

WHEN COMPLIMENTS FROM A LEADER CREATE A RIPPLE:
A DUAL AFFECTIVE APPROACH TO DISENTANGLE THE DISTINCT
OBSERVER EFFECTS OF COMPLIMENTS

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ABSTRACT

Compliments—voluntary and impromptu expressions of acknowledgement, approval, or praise of another’s accomplishments or behaviors—are a powerful tool leaders can use to enhance employees’ development, work engagement, and job performance. Although the positive effects of compliments on recipients’ well-being and performance are well-demonstrated, it is important to consider how leader compliments influence the broader audience (i.e., employees who witness compliments but are not the recipients). In this dissertation, I draw on social comparison theory and expectancy theory to suggest that leader compliments can both positively and negatively influence observers through the emotional experiences of inspiration and envy, respectively. Importantly, I identify observer expectancy (shaped by core self-evaluation, perceived similarity, and organizational support as individual, interpersonal, and organizational factors) and instrumentality (shaped by non-zero-sum mentality, relative leader-member exchange, and procedural justice as individual, interpersonal, and organizational factors) as two overarching boundary conditions that determine the degree to which inspiration and envy occur. Furthermore, while inspiration leads to a moving-up tendency to increase one’s own in-role and extra-role behaviors, envy leads to a pulling-down tendency aimed at harming the complimented coworker. By examining the ripple effect of leader compliments, I expand the social functions of compliments beyond the dyadic level and provide a more holistic understanding of compliments in the workplace.

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INTRODUCTION

Being viewed positively is desirable in many aspects of people's lives because it satisfies their fundamental need to belong (Baumeister, 1982; Baumeister & Leary, 1995). Receiving compliments can fulfill this desire through an increased sense of social acceptance (Hill, 1987; Marigold et al., 2007; Sedikides, 1993). Indeed, compliments are positive, evaluative responses signaling the recipient's value in the eyes of the complimenter (Kanouse et al., 1981). Compliments can also help recipients build positive self-regard, brighten mood, and strengthen interpersonal relationships (Boothby & Bohns, 2021; Zhao & Epley, 2021). In the workplace, compliments are social rewards that fulfill people's need to be approved and acknowledged by their leader (Stajkovic & Luthans, 1997). In fact, compliments can be a leadership tool that reinforces employees' performance, enhances intrinsic motivation, increases job satisfaction, and reduces stress (Anderson et al., 1988; Bono et al., 2013; Crowell et al., 1988; De Gieter et al., 2008; Koestner et al., 1987).

While the functions of compliments for enhancing recipients' well-being and performance in the workplace are well-demonstrated, such positive effects may not only linger at the dyadic level for recipients but also reverberate among coworkers who witness compliments. When compliments are given in public, they are observable acknowledgments of the complimented employee's valued behaviors (Brun & Dugas, 2008). Compliments not only provide important information to the recipient related to their goal progress and performance (Ashford & Cummings, 1983; Cusella, 1987), but also convey implicit feedback to other employees about their own relative standing and social acceptance. Yet, it is not clear how employees feel and react when they observe another employee receiving a compliment from their mutual supervisor, even though they themselves are not complimented. On the one hand, by

offering public compliments, a leader may make the impact of the compliments more powerful by positively influencing other observing employees and motivating observers to excel as well. These employees may view the recipients of compliments as role models and learn vicariously through them. Indeed, some research has demonstrated that publicly recognizing superior performers improves performance for team members who are not recognized (Bradler et al., 2016; Hoogveld & Zubanov, 2017; Li et al., 2016; Neckermann & Yang, 2017). On the other hand, a leader's public compliments toward one employee may create negative competition within the work environment and cause observers to resent the individual who is complimented. For instance, publicly acknowledging top performers can weaken nonrecipients' connections to recipients and harm team performance (Liao et al., in press; Zheng et al., 2019). These arguments and empirical evidence suggest that although leader compliments likely have ripple effects on observers, whether these effects are positive or negative is inconclusive. What is currently lacking is an overarching theoretical framework that integrates these divergent positive and negative observer-based consequences of compliments and sheds light on the mechanisms involved.

Social comparison theory (Festinger, 1954) provides a fruitful avenue for understanding why and how leader compliments can positively or negatively impact observers' job performance and interpersonal relationships with coworkers. Social comparison theory suggests that individuals possess an innate desire to evaluate their abilities by comparing themselves with others. Social comparison is inevitable in social interaction (Brickman & Bulman, 1977) and can be triggered spontaneously and without intention (Banaji et al., 2001; Gilbert et al., 1995; Mussweiler et al., 2004a). Accordingly, I suggest that observing a coworker receiving compliments constitutes a social comparison situation, which triggers the observer to compare

themselves with the complimented coworker. Such comparison is upward because receiving compliments signals that the recipient excels in the complimented area (e.g., performs above and beyond standards) and/or is relatively better than other uncomplimented employees (Wood, 1996).

Upward social comparison can result in two distinct emotions: inspiration and envy, both of which are self- and other-focused emotions (Smith, 2000). Inspiration involves not only an admiration of others' capabilities but also a positive expectation for one's own future (Lockwood & Kunda, 1997). Envy entails both discontent in oneself and hostility toward the advantaged other (Smith et al., 1994). Accordingly, I adopt a dual process perspective by simultaneously considering these two emotional responses to have a more encompassing understanding of the distinct observer effects of compliments from the leader. In addition, given that inspiration allows individuals to focus on growth and achievement (Thrash & Elliot, 2003), I suggest that inspired observers view the compliments as providing information about how to decrease discrepancies between their performance and that of their complimented coworker. Accordingly, inspiration should motivate them to improve their current level and fuel their efforts toward work. By contrast, the negative views envious observers hold of themselves and their complimented coworkers may motivate them to pull the complimented coworker down by engaging in interpersonal counterproductive work behaviors (Duffy et al., 2021).

Additionally, I aim to further understand why upward social comparison that arises from observing coworkers receiving compliments may produce diverging emotional responses by elucidating the conditions under which people are more likely to experience inspiration and the conditions under which they are more likely to experience envy. According to theory on social comparison processes and emotions, the direction of upward social comparison emotions

depends on perceived control (Major et al., 1991; Mussweiler et al., 2004b; Smith, 2000). In this respect, people's perception of whether the performance gap between themselves and the advantaged person can be reduced should be a key determinant for whether inspiration or envy occurs. When observers determine they have good prospects for eliminating the performance discrepancy between themselves and the complimented employee, they assimilate to the complimented employee and feel inspired. By contrast, when observers perceive that they are unlikely to reach the same level as the complimented employee, they contrast from the complimented employee and feel envious (Brewer & Weber, 1994; Buunk & Gibbons, 2007; Greenberg et al., 2007). Perceived control can be shaped by multiple factors. For example, people may perceive greater control when they have more favorable core self-evaluation, an individual factor; when they perceive themselves as more similar to the complimented coworker, an interpersonal factor; or when they are in a more supportive organization, an organizational factor. Thus, building upon the concept of perceived control, one goal of this dissertation is to systematically show that people's beliefs about themselves, their relationships with others, and the nature of their broader organizational environments are key moderators that influence the extent to which inspiration and envy arise.

Notably, although perceived control effectively captures how observers' perceived likelihood of closing the performance gap influences their experience of inspiration and envy, such theorizing overlooks the importance of observers' perceived instrumentality of their good performance. Observers compare themselves to complimented coworkers not only to improve themselves in the domain in which their coworkers receive compliments but also in the hope that such improvement could lead to them receiving compliments themselves. However, superior performance does not always lead to desired rewards like compliments (Alexander & Ruderman,

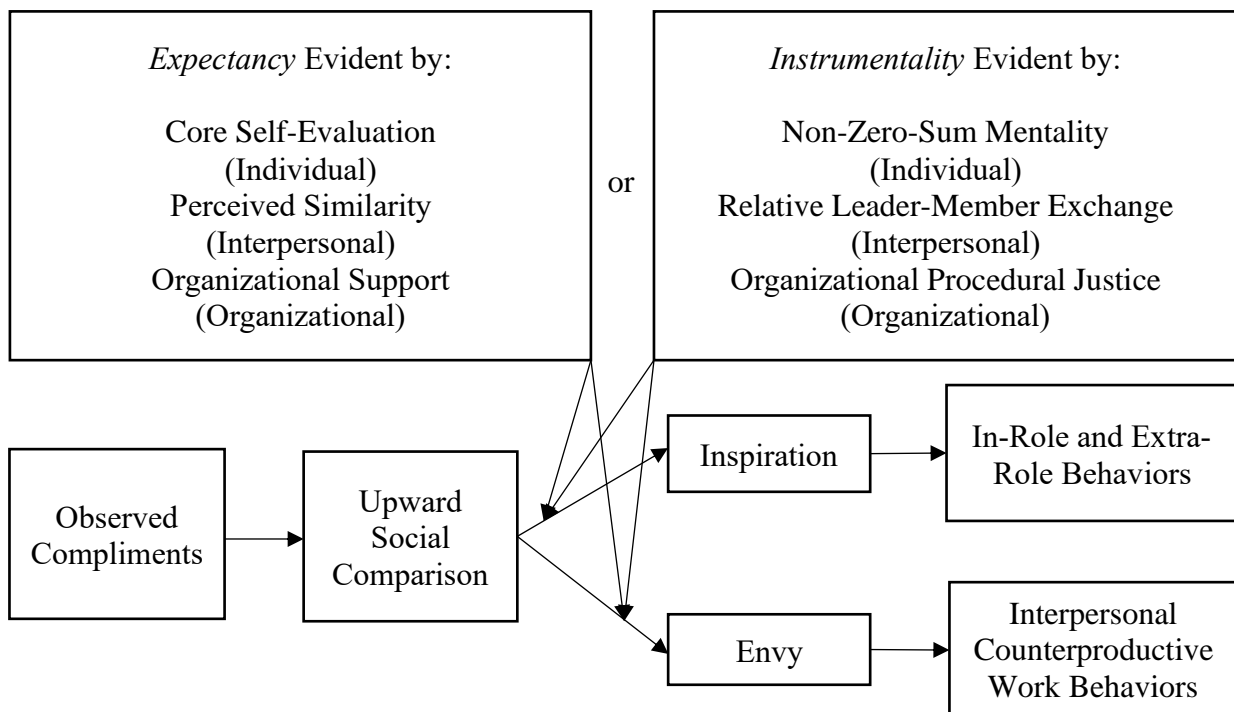
1987). Accordingly, observers' experience of inspiration and envy should also be influenced by their perceived likelihood of receiving future compliments from the leader. Based on expectancy theory (Vroom, 1964), people are motivated to put forth effort if they believe that their efforts will result in good performance (expectancy or perceived control) and that such performance will lead to expected outcomes, such as rewards and compliments (instrumentality). In addition, people need to view the outcomes as important, attractive, and desirable (valence). Given that receiving compliments can satisfy people's fundamental need to belong (Baumeister, 1982; Baumeister & Leary, 1995), employees should generally value receiving compliments from their leader. Thus, informed by the concept of instrumentality, I aim to understand the observer effects of compliments in a more comprehensive way by examining three factors that may influence employees' emotions. Specifically, when these employees have a non-zero-sum mentality, an individual factor; when they have a higher leader-member exchange (LMX) relative to the complimented coworker, an interpersonal factor; or when they perceive a higher level of organizational procedural justice, an organizational factor, they should perceive receiving compliments from the leader following good performance as more plausible and thus be more likely to be inspired and less likely to be envious.

