of envy; specifically, the relationship between LMX and work engagement is significantly weakened ($\beta < .32, p < .001$), indicating that it is partially mediated by envy. In accordance with the regression analysis, *H*1a is accepted. However, *H*1b is not accepted because model M1 indicated that the relationship between the LMX and social undermining is nonsignificant.

Table 2
Model Fit Analysis.

ITEM	GFI	AGFI	RMR	RMSEA	NFI	CFI
Null –Factor Model	.69	.64	.07	.10	.79	.83
Single –Factor Model	.60	.54	.04	.12	.71	.76
Multi –Factor Model	.64	.55	.09	.16	.76	.78
Theoretical Model	.91	.87	.04	.05	.95	.98

Table 3
Hierarchal Regression Analysis for Mediating Effects.

Variable Name	Dependent Variable					
	M1		M2		M3	M4
	WE	SU	WE	SU	Envy	WE
LMX	.38***	-.01			-.49***	.32***
Envy			-.45***	.40***		-.22***
Dispositional envy	-.13**	.44***				-.02
R^2	.29***	.20***	.20***	.16***	.24***	.33***
ΔR^2	.29***	.20***	.20***	.16***	.24***	.04***

Note. M1 represents the linear regression between LMX as an independent variable influencing the dependent variables work engagement (WE) and social undermining behavior (SU); M2 represents the effect of the mediating variable envy on the dependent variables WE and SU, M3 represents the relationship between the independent variable LMX and mediating variable envy, and M4 combines all the variables (independent, mediating, and dependent) to explain the relationship between LMX, envy, and WE.
All values in the table are beta standardized.
* p < .05, ** p < .01, *** p < .001.

M1 represents the linear regression between LMX as an independent variable influencing the dependent variables work engagement (WE) and social undermining behavior (SU); M2 represents the effect of the mediating variable envy on the dependent variables WE and SU; M3 represents the relationship between the independent variable LMX and mediating variable envy; and M4 combines all the variables (independent, mediating, and dependent) to explain the relationship between LMX, envy, and WE.

Moderating Effect of Self-Esteem

To determine the moderating effect of self-esteem, we used hierarchical regression analysis (Baron & Kenny, 1986). The moderating effect is explained by verifying the dependent variable with the help of independent variables, or by adjusting the variables and interaction terms. To avoid the multicollinearity problem, we referred to the independent variables and interaction terms using the Aiken and West's (1991) approach, which indicates that the value should be standardized before the phase product to obtain the interaction terms.

Table 4 outlines the results. Model M1 reveals that envy is significantly negatively related to work engagement (β = -.36, p < .001) and significantly positively correlated to social undermining behavior (β = .13, p < .01). Model M2 reveals that self-esteem is significantly positively correlated to WE (β = .87, p < .001) and significantly negatively correlated to social undermining behavior (β = -.36, p < .001). Model M3 reveals that the negative relationship between envy and work engagement is weakened by the presence of self-esteem (β = -.18, p < .001), and that the relationship between envy and social undermining behavior becomes nonsignificant in the presence of self-esteem (β = .08). Finally, model M4 shows that envy × self-esteem is significantly positive (β = .08, p < .05) whereas envy × social undermining behavior is significantly negative (β = -.12, p < .001). Therefore, *H*2 is accepted.

Regression analysis model M1 to M4: M1 represents the hierarchal regression analysis between envy and work engagement (WE)/social undermining behavior (SU), M2 represents the relationship between self-esteem (SE) and WE/SU, M3 represents how envy and SE determine WE and SU, and M4 represents the interaction between envy and SE determining WE and SU.

People with low versus high self-esteem vary in their level of work engagement when they experience envy. As depicted in Figure 1, people with high self-esteem appear to feel self-confident and remain emotionally stable when experiencing envy; consequently, their level of work engagement remains high. However, people with low self-esteem appear more likely to be emotionally destabilized when experiencing envy and disengaged from their work. Therefore, we can conclude that people with high

Table 4
Hierarchical Regression Analysis for the Moderating Effects of Self-Esteem.