In my dissertation, I examine the observer effects of compliments in the workplace and focus on explaining why observing coworkers receiving compliments from leaders sometimes produces positive performance and interpersonal outcomes whereas at other times yields negative consequences. The proposed model is illustrated in Figure 1. My dissertation research offers four major contributions to the existing theory and literature. First, I extend the compliment research by focusing on the observer effects of compliments, which expands the social functions of compliments beyond the dyadic level and draws attention to a broader

influence of compliments than what has hitherto been acknowledged. When considering the recipients of compliments only, compliments create an uplifting experience (Boothby & Bohns, 2021; Zhao & Epley, 2021). However, my dissertation suggests that when considering how compliments reverberate within a team, although compliments can inspire nonrecipients to constructively contribute to the organization, compliments may also lead to envious responses from nonrecipients. These negative responses make the recipients targets of interpersonal harm and can potentially jeopardize their careers (Campbell et al., 2017; Kim & Glomb, 2014; Lam et al., 2011). Second, I unravel the emotional mechanisms of the relationship between observing compliments and workplace outcomes. I integrate assimilative and contrastive social comparison processes simultaneously when studying the observation of compliments as a social comparison phenomenon (Ganegoda & Bordia, 2019; Greenberg et al., 2007; Moore, 2007). This work contributes to the literature in emotional ambivalence (i.e., the simultaneous experience of positive and negative emotions) by recognizing inspiration and envy as two unique emotional responses that operate in tandem (Rothman et al., 2017). Third, I reconcile the conflicting findings related to the potential benefits and drawbacks of publicly recognizing superior performers on team members who are not recognized. Drawing from social comparison theory and expectancy theory, I demonstrate that, when it comes to influencing observers' emotional responses to upward social comparison, not only does expectancy have an impact, but instrumentality matters as well. This work contributes to social comparison theory by suggesting that the outcomes of social comparison should stem not only from one's expectation that they can reduce discrepancies in capability (Major et al., 1991; Mussweiler et al., 2004b; Smith, 2000), but also from one's belief that such capability can yield rewards. Fourth, by examining three foci of expectancy and instrumentality as boundary conditions, I systematically test

whether people's beliefs about themselves, their relationships with other people, and their broader organizational environments can each influence the extent to which inspiration and envy arise. These foci contribute to expectancy theory (Vroom, 1964) by enumerating potential sources of expectancy and instrumentality beliefs.

FIGURE 1
Proposed Expectancy and Instrumentality Models



LITERATURE REVIEW: COMPLIMENTS

Compliments and Related Concepts

I define compliments as *voluntary and impromptu expressions of acknowledgement, approval, or praise of another person's accomplishments or behaviors*. Compliments are evaluative in nature, signaling the recipient's value in the eyes of the complimenter (Kanouse et al., 1981). They are theorized to be prosocially motivated and involve authentic expressions (Zhao & Epley, 2021). Compliments occur frequently in everyday discourse, including performance compliments at work that recognize individual ability or effort (Ayduk et al., 2013; Jones, 1964; Knapp et al., 1984; Morton et al., 2022; Wolfson & Manes, 1980). A unique feature of performance compliments is that they tend to be given spontaneously in order to further the recipient's goal and motivate certain behavior (Rees-Miller, 2011). In addition, compliments are expressed downward in the status hierarchy more often than the reverse, as upward expressions of compliments are likely to be viewed as flattery or ingratiation (Jones, 1964). Compliments can positively influence both the giver's and receiver's emotions and behaviors as well as strengthening the relational bond between them (Boothby & Bohns, 2021; Zhao & Epley, 2021). When asked about how they felt after giving or receiving compliments, people reported a positive experience without exception (Knapp et al., 1984).

Praise overlaps significantly with compliments and, in fact, they often are used interchangeably (Delin & Baumeister, 1994; Knapp et al., 1984). Praise is given based on a leader's positive observation of an employee's present performance related to their goal or their previous level of performance and is categorized as a type of positive feedback (Herold & Greller, 1977; Kim & Hamner, 1976). Praise not only provides employees information regarding their task performance but also is a social reward that can motivate them to strive for higher

performance levels (Delin & Baumeister, 1994; Koestner et al., 1987; Stajkovic & Luthans, 1997). Indeed, praise has been shown to effectively improve employee intrinsic motivation, work engagement, job satisfaction, and productivity (Anderson et al., 1988; Crowell et al., 1988; De Gieter et al., 2008; Koestner et al., 1987). In addition, praise enables employees to build positive resources and reduce work stress (Bono et al., 2013). Although compliments and praise have similar effects on employees, one key difference between these two constructs is that praise is often discussed under the auspices of formal and infrequent performance management and thus is a planned rather than spontaneous expression (Kluger & DeNisi, 1996). Given that the difference between praise and compliments is nuanced, I view praise as synonymous with compliments and use the term “compliments” even when discussing findings related to praise through the rest of my dissertation.

Another related construct that has been studied in organizational behavior literature is recognition. Both compliments and recognition convey a leader’s acknowledgment and approval of an employee’s valued behavior (Brun & Dugas, 2008; Caligiuri et al., 2010; Nelson, 2005). As a nonfinancial reinforcer, recognition also has positive implications for recipients, such as boosting morale, building confidence, instilling commitment, and strengthening performance (Gostick & Elton, 2007; Kosfeld & Neckermann, 2011; Markham et al., 2002; Neckermann et al., 2014). However, while compliments are given by leaders under their discretion, recognition generally refers to an organization’s formal programs that are planned and scheduled (e.g., “employee of the month”; Kosfeld & Neckermann, 2011). Furthermore, in contrast with compliments, which can be given both in private and in public, recognition almost always involves publicly expressed or posted messages (Dubinsky et al., 1993; Stajkovic & Luthans, 2001). According to the similarities and differences between compliments and recognition, I

consider recognition to be a related yet distinct construct and thus do not include it in the definition of compliments.

Observer Effects of Compliments

While the effects of compliments on the recipient and their interpersonal outcomes are well-documented, there is a lack of research regarding the impact on those who witness others receiving compliments while they themselves are not. In comparison, when an individual is provided with recognition, such positive information is available not only to the performing individual but to other group members as well. Consequently, recent research has emerged discussing how recognition impacts others who are not recognized and how it alters interpersonal dynamics in groups (Gallus & Frey, 2016; Neckermann & Frey, 2013). This line of research may shed light on the observer effects of compliments.

Much like the observer effects documented in the recognition literature (e.g., Bradler et al., 2016; Hoogveld & Zubanov, 2017; Liao et al., in press; Zheng et al., 2019), I expect that compliments expressed in public can similarly impact nonrecipients. Unfortunately, findings pertaining to observer effects of recognition are mixed, and whether recognition can positively or negatively influence observing employees is inconclusive. A few studies have viewed recognition as a form of positive social influence and demonstrated that recognition positively influenced employees who are not recognized. Specifically, Bradler et al. (2016) found that public recognition given exclusively to top performers increased subsequent performance for both recipients and nonrecipients, with a greater increase from nonrecipients. Hoogveld and Zubanov (2017) also studied the power of “no recognition” and reached the same conclusion. Similarly, Li et al. (2016) found that a single team member’s recognition produced positive spillover effects on the overall team performance and non-recognized team members’

performance. Although Neckermann and Yang (2017) found no effect of recognition on recipients' performance, they confirmed that recognition increased performance for those who are not recognized. In contrast, studies that focus on the impact of recognition on social interactions among employees tend to show adverse effects. Specifically, Zheng et al. (2019) found that publicly recognizing top team performers harmed team performance due to nonrecipients' reduced cooperation with the recipients. Liao et al. (in press) further distinguished non-winner nominees for recognition (i.e., being nominated but failing to receive recognition) from non-nominees (i.e., not nominated from the beginning). They found that compared to non-nominees, non-winner nominees were less responsive to collaboration requests made by recipients of recognition, especially when they had a higher structural proximity to recipients. In view of these inconsistent findings, particularly related to performance versus social outcomes, the observer effects of compliments are equivocal and further theorizing and research are needed. In the next section, I discuss how social comparison theory and expectancy theory can aid in integrating these divergent observer effects and illuminate the mechanisms.

THEORETICAL BACKGROUND: SOCIAL COMPARISON THEORY

Social comparison theory has long held that people self-evaluate by comparing themselves to others, especially when objective information about their standing is not available (Festinger, 1954). People's primary motive for social comparison is a natural drive to evaluate their own opinions and abilities so that they can maintain an accurate self-view (Buunk & Gibbons, 2007). Although the original social comparison theory (Festinger, 1954) solely focuses on how one uses social comparison information to evaluate their abilities and opinions, later research broadens the theory to also encompass people's evaluations of their traits and circumstances (Wood, 1989).

Social comparison is a central feature of human social life, inevitable and ubiquitous in social interactions (Greenberg et al., 2007). In fact, it is human inclination to compare (Gilbert et al., 1995). People may actively seek information to form comparative judgments about themselves. Moreover, comparison information can shape self-evaluations even when people are not directed to reflect on the self. Merely encountering social information about others can spontaneously prompt social comparison (Brickman & Bulman, 1977; Li et al., 2021; Wood, 1996), which occurs because comparative information processing has valuable efficiency advantages and critical judgments can be made faster in a comparative manner (Mussweiler & Epstude, 2009). Social comparison can even be triggered subconsciously, such that comparison information influences self-evaluations even when people do not realize their engagement in social comparison (Banaji et al., 2001; Gilbert et al., 1995; Mussweiler et al., 2004a). Social comparison can also be a more complex process; for example, people may first have an automatic social comparison reaction with or without awareness and then engage in a more

systematic and thorough review of their own situation relevant to others (Buunk & Gibbons, 2007).

People may compare themselves to others who are similar to (lateral comparison), better than (upward comparison), or worse than themselves (downward comparison). Although Festinger's (1954) original theory suggests that people prefer to compare themselves to similar individuals, Wood (1989) advances social comparison theory by illuminating that, instead of being a preference, social comparison to similar individuals functions to provide people with more precise and stable information for self-evaluation. By contrast, social comparison with dissimilar individuals has its unique functions. Specifically, people not only desire to accurately evaluate themselves but also desire to continually improve themselves; this self-improvement need can be fulfilled by comparing themselves with others perceived as better in the comparison domain (Taylor & Lobel, 1989). People may also have the goal to create and maintain a positive self-image, and comparison with others who they outperform can serve this goal (Wills, 1981). Given that upward comparisons are at the core of my theoretical model (i.e., nonrecipients observing another person being complimented), the following literature review will focus specifically on upward comparisons.

Assimilative and Contrastive Emotional Reactions to Upward Social Comparison

Upward social comparison can elicit assimilative and contrastive reactions (Pelham & Wachsmuth, 1995). As initially theorized, when confronted with someone who outperforms, social comparison directs people's attention to the comparison target's advantage and triggers their desire to establish similarity with the comparison target by improving themselves (Taylor & Lobel, 1989). Such assimilative response to upward social comparison has been demonstrated in various domains such as academic performance (e.g., Blanton et al., 1999; Buunk et al., 2005;

Gibbons et al., 2000; Huguet et al., 2001) and health behaviors (e.g., Gerrard et al., 2005; Molleman et al., 1986). Despite this adaptive function of upward comparison, a considerable body of research has indicated that upward comparison could simultaneously be threatening to the self (Brickman & Bulman, 1977). Due to a general tendency to maintain a positive self-view, making upward comparisons may make people question their positive self-image and, thus, respond defensively (Tesser, 1988). People might, for example, downplay the relevance of the comparison (Mussweiler et al., 2000) or reconstruct their own past to cope with the threat (Klein & Kunda, 1993). These behaviors fall under the realm of contrastive effects. In short, although upward social comparison can be informative for self-improvement, a superior individual may, at the same time, induce a threat that needs to be counteracted (Biernat et al., 1997; Manis et al., 1991).

Prior research has shed light on the strength of occurrence of assimilative and contrastive processes. Scholars have explored the conditions under which upward social comparison is more likely to garner either assimilative or contrastive effects (Buunk & Gibbons, 2007). Generally speaking, upward assimilative effects are more likely to be elicited when people focus on the similarities between themselves and the comparison target and perceive that the gap between themselves and the advantaged individual can be reduced (i.e., high perceived control); meanwhile, contrastive effects are more likely to occur when people focus on interpersonal discrepancies and believe that reaching the same level as the comparison target is unlikely (i.e., low perceived control) (Aspinwall, 1997; Lockwood & Kunda, 1997; Major et al., 1991; Smith, 2000). More specifically, research has suggested that self-esteem (Aspinwall & Taylor, 1993; Buunk et al., 1990; Gibbons & Gerrard, 1989), self-construal (e.g., Gardner et al., 2002; Kemmelmeier & Oyserman, 2001), attainability of the comparison standard (Lockwood &

Kunda, 1997), psychological closeness (Brewer & Weber, 1994; Brown et al., 1992; Pelham & Wachsmuth, 1995; Tesser et al., 1988), and perceived similarity (Hafner, 2003; Mussweiler, 2001; Mussweiler et al., 2004a) influence the extent to which assimilative and contrastive thoughts are evoked from social comparison.

Assimilative and contrastive processes result in distinct emotions (Aspinwall & Taylor, 1993; Buunk et al., 1990; Gibbons & Gerrard, 1989; Reis et al., 1993; Tesser et al., 1988). Emotions are feelings that arise in response to implicit appraisals of situations relating to one's goals and concerns, meaning that emotions are elicited by a specific target or event (Barsade & Gibson, 2007; Schwarz & Clore, 1996). In the context of upward social comparison, encountering a comparison target can trigger emotions. Smith (2000) theorizes that upward assimilative and contrastive processes can result in two distinct emotions: inspiration and envy, respectively. Inspiration and envy are both dual-focused emotions, combining both feelings about oneself and feelings about the comparison target. While inspiration involves one's admiration of the upward comparison target's capabilities and a positive expectation for their own future, envy entails discontent in oneself and hostility toward the comparison target (Lockwood & Kunda, 1997; Smith et al., 1994). Indeed, empirical research has shown that the experience of inspiration follows upward social comparison (Buunk et al., 2007; Helgeson & Taylor, 1993; Lockwood et al., 2012). Research also has demonstrated that envy is a significant part of upward social comparison processes when faced with the threat of being outperformed by another person (Bamberger & Belogolovsky, 2017; Fischer et al., 2009; Kim & Glomb, 2014; Salovey & Rodin, 1984; Schaubroeck & Lam, 2004). Although past research has demonstrated the possible occurrence of either envy or inspiration following upward social comparison, it is surprising that no systematic research has been conducted to integrate these two emotional

experiences into one comprehensive model. The experience of positive and negative emotion is independent, and people can feel mixed emotions where different emotions occur at the same time (Diener & Emmons, 1984; Rothman et al., 2017; Warr et al., 1983). Thus, it is not unreasonable to assume that an individual could experience both inspiration and envy after exposure to an upward comparison target. It is also possible that an individual first experiences an envious reaction to an upward comparison target's advantage, and this initial emotional experience is followed by cognitive processing such that this individual may reason the advantage as an inspirational direction (Smith & Kirby, 2000; Verduyn et al., 2011). Accordingly, although inspiration and envy may appear to be conflicting in nature, I suggest that they are not mutually exclusive and can be experienced simultaneously.

Opportunity for Theoretical Advancement

Despite the comprehensiveness of perceived control (i.e., one's perceived likelihood of reducing the gap between oneself and a comparison target) in predicting the relative strength of assimilative and contrastive emotional processes (Major et al., 1991; Mussweiler et al., 2004b; Smith, 2000), only considering this aspect is somewhat limited in scope. Perceived control echoes Festinger's emphasis on the question: "Can I do X?" Although certainly very relevant, the "Can I do X?" question only concerns one's self-evaluation of ability or performance (Wheeler et al., 1997). However, people may ask other types of questions that they try to answer through social comparison, with one important question being "I can do X, so what?" Or, more specifically, "Can I reach a similarly desired outcome from doing X?" This question is a pragmatic one that is mainly for instrumental purposes and not for self-evaluation purposes. People may assimilate to the comparison target if they are able to achieve a similar outcome by performing well, whereas they are more likely to contrast against the comparison target if they

perceive the desired outcome as unlikely. In short, the relative strength of assimilation and contrast effects should not only depend on perceived control but should also depend on perceived instrumentality, both of which are alluded to by expectancy theory (Vroom, 1964). Thus, I next describe expectancy theory to provide a more multifaceted picture of motivation in social comparison processes.

THEORETICAL BACKGROUND: EXPECTANCY THEORY

Expectancy, Instrumentality, and Valence

Expectancy theory, originally developed by Vroom (1964), explains the cognitive process of how people interpret and evaluate their environments to decide on a course of action. The motivational force for directing a given behavior is a function of three distinct perceptions: expectancy, instrumentality, and valence. Expectancy is defined as the subjective probability of effort leading to good performance, which is very similar to the idea of perceived control identified in the social comparison literature (e.g., Buunk & Gibbons, 2007). Instrumentality is defined as the degree to which people believe that performance will lead to a desirable outcome, such as rewards and compliments. Valence refers to people viewing the outcomes as important, attractive, and desirable. According to Vroom (1964), people are motivated to put forth effort if they believe that (a) their efforts will result in good performance (expectancy) and (b) said performance will lead to expected outcomes (instrumentality) that are deemed attractive or desirable (valence). Expectancy theory has become one of the most commonly used theories of motivation in the workplace (Campbell & Pritchard, 1976; Heneman & Schwab, 1972; Mitchell & Biglan, 1971), and is generally supported by empirical evidence (e.g., Allen et al., 1997; Burton et al., 1992; Chen & Miller, 1994; Sanchez et al., 2000).

Vroom (1964) further suggests that motivation is a multiplicative function of the three components (i.e., $\text{Motivation} = \text{Instrumentality} \times \text{Expectancy} \times \text{Valence}$). In addition, all three factors need to be present to motivate behavior; the motivational force will equal zero if any factor is missing. However, the multiplicative nature of expectancy theory has been challenged and adapted throughout the years (Evans, 1991). Alternatively, an additive model suggests that the three factors are compensatory and independently contribute to motivational force. For

example, if one factor is low and the others are high, motivational force still exists. Indeed, meta-analyses have demonstrated that the additive model is valid and that the multiplicative model does not yield higher effect sizes than the additive model (Ambrose & Kulik, 1999; Brooks & Betz, 1990; Chen & Miller, 1994; Van Eerde & Thierry, 1996).

Opportunity for Theoretical Advancement

My integration of expectancy theory diverges from and expands Vroom's original conception in a couple of ways. First, consistent with meta-analyses that illustrate the validity of the additive model (Van Eerde & Thierry, 1996; Ambrose & Kulik, 1999), I examine the independent effects of expectancy and instrumentality, as opposed to multiplicative effects. Notably, I do not examine valence as a third factor because as noted earlier, compliments are typically desired and thus valence is held constant across individuals. In addition, expectancy theory (Vroom, 1964) does not specify where expectancy and instrumentality beliefs come from. However, expectancy and instrumentality can be shaped by many factors at work and reflect how people evaluate themselves as individuals, their interpersonal interactions with others, and their perceptions about the organization as a whole. Thus, in the sections that follow, I focus on three work-related manifestations of expectancy and instrumentality.

HYPOTHESIS DEVELOPMENT:
PREDICTING UPWARD SOCIAL COMPARISON

Observing Compliments Triggers Upward Social Comparison

Social comparison is pervasive in the workplace. Employees are motivated to understand their performance in the organization (Mumford, 1983). However, objective information about one's performance is not always available. Social comparison is functional in helping people gather information to determine their relative standing (Wood, 1989). People tend to compare themselves with others when the target person is in a similar position to them (Garcia et al., 2013). Coworkers are strong candidates for comparison because they share the same leader, possess similar qualifications, and experience similar work-related events (Lam et al., 2011). Coworkers are also easily accessible comparison targets because they spend much of their work hours interacting with one another to accomplish tasks (Kozlowski & Bell, 2003; Molleman et al., 2007). Spontaneous social comparison is likely triggered when people observe their coworkers' performance and their coworkers' interactions with their shared leader. Employees are frequently confronted with evidence of differential treatment by managers (Thomas et al., 2013). One may observe their manager giving compliments to a coworker whereas they themselves have not received compliments. People may automatically relate this social information to themselves and use it to assess their own performance (Dunning & Hayes, 1996; Greenberg et al., 2007). In other words, compliments not only are informative to the recipient but also convey implicit feedback to observers about their relative standings. Thus, managers giving compliments to some employees but not others places observers in less superior positions and fuels upward social comparison processes.

Hypothesis 1: Observing coworkers receiving compliments from the leader is positively associated with upward social comparison.

Research Question: Does the Type of Compliment Matter?

The type of compliment nonrecipients observe may determine the extent to which they engage in upward social comparison. Compliments can vary based on how they are expressed. For example, compliments can target the person or the process (Kamins & Dweck, 1999). Person-focused compliments comment on the more stable personality or ability, whereas process-focused compliments comment on behaviors that are more malleable, such as effort- and relationship-centered compliments. Compared to process-focused compliments, person-focused compliments produce more beneficial effects on self-efficacy and intrinsic motivation for recipients because they convey stronger competence information (Koestner et al., 1987; Schunk, 1983; Schunk & Rice, 1986), but they can also render recipients vulnerable to failure or setbacks and yield negative outcomes, such as feeling unhappy, avoiding repairing mistakes, denigrating their situation, and quitting a task (Skipper & Douglas, 2012; Cimpian et al., 2007; Kamins & Dweck, 1999). For observers, it is possible that process-focused compliments are more relevant for self-improvement and trigger upward social comparison because they convey a message to observers that undesirable situations are changeable and that they are in control of their own outcomes. It is also possible that person-focused compliments are more useful because they focus on desirable abilities and traits, which can be demonstrated by engaging in a variety of valued behaviors and successfully performing different tasks.

Compliments may also be categorized as either behavior-specific or general. Behavior-specific compliments involve statements that deliver positive information on a specific behavior, whereas general compliments involve a statement that does not describe a particular behavior

that is praised (Floress & Jenkins, 2015; Lown et al., 2021). People may react differently to compliments based on how specific or general the statements are (Kanouse et al., 1981). Behavior-specific compliments might be informative to observers because they provide more specific information about both the complimenter's standards and the act that is valued, both of which are aspirations for observers' future performance (Beaman & Wheldall, 2000). However, general compliments might make it easier for observers to latch onto a broad array of behaviors that they find meaningful and constructive. Given the theoretical ambiguities over the effects of compliment type, I pose them as a research question as opposed to a formal hypothesis.

Research Question: Does the type of compliment (i.e., person- versus process-focused; behavior-specific versus general) influence the extent to which observers engage in upward social comparison?