Variable Name	Dependent Variable							
	M1		M2		M3		M4	
	WE	SU	WE	SU	WE	SU	WE	SU
Envy	-.36***	.13**			-.18***	.08	-.022***	.14**
SE			.87***	-.36***	.65***	-.20***	.65***	-.19***
Envy*SE							.08*	-.12***
Dispositional envy	-.12	.22***			.02	.17***	.03	.16***
R^2	.22***	.23***	.55***	.20***	.58***	.30***	.59*	.33***
ΔR^2	.22***	.23***	.55***	.20***	.36***	.07***	.01*	.04***

Note. Regression analysis model M1 to M4: M1 represents the hierarchal regression analysis between envy and work engagement (WE)/social undermining behavior (SU), M2 represents the relationship between self-esteem (SE) and WE/SU, M3 represents how envy and SE determine WE and SU, and M4 represents the interaction between envy and SE determining WE and SU.
All values in the table are beta standardized.
* p < .05, ** p < .01, *** p < .001.

Table 5
Hierarchical Regression Analysis for the Moderating Effects of Neuroticism.

Variable Name	Dependent Variable							
	M1		M2		M3		M4	
	WE	SU	WE	SU	WE	SU	WE	SU
Envy	-.36***	.13**			-.28***	.08	-.28***	.11*
NEURO			-.52***	.53***	-.43***	.26***	-.42***	.24***
Envy*NEURO							-.02	.08*
Dispositional envy	-.12	.22***			.02	.13**	.02	.13**
R^2	.22***	.23***	.30***	.28***	.36***	.34***	.36	.35*
ΔR^2	.22***	.23***	.30***	.28***	.15***	.11***	.000	.01*

Note. Regression analysis model M1 to M4: M1 represents the hierarchal regression analysis between envy and work engagement (WE)/social undermining behavior (SU), M2 represents the relationship between neuroticism (NEURO) and WE/SU, M3 represents how envy and NEURO determine WE and SU, and M4 represents how the interaction between envy and NEURO determines WE and SU.
All values in the table are beta standardized.
* p < .05, ** p < .01, *** p < .001.

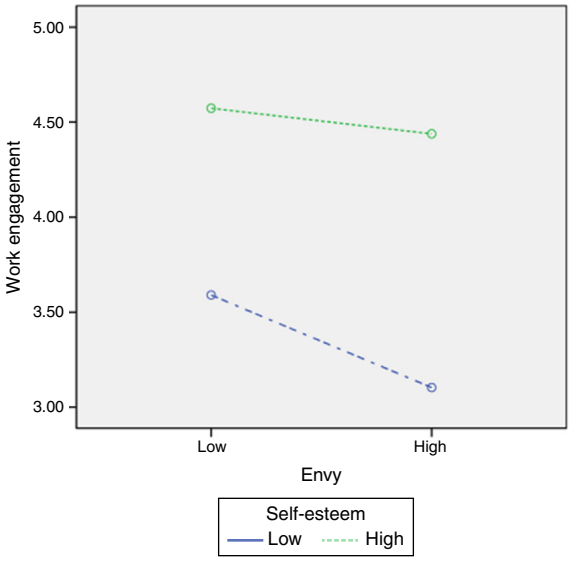

Figure 1. Interaction of Self-esteem and Work Engagement.

self-esteem are more engaged in their work than people who have low self-esteem in the face of envy.

Moderating Effect of Neuroticism

As outlined in Table 5, model M1 revealed that envy is significantly negatively correlated to work engagement (β = -.36, $p < .001$) and significantly positively correlated to social undermining behavior (β = .13, $p < .01$). Model M2 indicates that neuroticism is significantly negatively correlated to work engagement (β = -.52, $p < .001$) and significantly positively correlated to social undermining behavior (β = .53, $p < .001$). Model M3 reveals that the negative relationship between envy and work engagement is weakened in the presence of low neuroticism (β = -.28, $p < .001$), rendering the relationship between envy and social undermining behavior nonsignificant (β = .08) Finally, model M4 shows that the interaction value is nonsignificant for work engagement, but is significantly positive for social undermining behavior (β = .08, $p < .05$). Therefore, *H*3 is accepted.