HYPOTHESIS DEVELOPMENT:

PREDICTING SOCIAL COMPARISON EMOTIONS

Upward Social Comparison Elicits Emotions

Upward social comparison can elicit assimilative and contrastive emotional reactions like inspiration and envy (Smith, 2000). On the one hand, upward social comparison can evoke inspiration because what the recipient of compliments possesses is generally coveted and the nonrecipients may capitalize on the situation by trying to learn from the recipient's experience and understand what is expected. The nonrecipients may perceive a positive expectation for their own future and become motivated to make similar achievements. On the other hand, upward social comparison can result in the nonrecipients feeling envious. When the nonrecipients become aware of their lack of achievement, they may feel discontent in themselves and resentful toward the recipient. In this sense, upward social comparison enables the nonrecipients to spotlight what their coworker has achieved in contrast to what they themselves failed to achieve. Thus, I expect people to experience both inspiration and envy after engaging in upward social comparison.

Hypothesis 2: Upward social comparison is positively associated with inspiration.

Hypothesis 3: Upward social comparison is positively associated with envy.

The Moderating Role of Expectancy

According to the literature on the assimilative and contrastive emotional processes of social comparison, the relative strength of the two upward social comparison emotions should depend on expectancy (Major et al., 1991; Mussweiler et al., 2004b; Smith, 2000). In work settings, performance is one key dimension people consider when inferring the distance between their coworkers and themselves. Expectancy captures the extent to which people believe that the

performance gap between themselves and an advantaged other can be reduced via their own efforts. When people perceive that their relative disadvantage is temporary and within their control, they assimilate to the advantaged other. These individuals imagine that the advantaged other's circumstances could easily be their own and envision a positive future for themselves, resulting in them feeling inspired. By contrast, when individuals feel their inferiority is fixed and out of their control, they focus on the differences between themselves and the advantaged other and contrast against the advantaged person. Such perception evokes strong feelings of frustration and inadequacy regarding their potential to reduce the gap, resulting in them feeling envious. Low expectancy may also decrease feelings of inspiration because interpreting the disadvantaged situation as stable damages people's confidence in making progress toward the outcome they desire. I suggest that expectancy can be shaped by various factors manifesting from different sources. In the following paragraphs, I will explain three unique work-related manifestations of expectancy: an individual factor (e.g., core self-evaluation), an interpersonal factor (e.g., perceived similarity), and an organizational factor (e.g., organizational support).

Individual factor. For the individual factor, core self-evaluation (CSE) represents people's fundamental appraisals of situations as well as broad evaluations about their self-worth, competence, and control (Judge et al., 2017). Four central components characterize CSE: 1) self-esteem (i.e., an individual's overall appraisal of their own self-worth; Rosenberg, 1965), 2) generalized self-efficacy (i.e., an individual's belief in their ability to perform well across a variety of situations; Chen et al., 2001), 3) emotional stability (i.e., the propensity to feel calm and secure under difficult situations and remain productive; Furnham & Zacherl, 1986), and 4) internal locus of control (i.e., an individual's belief that they have control over their own behaviors and resulting outcomes, as opposed to being influenced by external forces such as fate

or powerful others; Spector, 1982). These four traits are interrelated and underlie CSE, a higher order construct (Judge et al., 2004).

There are at least three reasons to expect that CSE will reflect expectancy. First, although not receiving compliments signals people's relative lower standings compared to those who receive compliments, people with higher CSEs are less likely to treat it as a stressor and more likely to embrace a positive outlook on it (Kammeyer-Mueller et al., 2009). In contrast to people with lower CSEs, those with higher CSEs are less sensitive to the threatening aspect of being a non-recipient of compliments (Chang et al., 2012). When faced with this unfavorable feedback, individuals with higher CSEs are more likely to appraise their circumstances as an opportunity to learn and grow (Bono & Colbert, 2005). For instance, they may treat observable compliments as valuable sources of information that direct their goals and reduce performance gaps. Second, people with higher CSEs think more positively of themselves and are more confident in their own abilities (Judge et al., 2003; Judge et al., 1998). They have a positive expectation of their future performance and believe that they are capable of carrying out the actions necessary for success. In other words, they see the potential of accomplishing what the complimented coworker has achieved. Third, higher CSE individuals are more intrinsically motivated and tend to set more challenging goals (Erez & Judge, 2001; Judge et al., 2005). While pursuing goals, they also are more persistent in the face of setbacks and engage in more problem-solving (Erez & Judge, 2001; Kammeyer-Mueller et al., 2009). Thus, they not only have the desire to reach a higher level of excellence but also are committed to improve themselves and have the mental resources to meet their goals (Judge & Hurst, 2007). With these reasons, a higher level of CSE should be positively related to a higher level of expectancy.

Interpersonal factor. For the interpersonal factor, perceived similarity between the observing employee and the complimented coworker should influence expectancy. When people engage in upward social comparison, they engage in similarity testing by actively generating self-related information to reach a conclusion of whether their standing is similar to or different from the complimented coworker (Lockwood & Kunda, 1997; Mussweiler, 2001). Such a conclusion, in turn, should influence people's judgment of the attainability of the desired outcomes. When an observing employee perceives themselves as more similar to a complimented coworker, they feel psychologically closer to them and more likely to reach the same level of achievement; by contrast, when an observing employee perceives a higher level of dissimilarity between the complimented coworker and themselves, they feel more psychologically distant and perceive a larger performance gap that is not easily reduced (Mussweiler, 2003). Indeed, people's self-evaluations are higher after they compare themselves with a moderately high standard than with an extremely high one due to perceived similarity (Mussweiler et al., 2004a). Relatedly, Tesser's (1988) self-evaluation maintenance model suggests that witnessing the success of a coworker whom one perceives as similar allows the said employee to bask in the glory of the successful coworker and feel that similar success is within their control.

Organizational factor. For the organizational factor, I suggest that organizational support should shape expectancy. Organizational scholars have recognized that perceptions of the environment are influential on employees' psychological states and behaviors (Kristof-Brown et al., 2005; Mischel, 1977). Perceived organizational support is defined as an employee's belief that their organization values their contribution and cares about their well-being (Eisenberger et al., 1986). When people perceive that their organization is supportive, they have increased job

satisfaction and reduced strains to stressors (Rhoades & Eisenberger, 2002). This is because perceived organizational support gives people assurance that aid is available from the organization when it is needed to carry out job duties and to overcome stressful situations (George et al., 1993). Indeed, supportive organizations not only provide adequate guidance that enables employees to possess appropriate skills for performing the job, but also offer social and psychological resources that enhance self-efficacy and support employees' growth and development (Kurtessis et al., 2017; Rhoades & Eisenberger, 2002). In a supportive work environment, employees receive support both from the organization and from one another, which optimizes employees' well-being and empowers them (Eisenberger et al., 1986; Shanock & Eisenberger, 2006; Stinglhamber & Vandenberghe, 2003). Thus, a supportive organization should foster employees' perception that desired outcomes are obtainable and in their control.

Accordingly, I posit that the three work-related manifestations of higher expectancy (i.e., higher levels of CSE, perceived similarity, and organizational support) independently enhance the positive relationship between observing compliments and inspiration. Specifically, I propose that the association between observing compliments and inspiration is positive when the observing employee has higher CSE, perceived similarity, or organizational support, but the association is negative when the observing employee experiences lower levels of any of these factors. I also posit that lower levels of CSE, perceived similarity, and organizational support separately enhance the positive relationship between observing compliments and envy. Specifically, I suggest that the association between observing compliments and envy is more positive when the observing employee has lower CSE, perceived similarity, or organizational support, compared to when the observing employee experiences higher levels of any of these factors.

Hypothesis 4: The positive association of upward social comparison with inspiration is moderated by expectancy, such that the association is positive when expectancy is higher and negative when expectancy is lower, evident by (a) an individual factor (e.g., CSE), (b) an interpersonal factor (e.g., perceived similarity), or (c) an organizational factor (e.g., organizational support).

Hypothesis 5: The positive association of upward social comparison with envy is moderated by expectancy, such that the association is stronger when expectancy is lower, evident by (a) an individual factor (e.g., CSE), (b) an interpersonal factor (e.g., perceived similarity), or (c) an organizational factor (e.g., organizational support).

The Moderating Role of Instrumentality

According to expectancy theory (Vroom, 1964), besides expectancy, people's perception of whether efforts and good performance can lead to rewards, such as receiving compliments from leaders, should also matter. Although after engaging in upward social comparison, the observer may feel that they are capable of performing the behavior that prompted a coworker to be complimented (i.e., high expectancy), it is nevertheless possible that the observer may not be similarly complimented for doing so, making instrumentality an important consideration in addition to expectancy. When observers perceive that their efforts and performance can lead to receiving compliments from their leader, they assimilate to the complimented coworker and feel inspired. When observers feel the potential of receiving compliments from their leader is low, they contrast against the complimented coworker, experiencing much envy and little inspiration. I suggest that instrumentality may be a manifestation of an individual factor (e.g., non-zero-sum mentality), an interpersonal factor (e.g., relative LMX), and an organizational factor (e.g., organizational procedural justice).

Individual factor. For the individual factor, people's non-zero-sum mentality can shape instrumentality. Social situations can be perceived from zero-sum, in which one person's gain is another's loss, to non-zero-sum, in which all people can win (Johnson et al., 2022; Kakkar & Sivanathan, 2022). When an individual has a zero-sum mentality, they naturally view a situation as competitive, where the achievements of one are at the expense of others (Bazerman et al., 2001). In contrast, people with a non-zero-sum mentality believe that relationships can work symbiotically, such that everyone can advance their interests (Crocker et al., 2017). They assume what is good for one person is or can be good for all; when one person is successful, it does not exhaust a limited pool of successful outcomes, and another person's gain is not offset. Prior research has shown that the extent to which people frame a situation as zero-sum or non-zero-sum influences their emotions and behaviors (Balliet et al., 2009; De Dreu et al., 2000; Sirola & Pitesa, 2017). In the context of giving and receiving compliments, I suggest that people who view coworkers receiving compliments from their mutual leader in a non-zero-sum manner should believe that these compliments are not given at their own expense and do not interfere with their own opportunity to receive compliments.

Interpersonal factor. For the interpersonal factor, perceived differences between one's LMX and the LMX of the complimented coworker should influence observers' perceived likelihood of receiving future compliments from the leader. Managers do not treat all employees in the same manner; rather, managers vary their interactions and develop differentiated exchange relationships with each employee (Dansereau et al., 1975; Graen & Cashman, 1975; Graen & Scandura, 1987; Graen & Uhl-Bien, 1995; Liden & Graen, 1980; Liden et al., 1993). Specifically, LMX captures the overall relationship quality between a manager and an employee, with high-quality LMX relationships characterized by mutual trust, loyalty, and respect (Liden &

Masllyn, 1998). Critically, LMX relationships are not only absolute in the sense that LMX captures the quality of the dyadic relationship between an employee and a manager, but can also be considered in relative terms in reference to others' relationships with the manager (Hogg et al., 2005; Liden et al., 1997). Through social interactions and observations, employees are able to gauge the differences between their own LMX relationship and others' LMX relationships with the manager (Tse et al., 2013). Such comparison processes are defined as LMX social comparison (LMXSC; Vidyarthi et al., 2010), which results in an employee's judgment about their relative LMX (RLMX) compared to their coworkers' LMXs (Henderson et al., 2008). Thus, an employee's evaluation of their relationship with their manager and subsequent attitudinal and behavioral responses are driven not only by their perceived quality of their relationship with the manager but also by the quality of the relationships the manager has with other members within a workgroup (Buengeler et al., 2021; Martin et al., 2018; Yu et al., 2018).