Moreover, Figure 2 illustrates that there is a difference between people with high and low levels of neuroticism regarding their social undermining behavior when they experience envy. Specifically, people with high levels of neuroticism engage in more social undermining behavior because of their emotional instability; by contrast, people with low levels of neuroticism are emotionally stable and engage in less social undermining behavior.

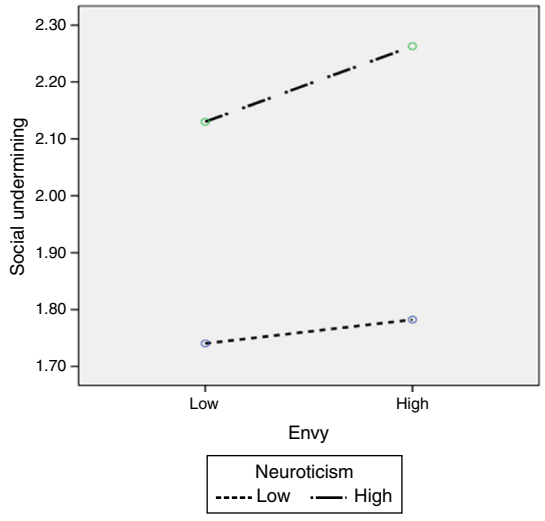

Figure 2. Interaction of Neuroticism on Social Undermining Behavior.

The present study also revealed the moderating effect of self-esteem on the relationship between envy and social undermining behavior (Table 4).

Further analysis highlights how self-esteem affects the relationship between envy and social undermining behavior. As Figure 3

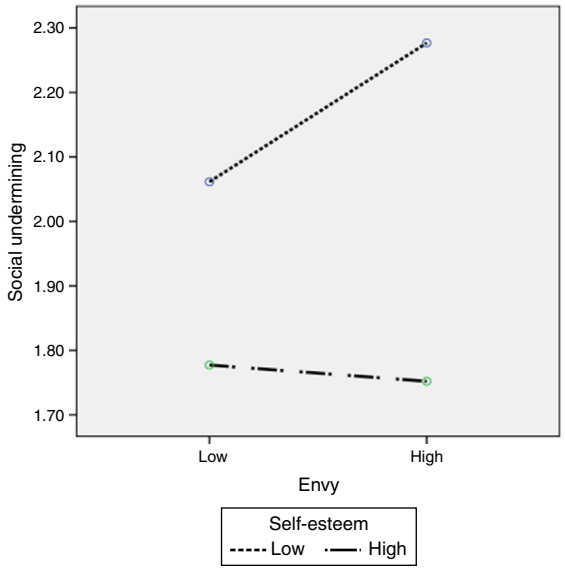

Figure 3. Interaction of Self-esteem on Social Undermining Behavior.

illustrates, people with high self-esteem remain emotionally stable in the face of envy; thus, reacting with social undermining behavior is rare because they suppress behaviors that are inconsistent with their self-view (Tracy & Robins, 2003). By contrast, social undermining behavior is a common reaction among people with low self-esteem who are facing envy because they are driven to alleviate their negative self-views and feelings of inferiority.

Discussion

In general, the results of this research align with the traditional view of envy as an unpleasant and harmful emotion that triggers negative behavior. Although some scholars have constructed more positive views on envy (e.g., Van de Ven et al., 2009), our findings corroborate those scholars whose work describes envy as a predictor of greater hostility, reduced openness to sharing information, and a stronger desire to harm the envied parties (Cohen-Charash & Mueller, 2007; Wobker, 2015).

The results of this study have shown that LMX can be an elicitor which negatively influences employee emotions in the workplace. Specifically, employees are sensitive to unfair treatment by supervisors, which can result in a bad supervisor-employee relationship (as well as more envy) if differential treatment by supervisors results in a conflict between in-group and out-group members (Yukl, 2009). Our results also support the research of Tse, Lam, Lawrence, and Huang (2013), which reveals that when coworkers develop different levels of LMX with their supervisor, the relational imbalances that arise may induce hostile sentiments between them.