In fact, compared to absolute LMX, employees' RLMX should have more meaningful implications for employees. Because social resources (e.g., time, information, influence, support, attention, favors, and rewards) are limited, managers allocate them disproportionately to employees with higher RLMXs (Epitropaki & Martin, 2013; Graen & Scandura, 1987; Green et al., 1996; Liden & Graen, 1980; Wilson et al., 2010). Thus, for an employee to obtain these limited resources, what is more important is not having a high LMX relationship with their manager but having a higher RLMX with the manager than their coworkers. More importantly, RLMX influences the type of resources being exchanged; while lower RLMX relationships are more economic in nature and entail exchanges that are formally agreed upon such as tangible pay, higher RLMX relationships are more socio-emotionally based and render exchanges such as mutual support (Dansereau et al., 1975; Dulebohn et al., 2012). For example, managers are more

likely to express compliments when communicating with employees with higher RLMX (Fairhurst & Chandler, 1989; Yrle et al., 2002). Accordingly, when an employee perceives their own LMX as higher than their complimented coworkers, they should foresee themselves being in a favorable position that allows them to obtain social rewards and a fair share of a manager's positive treatment.

Organizational factor. For the organizational factor, instrumentality can be shaped by people's perception of their organization's procedural justice. Procedural justice centers on the fairness of decision-making processes (Thibaut & Walker, 1975) and tends to be attributed to the organization (Masterson et al., 2000; Johnson et al., 2006). To characterize an organization as having high procedural justice, the organization's procedures need to be applied consistently, be free of bias, be based on accurate information, and uphold ethical and moral standards (Colquitt et al., 2001; Colquitt et al., 2002). In addition, employees should be able to express their views and feelings during procedures, to influence the outcomes, and to appeal the outcomes (Liao & Rupp, 2005; Naumann & Bennett, 2000). A procedurally just organization conveys information about fairness to employees in the process of distributing rewards and permits equal reward opportunities (Folger & Konovsky, 1989). Such organization likely fosters employees' expectations that rewards which one person receives for performing certain behavior will also be rewarded to others if they perform the same behavior. Thus, when employees view their organization as having fair procedures, they should perceive a high likelihood of receiving compliments from their leader after engaging in similar behavior or reaching a similar performance level as their complimented coworkers.

To conclude, I posit that the three work-related manifestations of higher instrumentality (i.e., higher levels of non-zero-sum mentality, RLMX, and organizational procedural justice)

independently enhance the positive relationship between observing compliments and inspiration. Specifically, I contend that the association between observing compliments and inspiration is positive when the observing employee has higher non-zero-sum mentality, RLMX, or organizational procedural justice, but the association is negative when the observing employee experiences lower levels of any of these factors. I also posit that lower levels of non-zero-sum mentality, RLMX, and organizational procedural justice, as three exemplars of lower expectancy, separately enhance the positive relationship between observing compliments and envy. Specifically, I suggest that the association between observing compliments and envy is more positive when the observing employee's non-zero-sum mentality, RLMX, or organizational procedural justice is lower, compared to when the observing employee experiences higher levels of any of these factors.

Hypothesis 6: The positive association of upward social comparison with inspiration is moderated by instrumentality, such that the association is positive when instrumentality is higher and negative when instrumentality is lower, evident by (a) an individual factor (e.g., non-zero-sum mentality), (b) an interpersonal factor (e.g., RLMX), and (c) an organizational factor (e.g., organizational procedural justice).

Hypothesis 7: The positive association of upward social comparison with envy is moderated by instrumentality, such that the association is stronger when instrumentality is lower, evident by (a) an individual factor (e.g., non-zero-sum mentality), (b) an interpersonal factor (e.g., RLMX), and (c) an organizational factor (e.g., organizational procedural justice).

HYPOTHESIS DEVELOPMENT:

DOWNSTREAM CONSEQUENCES OF INSPIRATION AND ENVY

Upward social comparison triggers self-evaluation and the discrepancy between observers and recipients of compliments motivates individuals to decrease the gap in their relative standings. However, different emotions trigger people to accomplish this in different ways. While inspiration leads to a moving-up motivation aimed at improving one's own position, envy leads to a pulling-down motivation aimed at damaging the position of the advantaged other.

Associations of Inspiration with In-Role and Extra-Role Behaviors

Inspiration is an appetitive motivational state that energizes and directs people's behaviors to improve their own situation. More specifically, inspiration activates people's self-improvement needs and motivates them to improve their relative standing (Corcoran et al., 2011). It affords people an influx of psychological resources that help them overcome constraints and take action (Thrash & Elliot, 2003). There are two types of actions people can take to make constructive contributions and reduce the gap in their relative standing. Specifically, people may exert efforts toward the core and formally defined aspects of their job responsibilities (i.e., in-role behaviors). People may also engage in extra-role behaviors, or organizational citizenship behaviors (OCB), to enhance the effective functioning of the organization (Organ, 1988). Organizational citizenship behaviors that are geared toward others (OCBI; e.g., assisting supervisor with their work when not asked) and toward the organization (OCBO; e.g., attendance at work is above the norm) both fulfil its purpose (Williams & Anderson, 1991). I propose that inspiration triggers people's efforts toward both in-role and extra-role behaviors.

Hypothesis 8: Inspiration is positively associated with in-role and extra-role behaviors.

Association of Envy with Interpersonal Counterproductive Work Behaviors

Envy results in an increased focus on the discrepancy between oneself and the envied counterpart and prompts people to bolster their relative standing by reducing the counterpart's perceived superiority. Envy is an unpleasant feeling and evokes a threat to self-esteem (Duffy et al., 2021). People who experience envy are motivated to alleviate the unpleasantness and restore self-esteem (Corcoran et al., 2011). Specifically, envy activates action tendencies aimed at detracting from the counterpart and pulling them down (Duffy et al., 2012; Dunn & Schweitzer, 2006; Tai et al., 2012). Past empirical research supports the positive association between envy and various negative behaviors. For example, envious individuals report lower group cohesiveness (Duffy & Shaw, 2000). Also, people who experience envy engage in negative behaviors that are intended to harm the envied person, such as social undermining behaviors (Duffy et al., 2012; Dunn & Schweitzer, 2006) and interpersonal counterproductive work behaviors (Cohen-Charash & Mueller, 2007). Similarly, I suggest that envy leads to the enactment of interpersonal counterproductive work behaviors toward envied coworkers.

Hypothesis 9: Envy is positively associated with interpersonal counterproductive work behaviors.

Taken together, I further propose moderated mediation predictions, such that each construct related to expectancy or instrumentality moderates the indirect effects of observing compliments on in-role and extra-role behaviors and interpersonal counterproductive work behaviors through upward social comparison and, in turn, inspiration and envy.

Hypothesis 10: The indirect, positive association of observing compliments with in-role and extra-role behaviors via upward social comparison and inspiration is positive when observer expectancy is higher and negative when observer expectancy is lower, evident

by (a) an individual factor (e.g., CSE), (b) an interpersonal factor (e.g., perceived similarity), and (c) an organizational factor (e.g., organizational support).

Hypothesis 11: The indirect, positive association of observing compliments with interpersonal counterproductive work behaviors via upward social comparison and envy is stronger when observer expectancy is lower, evident by (a) an individual factor (e.g., CSE), (b) an interpersonal factor (e.g., perceived similarity), and (c) an organizational factor (e.g., organizational support).

Hypothesis 12: The indirect, positive association of observing compliments with in-role and extra-role behaviors via upward social comparison and inspiration is positive when observers' instrumentality is higher and negative when observer instrumentality is lower, evident by (a) an individual factor (e.g., non-zero-sum mentality), (b) an interpersonal factor (e.g., RLMX), and (c) an organizational factor (e.g., organizational procedural justice).

Hypothesis 13: The indirect, positive association of observing compliments with interpersonal counterproductive work behaviors via upward social comparison and envy is stronger when observer instrumentality is lower, evident by (a) an individual factor (e.g., non-zero-sum mentality), (b) an interpersonal factor (e.g., RLMX), and (c) an organizational factor (e.g., organizational procedural justice).

OVERVIEW OF STUDIES

I conducted two studies for this dissertation. The first study involved three pilot tests that aimed to construct, refine, and validate a multidimensional compliments scale. The sample for the first pilot test consisted of a group of subject matter experts, and the latter two consisted of participants from an online research platform. The second study relied on the validated compliments scale and utilized experience sampling methodology to test the hypothesized relationships. The sample for this study was comprised of field data obtained from full-time employees.

STUDY 1 METHOD

Following the recommendation of Hinkin (1998), the development of the compliments scale progressed through several stages. In the first stage, based on the proposed definition and previous research related to the concept, I generated 65 theoretically-derived items that tapped into the five kinds of compliments (i.e., general, effort-centered, relationship-centered, ability-centered, and personality-centered compliments) related to my proposed research question. In the second stage, to evaluate the content validity, I employed 21 subject matter experts (i.e., management faculty and doctoral students). I first provided these judges with a definition of compliments and definitions of each of the five types of compliments. Specifically, general compliments were defined as “statements that deliver positive information not about a specific behavior.” Effort-centered compliments were defined as “statements that focus on an individual’s effort toward job responsibilities, how hard they try, and how much time they put into work.” Relationship-centered compliments were defined as “statements that focus on an individual’s time and effort spent toward other people at work (e.g., coworkers, supervisors, and subordinates).” Ability-centered compliments were defined as “statements that focus on an individual’s ability or skill that requires a gradual learning curve of improvement.” Personality-centered compliments were defined as “statements that focus on an individual’s traits and personality.” I then asked the judges to classify each of the 65 items, which were randomly ordered, into one of the five categories. Consistent with what was described and used by previous scale development studies (e.g., Hinkin & Schriesheim, 1989; MacKenzie et al., 1991; Schriesheim et al., 1993), items were retained when the majority of judges assigned them to the proper a priori category.

In the third stage, to capture the factor structure of the compliments measure, I administered the remaining items to a sample representative of the actual population of interest. I recruited a sample of 400 full-time employees through Prolific Academic (www.prolific.ac; Palan & Schitter, 2018). This sample size was based on Gorsuch's (1983) recommendation that at least five participants per variable is desirable. The majority of participants were Caucasian (74%) and male (58%). Participants' average age was 37.55 years ($SD = 9.92$). They worked an average of 42.29 hours per week ($SD = 5.31$), and their average job tenure was 7.95 years ($SD = 7.03$). They worked in a variety of industries, such as health care (15%), education (14%), and manufacturing (13.5%). Participants rated how frequently they observed their coworkers receive each compliment item from their mutual manager. An example item of general compliments was: "adding value to the company." An example of effort-centered compliments was: "putting in effort to complete a task." An example of relationship-centered compliments was: "creating a pleasant working relationship." An example of ability-centered compliments was: "having strong technical skills." An example of personality-centered compliments was: "being enthusiastic." The response options were on a 5-point Likert scale: 1 (*never*), 2 (*rarely*), 3 (*occasionally*), 4 (*often*), and 5 (*always*). The items were administered in randomized order within their respective category.

In the final stage, to confirm the dimensionality of the scale, the reduced items were included in a confirmatory factor analysis (CFA). I recruited another set of 408 full-time employees from Prolific Academic (www.prolific.ac; Palan & Schitter, 2018). The demographics of this sample were similar to that of the sample for EFA. Specifically, 77% of the participants were Caucasian and 52% were male. The average age was 36.54 years ($SD = 9.34$), they worked an average of 42.69 hours per week ($SD = 6.99$), and their average job tenure was 7.21 years (SD

= 7.79). They worked in various industries, such as education (17.6%), health care (15.2%), and retail (11.3%). Participants indicated on a 5-point Likert scale ranging from 1 (*never*) to 5 (*always*) regarding the frequency of observing each of the remaining items (randomized within their category) that were retained through the EFA process.