We have argued that LMX has a positive effect on employee work engagement and that envy mediates this relationship. These findings support the research of Park, Sturman, Vanderpool, and Chan (2015), as well as Saks' (2006), which indicates that when employees feel that their supervisor is concerned about their personal and professional well-being, they are more likely to reciprocate with vigor, dedication, and absorption; notably, these are the three essential features of work engagement identified by Schaufeli et al. (2002). However, the positive effect of LMX on work engagement is weakened by the presence of envy, which verifies arguments made by Tse et al. (2013) and Cohen-Charash (2009). These scholars suggest that when employees have low-quality LMX and obtain fewer resources and less support from their supervisors, they are more likely to reciprocate with negative attitudes that can engender burnout because they are less motivated to achieve the goals of the organization.

Furthermore, we have also argued that an individual's level of self-esteem and neuroticism have a significant role in moderating the relationship between envy and work behavior. High self-esteem is a positive trait that can buffer an individual from the negative effects of envy, thus diminishing its effect on their work engagement. By contrast, individuals with low self-esteem display decreased work engagement when feeling envy toward their coworkers, which is their reaction to a negative environment. Similarly, Tracy and Robins (2003) contend that even though envy persists, individuals with high self-esteem continue to engage in positive behaviors, because it aligns with their favorable self-views. However, negative traits such as high neuroticism are likely to exacerbate the negative effects of envy, which facilitates more social undermining behavior. As Muris et al. (2005) point out, employees who are high in neuroticism (and for whom negative feedback is a source of stress and anxiety) are vulnerable to being challenged, and tend to behave negatively and undermine their colleagues when they experience envy in the workplace.

Theoretical and Management Implications

This research has engendered a framework wherein LMX triggers envy in the workplace, and disrupted work engagement and social undermining behaviors are the outcomes of envy. Our findings offer a comprehensive understanding of why employees differ in their reactions to feeling envious of coworkers whom they perceive as similar to themselves.

Specifically, we note that envy is an emotion that drives negative reactions and activates strong negative action tendencies among employees (Smith & Kim, 2007; Wobker, 2015). However, the extent of such reactions depends on individual personalities, particularly regarding self-esteem and neuroticism. Because social undermining behavior is more likely to occur when an individual has low self-esteem (and the associated emotional instability), we suggest that a positive personality marked by high self-esteem and low neuroticism has an encouraging role in the relationship between LMX and employee behavior.

This research also provides empirical evidence regarding the influence of LMX on employee envy and work behavior. Although previous research has developed a foundation (Bolino & Turnley, 2009; Kim & Radosevich, 2007), this study demonstrates that poor relationships between supervisors and employees lead to higher reported levels of envy among employees, which reduces employee work engagement and induces social undermining behavior. It is clear that LMX is a crucial factor underlying envy in the workplace, despite the moderation of envy by individual characteristics.

Our findings provide practical suggestions for managers and organizations. First, a richer understanding of employee emotions, envy in particular, is relevant to workplace management. Leaders should recognize their employees' need for high-quality LMX to mitigate envy and negative behavior, particularly because the contribution of employees to their organization is generally affected by how their immediate supervisors treat them (Kim et al., 2009; Park et al., 2015). Liden and Antonakis (2009) argue that leader distance (both physical and social) may shape the processes by which leaders influence individual, group, or organizational outcomes. Thus, to reduce envy and its negative effects, leaders should aim to reduce uneven LMX in the workplace through fair and just systems where performance evaluations and resource allocations are performed with clear, transparent, and standardized procedures (Lavelle, Rupp, & Brockner, 2007).

Second, organizations can help both leaders and employees by providing diverse training programs, such as self-awareness or employee assistance programs, to maintain and improve employee relationships with their coworkers as well as their supervisors. Finally, episodic envy is associated with particular circumstances and can be experienced by anyone (Cohen-Charash, 2009). From this perspective, envious employees should view envy as a challenge instead of a threat, and recognize that envied targets can be a source of motivation. On the basis of the present study, we add that employee personalities are relevant in reducing the negative consequences of envy. We therefore suggest that positive personality traits should be encouraged in employees, and that organizations pay closer attention in screening out individuals with negative personality traits during personnel selection processes.