STUDY 1 RESULTS

The content validation procedure involving subject matter experts yielded 50 items, including 8 items for general compliments, 8 items for effort-centered compliments, 11 items for relationship-centered compliments, 12 items for ability-centered compliments, and 11 items for personality-centered compliments (see Table 1 for detailed results). I then submitted the 50 remaining items to an EFA involving principal components analysis with Varimax rotation (Kim & Mueller, 1978). Five factors emerged with eigenvalues of 29.33, 1.99, 1.58, 1.32, and 1.11, each of which explained 58.67%, 3.97%, 3.16%, 2.63%, and 2.22%, respectively, of the variance in the items. The rotated component matrix is shown in Table 2. I used a factor loading of .50 as a minimum cutoff to ensure that the items meaningfully reflected the content domain of each underlying construct (Ford et al., 1986). I further eliminated items that loaded strongly on the appropriate factor as well as one or more other factors (Hinkin, 1998). The difference between factor loadings for any given item was more than 0.10 to ensure only items that clearly loaded on a single factor were included (Schwab, 1980). From these steps, I inspected five subscales of compliments: one labeled general compliments composed of 6 items, one labeled effort-centered compliments composed of 6 items, one labeled relationship-centered compliments composed of 7 items, one labeled ability-centered compliments composed of 8 items, and one labeled personality-centered compliments composed of 9 items (see Appendix for a full list of 36 items). All of the subscales showed high internal consistency, with Cronbach's alpha reliability of 0.94 for the general compliments subscale, 0.91 for the effort-centered compliments subscale, 0.93 for the relationship-centered compliments subscale, 0.94 for the ability-centered compliments subscale, and 0.95 for the personality-centered compliments subscale.

The items consisting of five subscales of compliments were then administered to a CFA. The fit statistics of the five-factor model were: $\chi^2(584) = 1288.12, p < .001$, Comparative Fit Index (CFI) = 0.95, and Standardized Root Mean Squared Residual (SRMR) = 0.04. According to Kline (2005), CFI values above 0.90 and SRMR values below 0.10 are favorable. Thus, the model had acceptable fit to the data. All factor loadings of the five-factor model were significant and are reported in Table 3 along with the item means and standard deviations. Because correlations between any two factors were high ($0.74 \leq r \leq 0.83$; see Table 4 for all correlations), I extracted a second-order factor with the five factors (Rindskop & Rose, 1988), which also showed acceptable model fit: $\chi^2(590) = 1305.64, p < .001$, CFI = 0.95, and SRMR = 0.06. However, a chi-square difference test denoted that the second-order factor model fit the data worse than the five-factor model, $\chi^2_{\text{diff}}(6) = 17.52, p < .01$. To further compare, I tested the fit of a one-factor model, which exhibited an even lower degree of fit compared to the five-factor model: $\chi^2(594) = 3175.83, p < .001$, CFI = 0.81, SRMR = 0.06, $\chi^2_{\text{diff}}(10) = 1887.71, p < .001$. The results above indicated that a five-factor model provides the most optimal factor structure.

STUDY 1 DISCUSSION

The purpose of Study 1 was to create a scale that could assess various types of compliments in the workplace. Using three independent samples, I constructed, refined, and validated a multidimensional compliments scale that includes general compliments, effort-centered compliments, relationship-centered compliments, ability-centered compliments, and personality-centered compliments. I demonstrated that this multidimensional compliments scale adequately covered the content domain. I also provided evidence that the scale was psychometrically sound with satisfactory validity and reliability. Researchers who are interested in understanding compliments-related phenomena may rely on the full scale to capture all dimensions of compliments or the general compliments subscale as an abbreviated version. Studies that aim to delineate the relationships between different types of compliments and any variables of interest may use the four behavior-specific subscales. Next, I proceed to hypothesis testing utilizing the validated scale of compliments.

TABLE 1

Results of Content Analysis for the Compliments Scale

Compliments Scale Item	General	Effort	Relationship	Ability	Personality
<i>General</i>					
1. Adding value to the company	21 (100%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
2. Being a good addition to the workplace	19 (90%)	0 (0%)	2 (10%)	0 (0%)	0 (0%)
3. Being an asset to the company	19 (90%)	0 (0%)	0 (0%)	2 (10%)	0 (0%)
4. Being an awesome employee	19 (90%)	1 (5%)	0 (0%)	0 (0%)	1 (5%)
5. Playing an important role in the company's success	19 (90%)	0 (0%)	0 (0%)	2 (10%)	0 (0%)
6. Making a contribution as an employee	18 (85%)	2 (10%)	0 (0%)	1 (5%)	0 (0%)
7. Strengthening the organizational culture	13 (62%)	0 (0%)	7 (33%)	1 (5%)	0 (0%)
8. Suggesting perspectives that benefit the organization	13 (62%)	0 (0%)	1 (5%)	7 (33%)	0 (0%)
9. Earning an achievement	11 (52%)	7 (33%)	0 (0%)	3 (15%)	0 (0%)
10. Doing quality work	9 (43%)	5 (24%)	0 (0%)	7 (33%)	0 (0%)
11. Improving job performance	9 (43%)	5 (24%)	0 (0%)	7 (33%)	0 (0%)
12. Providing unique perspectives	10 (47%)	1 (5%)	0 (0%)	9 (43%)	1 (5%)
<i>Effort-centered</i>					
1. Putting in effort to complete a task	0 (0%)	21 (100%)	0 (0%)	0 (0%)	0 (0%)
2. Putting in the extra time to reach goals	0 (0%)	21 (100%)	0 (0%)	0 (0%)	0 (0%)
3. Doing more work than expected	1 (5%)	20 (95%)	0 (0%)	0 (0%)	0 (0%)
4. Coming in early/staying late to finish work	1 (5%)	20 (95%)	0 (0%)	0 (0%)	0 (0%)

TABLE 1 (CONT.)

Compliments Scale Item	General	Effort	Relationship	Ability	Personality
5. Going above and beyond for every piece of their job	2 (10%)	18 (85%)	1 (5%)	0 (0%)	0 (0%)
6. Working hard	1 (5%)	18 (85%)	0 (0%)	0 (0%)	2 (10%)
7. Fulfilling all responsibilities	5 (24%)	15 (71%)	0 (0%)	0 (0%)	1 (5%)
8. Being well prepared	2 (10%)	14 (65%)	0 (0%)	3 (15%)	2 (10%)
9. Handling a difficult project with care	2 (10%)	10 (47%)	0 (0%)	8 (38%)	1 (5%)
10. Overcoming obstacles and challenges	4 (20%)	9 (43%)	0 (0%)	7 (33%)	1 (5%)
<i>Relationship-centered</i>					
1. Creating a pleasant working relationship	0 (0%)	0 (0%)	21 (100%)	0 (0%)	0 (0%)
2. Handling interpersonal matters effectively	0 (0%)	0 (0%)	20 (95%)	1 (5%)	0 (0%)
3. Helping coworkers get up to speed	0 (0%)	0 (0%)	20 (95%)	0 (0%)	1 (5%)
4. Assisting someone with their work	0 (0%)	1 (5%)	20 (95%)	0 (0%)	0 (0%)
5. Uplifting team morale	0 (0%)	0 (0%)	20 (95%)	0 (0%)	1 (5%)
6. Extending extra kindness to a coworker	0 (0%)	0 (0%)	20 (95%)	0 (0%)	1 (5%)
7. Empathizing with coworkers	0 (0%)	0 (0%)	20 (95%)	0 (0%)	1 (5%)
8. Working collaboratively with others	0 (0%)	0 (0%)	19 (90%)	2 (10%)	0 (0%)
9. Being flexible as a team member	0 (0%)	0 (0%)	16 (75%)	0 (0%)	5 (24%)
10. Being willing to lend a hand	3 (15%)	2 (10%)	14 (65%)	0 (0%)	2 (10%)
11. Raising their concerns that help the organization	4 (20%)	1 (5%)	14 (65%)	2 (10%)	0 (0%)
12. Effectively resolving a conflict	2 (10%)	1 (5%)	11 (52%)	7 (33%)	0 (0%)

TABLE 1 (CONT.)

Compliments Scale Item	General	Effort	Relationship	Ability	Personality
13. Setting a good example for coworkers	7 (33%)	3 (15%)	11 (52%)	0 (0%)	0 (0%)
<i>Ability-centered</i>					
1. Having strong technical skills	0 (0%)	0 (0%)	0 (0%)	21 (100%)	0 (0%)
2. Delivering presentations proficiently	0 (0%)	1 (5%)	0 (0%)	20 (95%)	0 (0%)
3. Demonstrating analytical ability	0 (0%)	2 (10%)	0 (0%)	19 (90%)	0 (0%)
4. Solving problems creatively	2 (10%)	1 (5%)	0 (0%)	17 (80%)	1 (5%)
5. Bringing good ideas to the table	4 (20%)	0 (0%)	0 (0%)	17 (80%)	0 (0%)
6. Resolving a work situation skillfully	2 (10%)	2 (10%)	0 (0%)	17 (80%)	0 (0%)
7. Being knowledgeable of their field	2 (10%)	3 (15%)	0 (0%)	15 (71%)	1 (5%)
8. Communicating effectively	1 (5%)	2 (10%)	4 (20%)	14 (65%)	0 (0%)
9. Having innovative ideas	3 (15%)	1 (5%)	0 (0%)	14 (65%)	3 (15%)
10. Approaching a problem using new methods	3 (15%)	3 (15%)	0 (0%)	14 (65%)	1 (5%)
11. Handling stress skillfully	3 (15%)	0 (0%)	0 (0%)	13 (62%)	5 (24%)
12. Bringing insights from experience to the table	6 (28%)	2 (10%)	0 (0%)	13 (62%)	0 (0%)
13. Asking insightful questions	6 (28%)	2 (10%)	0 (0%)	12 (57%)	1 (5%)
14. Paying attention to details	1 (5%)	4 (20%)	0 (0%)	10 (47%)	6 (28%)
15. Seeing the big picture	8 (38%)	0 (0%)	0 (0%)	8 (38%)	5 (24%)
<i>Personality-centered</i>					
1. Being enthusiastic	1 (5%)	0 (0%)	0 (0%)	0 (0%)	20 (95%)

TABLE 1 (CONT.)

Compliments Scale Item	General	Effort	Relationship	Ability	Personality
2. Being extraverted	1 (5%)	0 (0%)	0 (0%)	0 (0%)	20 (95%)
3. Being confident	2 (10%)	0 (0%)	0 (0%)	0 (0%)	19 (90%)
4. Being open-minded	3 (15%)	0 (0%)	0 (0%)	0 (0%)	18 (85%)
5. Being levelheaded	3 (15%)	0 (0%)	0 (0%)	0 (0%)	18 (85%)
6. Being trustworthy	1 (5%)	0 (0%)	3 (15%)	0 (0%)	17 (80%)
7. Having a positive attitude	3 (15%)	0 (0%)	0 (0%)	1 (5%)	17 (80%)
8. Being adaptable	1 (5%)	0 (0%)	0 (0%)	3 (15%)	17 (80%)
9. Being conscientious	2 (10%)	0 (0%)	1 (5%)	2 (10%)	16 (75%)
10. Being agreeable	1 (5%)	0 (0%)	3 (15%)	1 (5%)	16 (75%)
11. Having a high ethical standard	5 (24%)	0 (0%)	1 (5%)	0 (0%)	15 (71%)
12. Being dedicated	2 (10%)	8 (38%)	0 (0%)	0 (0%)	11 (52%)
13. Having a good work ethic	1 (5%)	10 (47%)	0 (0%)	0 (0%)	10 (47%)
14. Being reliable as an employee	7 (33%)	3 (15%)	1 (5%)	0 (0%)	10 (47%)
15. Staying organized	4 (20%)	1 (5%)	0 (0%)	7 (33%)	9 (43%)

Note. $N = 21$. Numbers indicate the number of judges (percentage in parentheses) that assigned each item to each category. Retained items are in bold.