Research Limitations and Further Suggestions

Although the present study offers critical practical implications, its limitations must be acknowledged. First, we faced some CMV bias, despite designing two formats of questionnaires for employees and supervisors, and accounting for the diverse phrasing of negative emotions. One possible reason for this might have been the use of cross-sectional, self-report surveys for employees; as previous behavioral science research points out, the concern for

CMV seems to be raised almost exclusively when cross-sectional, self-report surveys are used (Lance, Baxter, & Mahan, 2005). In particular, scholars contend that self-reporting on socially sensitive subjects, such as a person's level of negative affect, can lead individuals who are high in social desirability to underreport their level of negative behaviors and feelings, although individuals who are low in social desirability are also less likely to distort. This social desirability effect introduces systematic variance or bias into the assessment of the trait of interest (Podsakoff et al., 2003). Herein, the data addressing envy and personality are self-reported with considerable potential for CMV, because envy is an internal state with no identified specific facial expressions. Therefore, it would be beneficial for future researchers to survey employees about envy separately from the rest of the questionnaire.

The body of empirical studies on envy in the social and organizational sciences is in its nascent stage, and although recent research has produced evidence for the existence of benign envy, our study does not corroborate it. In previous research, benign and malicious envy are primarily distinguished directly by the action tendencies that envy activates, as suggested by Tai et al. (2012); however, we only considered two employee behaviors, work engagement and social undermining. We suggest that to identify the exact reaction of envy, future research should focus on direct action tendencies, rather than work behavior.

Moreover, recent studies suggest that benign envy is similar to admiration. It exists when people make upward social comparisons and attempt to raise their position to the level of their target (Van de Ven et al., 2009). However, in this study, we only asked employees to think about a specific person of similar status to them, according to Lazarus' (1991) suggestions. Consequently, we suggest that future research on envy examine upward social comparisons to determine the positive features of employee envy in the workplace, and investigate how envy is activated when people compare themselves to someone they consider to be a role model. In addition, we suggest that whether the relative status of these role models affect malicious versus benign envy should be considered. Finally, findings of this study might be generalized to countries with similar cultural background only; however, the specific culture of this study is considered to be pertinent in this research. Future studies may examine how workers from different cultural orientations may respond differently wherein such findings may shed light on how envy may influence worker outcomes in different settings.

Conflict of interest

The auhtors of this article declare no conflict of interest.

Appendix A.

QUESTIONNAIRE FOR SUPERVISOR (MONGOLIAN TRANSLATION)

WORK ENGAGEMENT

1. Тэр ажил дээрээ эрч хүчээр дүүрэн байдаг
2. Тэр ажил дээрээ хүчирхэг болон өсөлттэй байдаг
3. Тэр эрчимтэйгээр ажиллаж дуртай байдаг
4. Тэр ажлаасаа урам авдаг
5. Тэр ажилдаа сэтгэл хангалуун байдаг
6. Тэр хийсэн ажлаараа бахардаг
7. Тэр ажиллаж байхдаа сэтгэл хөдлөлд автдаг
8. Тэр ажилдаа анхаарлаа бүрэн төвлөрүүлдэг

SOCIAL UNDERMINING

1. Хамтрагчаа гомдоодог уу?
2. Хамтрагчдаа үл ойшоосон хандлага гаргаж байсан уу?
3. Хамтрагчынхаа талаар цуурхал тараадаг уу?
4. Ажил хойш татсан гэж ажлаас чөлөөлөгдөж байсан уу?
5. Ажилчдыг болон тэдний саналыг үл ойшоож байсан уу?
6. Тэдний мэдрэмжийг өвтгөж байсан уу?
7. Ажилчдын араар муулаж байсан уу?
8. Хамтрагчдынхаа ажлыг хэрэцээтэй байгаагүй гэж буруутгаж байсан уу?
9. Амалсан амлалтаасаа буцаж байсан уу?
10. Буруу болон алдаатай мэдээлэл өгч байсан уу?
11. Өөрийгөө бусадтай харицуулж байсан уу?
12. Тэдний ямар нэгэн зүйлд нь дургүйгээ илэрхийлж байсан уу?
13. Хэн нэгэн хамтрагчдыг нь муулаж байхад өмөөрч байсан уу?