TABLE 2
Results of Exploratory Factor Analysis for the Compliments Scale

Compliments Scale Item	Factor Loadings				
	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
<i>General</i>					
1. Adding value to the company	0.33	0.28	0.25	0.28	0.69
2. Being a good addition to the workplace	0.35	0.30	0.38	0.32	0.51
3. Being an asset to the company	0.26	0.29	0.26	0.39	0.65
4. Being an awesome employee	0.23	0.24	0.40	0.41	0.45
5. Playing an important role in the company's success	0.30	0.31	0.24	0.34	0.67
6. Making a contribution as an employee	0.20	0.30	0.39	0.37	0.52
7. Strengthening the organizational culture	0.40	0.39	0.25	0.22	0.55
8. Suggesting perspectives that benefit the organization	0.30	0.44	0.20	0.24	0.56
<i>Effort-centered</i>					
1. Putting in effort to complete a task	0.26	0.33	0.32	0.66	0.18
2. Putting in the extra time to reach goals	0.26	0.27	0.19	0.69	0.23
3. Doing more work than expected	0.18	0.18	0.16	0.79	0.13
4. Coming in early/staying late to finish work	0.23	0.18	0.09	0.64	0.16
5. Going above and beyond for every piece of their job	0.19	0.21	0.21	0.71	0.30
6. Working hard	0.17	0.25	0.32	0.70	0.20
7. Fulfilling all responsibilities	0.33	0.27	0.39	0.55	0.25
8. Being well prepared	0.35	0.34	0.36	0.51	0.25
<i>Relationship-centered</i>					

TABLE 2 (CONT.)

Compliments Scale Item	Factor Loadings				
	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
1. Creating a pleasant working relationship	0.41	0.28	0.61	0.18	0.31
2. Handling interpersonal matters effectively	0.49	0.29	0.55	0.21	0.20
3. Helping coworkers get up to speed	0.29	0.29	0.68	0.26	0.21
4. Assisting someone with their work	0.27	0.16	0.70	0.30	0.17
5. Uplifting team morale	0.37	0.36	0.53	0.22	0.31
6. Extending extra kindness to a coworker	0.41	0.26	0.61	0.20	0.26
7. Empathizing with coworkers	0.48	0.31	0.55	0.11	0.23
8. Working collaboratively with others	0.37	0.31	0.63	0.20	0.22
9. Being flexible as a team member	0.21	0.32	0.65	0.24	0.18
10. Being willing to lend a hand	0.22	0.26	0.68	0.31	0.13
11. Raising their concerns that help the organization	0.33	0.37	0.42	0.16	0.41
<i>Ability-centered</i>					
1. Having strong technical skills	0.30	0.61	0.29	0.22	0.21
2. Delivering presentations proficiently	0.25	0.66	0.15	0.24	0.27
3. Demonstrating analytical ability	0.34	0.65	0.27	0.23	0.25
4. Solving problems creatively	0.27	0.69	0.24	0.32	0.21
5. Bringing good ideas to the table	0.19	0.71	0.29	0.26	0.24
6. Resolving a work situation skillfully	0.34	0.55	0.35	0.35	0.16
7. Being knowledgeable of their field	0.38	0.53	0.33	0.28	0.18
8. Communicating effectively	0.38	0.48	0.42	0.27	0.23

TABLE 2 (CONT.)

Compliments Scale Item	Factor Loadings				
	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
9. Having innovative ideas	0.24	0.76	0.25	0.22	0.20
10. Approaching a problem using new methods	0.29	0.69	0.28	0.26	0.19
11. Handling stress skillfully	0.52	0.41	0.30	0.32	0.11
12. Bringing insights from experience to the table	0.36	0.62	0.24	0.20	0.34
<i>Personality-centered</i>					
1. Being enthusiastic	0.61	0.26	0.26	0.32	0.20
2. Being extraverted	0.77	0.19	0.11	0.18	0.21
3. Being confident	0.70	0.35	0.28	0.23	0.21
4. Being open-minded	0.64	0.36	0.30	0.17	0.26
5. Being levelheaded	0.71	0.24	0.33	0.25	0.19
6. Being trustworthy	0.71	0.28	0.31	0.24	0.20
7. Having a positive attitude	0.57	0.26	0.35	0.34	0.17
8. Being adaptable	0.45	0.32	0.37	0.37	0.15
9. Being conscientious	0.61	0.27	0.33	0.30	0.27
10. Being agreeable	0.70	0.22	0.29	0.23	0.21
11. Having a high ethical standard	0.68	0.30	0.33	0.20	0.22
Eigenvalue	29.33	1.99	1.58	1.32	1.11
% of variance explained	58.67%	3.97%	3.16%	2.63%	2.22%

Note. $N = 400$. Items that had factor loadings below 0.50 or loaded similarly on two or more factors (i.e., cross-loadings) were suppressed. Items in bold indicate retained items. Numbers in bold indicate dominant factor loadings.

TABLE 3

Results of Confirmatory Factor Analysis for the Compliments Scale

Compliments Scale Item	Mean	SD	General	Effort	Relationship	Ability	Personality
<i>General</i>							
1. Adding value to the company	3.13	1.11	0.86				
2. Being a good addition to the workplace	3.23	1.06	0.87				
3. Being an asset to the company	3.17	1.07	0.88				
4. Playing an important role in the company's success	3.12	1.07	0.87				
5. Making a contribution as an employee	3.27	1.00	0.84				
6. Strengthening the organizational culture	2.80	1.15	0.81				
<i>Effort-centered</i>							
1. Putting in effort to complete a task	3.36	1.01		0.81			
2. Putting in the extra time to reach goals	3.06	1.13		0.85			
3. Doing more work than expected	3.06	1.09		0.85			
4. Coming in early/staying late to finish work	2.77	1.20		0.71			
5. Going above and beyond for every piece of their job	3.09	1.04		0.83			
6. Working hard	3.48	0.99		0.81			
<i>Relationship-centered</i>							
1. Creating a pleasant working relationship	3.20	1.10			0.82		
2. Helping coworkers get up to speed	3.28	1.09			0.83		
3. Assisting someone with their work	3.37	1.05			0.82		
4. Extending extra kindness to a coworker	3.00	1.15			0.82		
5. Working collaboratively with others	3.38	1.03			0.86		
6. Being flexible as a team member	3.40	1.03			0.81		

TABLE 3 (CONT.)

Compliments Scale Item	Mean	SD	General	Effort	Relationship	Ability	Personality
7. Being willing to lend a hand	3.40	1.04			0.84		
<i>Ability-centered</i>							
1. Having strong technical skills	3.14	1.19				0.77	
2. Delivering presentations proficiently	2.76	1.37				0.73	
3. Demonstrating analytical ability	2.95	1.40				0.84	
4. Solving problems creatively	3.13	1.03				0.81	
5. Bringing good ideas to the table	3.23	1.02				0.83	
6. Having innovative ideas	2.97	1.05				0.85	
7. Approaching a problem using new methods	2.97	1.01				0.83	
8. Bringing insights from experience to the table	3.13	1.07				0.84	
<i>Personality-centered</i>							
1. Being enthusiastic	2.99	1.09					0.77
2. Being extraverted	2.52	1.17					0.71
3. Being confident	2.95	1.18					0.83
4. Being open-minded	2.93	1.14					0.81
5. Being levelheaded	3.04	1.13					0.81
6. Being trustworthy	3.16	1.20					0.86
7. Being conscientious	2.96	1.13					0.80
8. Being agreeable	3.03	1.11					0.77
9. Having a high ethical standard	3.02	1.22					0.84

Note. $N = 408$. Standardized parameter estimates are reported. All items loaded significantly on their corresponding factor ($p < .001$). Fit statistics were: $\chi^2(584) = 1288.12$, $p < .001$, CFI = 0.95, SRMR = 0.04.

TABLE 4
Inter-Factor Correlations for the Compliments Scale

Variable	1	2	3	4	5
1. General	---				
2. Effort-centered	.78***	---			
3. Relationship-centered	.82***	.81***	---		
4. Ability-centered	.83***	.78***	.83***	---	
5. Personality-centered	.79***	.74***	.81***	.83***	---

*** $p < .001$

STUDY 2 METHOD

Sample and Procedure

The sample consisted of 158 full-time employees collected via snowball sampling procedures in two undergraduate management courses at a large Midwest University. My decision for the sample size was guided by Gabriel et al.'s (2019) recommendation based on prior experience sampling studies. Out of 1580 possible paired weekly observations, I obtained data from 909 of them. The majority of participants were Caucasian (75%) and female (63%). The participants worked in a variety of industries, such as health care (15.6%), manufacturing (13.1%), and banking/finance (11.9%). On average, they worked in a group of 14 employees ($SD = 20$). Participants' average age was 45.72 ($SD = 13.36$) and their average tenure in their organization was 10.89 years ($SD = 10.42$). Out of their average work hours of 44.39 ($SD = 7.94$), they interacted with their manager for 14.31 hours ($SD = 13.08$) and interacted with a focal coworker they nominated (X) for 17.91 hours ($SD = 13.09$) per week.

I employed experience sampling methodology (Wheeler & Reis, 1991) using a series of online surveys to test the proposed model and hypotheses. The adoption of this specific methodology allowed me to address observed compliments whose occurrences fluctuate over time and capture their within-person variations. The consequences of observing compliments, including upward social comparison, emotional experiences, and behavioral outcomes are also episodic occurrences that vary from one point in time to another. A weekly design was implemented because results of Study 1 showed that on average people occasionally observed their coworkers receive compliments from their mutual manager. Thus, weekly surveys allowed me to capture the dynamism of the phenomenon with sufficient observations while giving participants the opportunity to accurately recall their experiences.

Participants first completed an initial one-time survey that assessed constructs related to expectancy (i.e., CSE, perceived similarity, and organizational support), instrumentality (i.e., non-zero-sum mentality, RLMX, and organizational procedural justice), and demographic information. In this survey, I asked participants to nominate a coworker (X) whom they share the same supervisor with and have the greatest chance to observe within their day-to-day work. The perceived similarity and RLMX measures were in reference to X. One week later, participants completed a pair of surveys for ten consecutive weeks. The measurements of the focal variables were designed to be separated in time. The first survey of each week was sent to participants at 12pm on Thursday and assessed observed compliments, upward social comparison, inspiration, and envy. Although these variables were measured around the same time, they captured different time frames of participants' experiences. Specifically, observed compliments and upward social comparison captured participants' observations and behaviors from the beginning of the work week, whereas inspiration and envy reflected how participants felt at the moment of taking the survey on Thursday. The second survey of each week was sent at 5pm on Friday and assessed participants' in-role and extra-role behaviors as well as interpersonal counterproductive work behaviors on that day. Participants were given until the end of the day Thursday to complete the first survey and until the end of the weekend to complete the second survey, beyond which the links to the surveys expired.