APPENDIX B

QUESTIONNAIRE FOR SUBORDINATES (MONGOLIAN TRANSLATION)

LEADER-MEMBER EXCHANGE

1. Чи өөрийгөө даргатайгаа хэр нийцэдэг гэж боддог вэ?
2. Таны дарга таны асуудал болон хэрэгцээг хэр сайн ойлгодог вэ?
3. Таны дарга таны чадварыг хэр үнэлдэг вэ?
4. Таны дарга өөрийн эрх мэдэл, албан тушаалын хүрээнд таны асуудлыг шийдэх боломж хэр байдаг вэ?
5. Таны удирдагчийн удирдлагын эрх мэдлээс үл хамааран таныг батлан даах боломж хэр вэ?
6. Миний удирдагч намайг хамгаалж, шудрага шийдвэр гаргана гэдэгт би бат итгэлтэй байдаг.
7. Та болон таны даргын хоорондох ажлын харилцааг хэрхэн тодорхойлох вэ?

DISPOSITIONAL ENVY
1. Би үргэлж атаархадаг.
2. Гашуун үнэн нь би өөрийгөө бусдаас дорд үздэг.
3. Атаархах сэтгэл намайг зовоодог.
4. Зарим хүмүүс амархан амжилтанд хүрэх нь миний сэтгэлийг гонсойлгодог.
5. Би юу ч хийсэн атаархах сэтгэл намайг зовоодог.
6. Би өөрийгөө хангалтгүй гэж боддог.
7. Зарим хүмүүст бүх чадвар байх нь надад шудрага бус мэт санагддаг.
8. Шулуухан хэлэхэд, миний нөхдийн амжилт миний дургүйг хүргэдэг.

EPISODIC ENVY
1. Бусад ажилчдыг бодвол надад дутагдал байгаа
2. Б их эрцгий хүн
3. Би атаархагч хүн
4. Би ажилчиддаа их зэвүүцдэг
5. Ажилчдын бүх зүйл надад ч бас байгаасай гэж хүсдэг
6. Манай ажилчид надаас илүүг хийж чаддаг
7. Би их бухимддаг
8. Би ажилчиддаа өш хонзон санадаг
9. Би хамтран ажиллагчиддаа дургүйцдэг

SELF-ESTEEM
1. Би өөрийгөө бусадтай харьцуулахад их гутранга хүн гэж боддог
2. Надад зарим сайн чанар бий
3. Би бүтэлгүй хүн
4. Бусдын чадах зүйлийг би ч гэсэн чадна
5. Надад бахархах зүйл бараг байхгүй
6. Би өөрийнхөө тухай эерэгээр боддог
7. Би өөртөө сэтгэл хангалуун байдаг
8. Би өөрийгөө илүү их хүндлэх хэрэгтэй
9. Би цагаа тулахаар хэнд ч хэрэггүй хүн
10. Цагаа тулахад би юу ч хийж чадахгүй

NEUROTICISM
1. Би амархан гомддог.
2. Би их бухимддаг.
3. Би санаа зовогч
4. Би үргэлж түгшсэн байдалтай байдаг
5. Би ууртай байхаас үргэлж санаа зовдог
6. Би гэмтэй хүн шиг байхаас үргэлж санаа зовдог
7. Миний зан ааш үргэлж хувирч байдаг
8. Би заримдаа учир шалтгаангүй гутардаг
9. Би ууртай хүн
10. Би үргэлж залхсан байдалтай байдаг
11. Би ичгэвтэр байдалд орсныхоо дараа үргэлж санаа зовдог
12. Би үргэлж ганцаарддаг

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