Measures

Core self-evaluation. CSE was captured by using scales that measure each CSE trait, which were then combined to form a CSE composite score (Johnson et al., 2015). Self-esteem was measured using 5 items developed by Rosenberg (1965) ($\alpha = .91$). An example item was: "I feel that I have a number of good qualities." Generalized self-efficacy ($\alpha = .91$), emotional

stability ($\alpha = .87$), and internal locus of control ($\alpha = .73$) were measured using 5 items each from the International Personality Item Pool (Goldberg, 1999). An example item of generalized self-efficacy was: “I complete tasks successfully.” An example item of emotional stability was: “I am relaxed most of the time.” An example item of locus of control was: “I believe that my success depends on ability rather than luck.” Participants indicated the extent to which they agreed with each item via a 5-point scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*).

Perceived similarity. Adapted from Fox et al. (1989), perceived similarity was assessed with 4 items ($\alpha = .81$). The items were: “How similar is X to you in general,” “How similar are your and X’s work knowledge,” “How similar are your and X’s work skills,” and “How similar are your and X’s work experience.” Participants answered this question using a 5-point scale ranging from 1 (*very dissimilar*) to 5 (*very similar*).

Organizational support. Organizational support was measured by Eisenberger et al.’s (1986) shortened Perceived Organizational Support Scale ($\alpha = .93$). This scale contained 16 items; some example items were: “My organization is willing to extend itself in order to help me perform my job to the best of my ability,” “My organization strongly considers my goals and values,” and “My organization is willing to help me when I need a special favor.” Participants indicated the extent to which they agree with each item via a 5-point scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*).

Non-zero-sum mentality. Non-zero-sum mentality was measured by 5 items adapted from Sirola and Pitesa (2017) ($\alpha = .87$). All items were modified to apply to the concept of compliments. The items were: “More compliments for some employees means fewer compliments for other employees (reversed),” “When one person receives social rewards, the other loses out (reversed),” “People who want to get ahead must do so at the expense of others

(reversed),” “The more employees a manager commends, the harder it is for other employees to be praised (reversed),” “Not everyone in my workplace can be complimented (reversed),” and “What is good for one employee is often bad for other employees (reversed).” Items were rated on a 5-point scale from 1 (*strongly disagree*) to 5 (*strongly agree*).

RLMX. Adapted from Vidyarthi et al. (2010), participants answered 5 questions to capture their relationship quality with their manager relative to X ($\alpha = .91$). The items were: “I have a better relationship with my manager than X,” “When my manager cannot make it to an important meeting, it is likely that he or she will ask me instead of X to fill in,” “Relative to X, I receive more support from my manager,” “The working relationship I have with my manager is more effective than the relationship X has with my manager,” “My manager is more loyal to me compared to X,” and “My manager enjoys my company more than he or she enjoys the company of X.” Participants answered each item via a 5-point scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*).

Organizational procedural justice. Organizational procedural justice was measured using the 4-item scale developed by Rupp and Cropanzano (2002) ($\alpha = .86$). The items were: “The organization’s procedures and guidelines are very fair,” “The procedures the organization uses to make decisions are not fair (reversed),” “I can count on the organization to have fair policies,” and “We don’t have any fair policies at the organization (reversed).” Items were rated on a 5-point scale from 1 (*strongly disagree*) to 5 (*strongly agree*).

Observed compliments. Observed compliments was assessed using the 36-item scale developed in Study 1. All items started with “This week, I observed X receive compliments from our manager on...” Example items of general compliments included: “adding value to the company” and “making a contribution as an employee” (average weekly $\alpha = .98$). Example items

of effort-centered compliments included: “putting in effort to complete a task” and “working hard” (average weekly $\alpha = .97$). Example items of relationship-centered compliments included: “creating a pleasant working relationship” and “helping coworkers get up to speed” (average weekly $\alpha = .97$). Example items of ability-centered compliments included: “having strong technical skills” and “solving problems creatively” (average weekly $\alpha = .98$). Example items of personality-centered compliments included: “being enthusiastic” and “being extraverted” (average weekly $\alpha = .98$). Participants indicated the extent to which each item occurred with a 5-point scale ranging from 1 (*never/zero*) to 5 (*always/four or more times*). The general compliments subscale was used to test the hypotheses, whereas all five subscales were used to explore the research question.¹

Upward social comparison. I measured upward social comparison using 3 items (average weekly $\alpha = .96$). All items started with the stem: “This week...” The items were: “I considered how X might be better than me,” “I thought about what I lack but X possesses,” and “I reflected on the compliments I have not received but X has.” Each item was rated on a 5-point scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*).

Inspiration. Inspiration was measured using the 4 items created by Thrash and Elliot (2003) (average weekly $\alpha = .94$). All items started with the stem: “Today...” The items were: “I experienced inspiration,” “The compliments inspired me,” “I was inspired to do something,” and “I felt inspired.” Responses were recorded using a 5-point scale ranging from 1 (*not at all*) to 5 (*extremely*).

¹ An alternative content validation approach (Anderson & Gerbing, 1991; Colquitt et al., 2019) resulted in the elimination of one item in the general compliments subscale (i.e., “strengthening the organizational culture”), two items in the relationship-centered subscale (i.e., “being flexible as a team member” and “being willing to lend a hand”), three items in the ability-centered subscale (i.e., “having innovative ideas,” “approaching a problem using new methods,” and “bringing insights from experience to the table”), and two items in the personality-centered subscale (i.e., “being agreeable” and “having a high ethical standard”). The pattern and significance of all findings were unchanged with the alternative approach.

Envy. Envy was measured using the 4 items created by Schaubroeck and Lam (2004) (average weekly $\alpha = .90$). All items started with the stem: “Today...” The items were: “I felt frustrated to see X succeed so easily,” “Feelings of envy toward X constantly tormented me,” “I felt inferior to X’s success,” “X’ success made me want to resent them.” Items were rated on a 5-point scale ranging from 1 (*not at all*) to 5 (*extremely*).

In-role and extra-role behaviors. In-role and extra-role behaviors were measured using the 21 items developed by Williams and Anderson (1991). The scale consisted of three subscales: in-role behaviors (average weekly $\alpha = .82$), OCBI (average weekly $\alpha = .93$), and OCBO (average weekly $\alpha = .70$). All items started with the stem: “Today...” Some example items of in-role behaviors were: “I adequately completed assigned duties,” “I fulfilled responsibilities specified in my job description,” “I performed tasks that were expected of me,” and “I met formal performance requirements of the job.” Some OCBI example items were: “I took time to listen to co-workers’ problems and worries” and “I went out of way to help new employees.” Some OCBO example items were: “I adhered to informal rules devised to maintain order” and “I conserved and protected organizational property.” Participants answered each question using a 5-point scale ranging from 1 (*never*) to 5 (*always*).

Interpersonal counterproductive work behaviors. CWBI was measured by the 11-item scale developed by Cohen-Charash and Mueller (2007), which is adapted from Fox and Spector’s (1999) Counterproductive Work Behavior Scale (average weekly $\alpha = .87$). All items started with the stem: “Today, how often did you...” Some example items included: “Fail to help X,” “Withhold work-related information from X,” “Play a practical joke on X at work,” and “Purposely interfere with X doing their job.” Participants answered each question using a 5-point scale ranging from 1 (*never*) to 5 (*always*).

Analytic Strategy

Given the multilevel nature of the data (i.e., weekly events nested within individuals), I tested my hypotheses using multilevel path analysis in Mplus 8 (Muthén & Muthén, 2017). This analytical approach accommodates non-independence between observations in nested data by design and allows me to test the hypotheses simultaneously. To test my hypotheses, I ran two separate models, one involving the within-person level (Level 1) variables with the between-person level (Level 2) variables related to expectancy, and the other one involving the same within-person variables with the between-person variables related to instrumentality. In line with Enders and Tofighi's (2007) recommendations, I group-mean-centered exogenous variables measured at Level 1 and grand-mean-centered Level 2 variables to facilitate the interpretation of results. Group-mean-centering also removes between-person confounds including individual differences and response styles (Raudenbush & Bryk, 2002). To test moderated mediation, I used Hayes' (2015) index of moderated mediation, which quantifies the extent to which the indirect effect varies as a function of the moderator. A significant index of moderated mediation indicates that any two conditional indirect effects are significantly different from each other and to the same degree. I conducted a Monte Carlo simulation with 20,000 replications to obtain a confidence interval around each moderated mediation effect (Preacher & Selig, 2012).

STUDY 2 RESULTS

Reported in Table 5 are the means, standard deviations, and correlations among the focal variables. Tables 6 and 7 present the results of the multilevel path analysis testing my hypothesized models involving expectancy- and instrumentality-related variables. Tables 8 and 9 present the indirect effects, indices of moderated mediation, and conditional indirect effects for the expectancy and instrumentality models, respectively. Prior to hypothesis testing, I examined the proportion of within-person variance in the level 1 variables to support my within-person study design. Notable proportions of weekly within-person variance existed in observed general compliments (34.0%), observed effort-centered compliments (31.5%), observed relationship-centered compliments (32.3%), observed ability-centered compliments (30.1%), observed personality-centered compliments (31.5%), upward social comparison (36.1%), inspiration (43.1%), envy (34.9%), in-role and extra-role behaviors (42.7%), and interpersonal counterproductive work behaviors (44.6%). These results suggest that the focal variables indeed varied from one week to another. I also conducted multilevel confirmatory factor analyses to assess the fit of the two measurement models that included the six within-person variables along with the three between-person variables related to expectancy and instrumentality, respectively. Given that both models involved a large number of items, I modeled the constructs with two to six item parcels per construct using random assignment (Little et al., 2002; Williams & O'Boyle, 2008). Both multilevel measurement models fit the data well, and all factor loadings were significant ($p < .001$). Fit statistics for the expectancy model were: $\chi^2(163) = 591.46$, CFI = .92, SRMR_{within} = .04, SRMR_{between} = .08. Fit statistics for the instrumentality model were: $\chi^2(95) = 325.38$, CFI = .95, SRMR_{within} = .04, SRMR_{between} = .03. They both fit significantly better than all alternative models in which any two of the factors at the within-person level were combined,

$770.87 \leq \Delta\chi^2 (df = 168) \leq 1852.09$ and $502.68 \leq \Delta\chi^2 (df = 100) \leq 1615.90$, for the expectancy and instrumentality models, respectively. These findings demonstrated the discriminant validity of my focal constructs.

TABLE 5

Descriptive Statistics and Correlations among the Focal Variables

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8	9	10	11	12
<i>Level 1 variables</i>														
1. Observed Compliments	2.04	1.26	---	.45*	.41*	.35*	.30*	.09						
2. Upward Social Comparison	1.71	1.07	.51*	---	.33*	.43*	.30*	.16*						
3. Inspiration	2.67	1.10	.60*	.27*	---	.24*	.30*	.11						
4. Envy	1.20	0.58	.33*	.71*	.01	---	.16*	.30*						
5. In-Role and Extra-Role Behaviors	3.94	0.62	.23*	-.28*	.26*	-.39*	---	-.02						
6. Interpersonal Counterproductive Work Behaviors	1.11	0.30	.45*	.71*	.26*	.79*	-.41*	---						
<i>Level 2 variables</i>														
7. Core Self-Evaluation	3.75	0.65	-.12	.27*	.16*	-.46*	.38*	-.46*	---					
8. Perceived Similarity	3.28	0.91	.30*	.34*	.19*	.16*	.01	.22*	.05	---				
9. Organizational Support	3.58	0.73	.20*	-.03	.34*	-.25*	.24*	-.09	.32*	.17*	---			
10. Non-Zero-Sum Mentality	3.77	0.78	-.03	-.24*	.16*	-.50*	.30*	-.29*	.41*	.03	.60*	---		
11. Relative Leader-Member Exchange	2.80	0.90	.19*	.32*	.31*	.16*	.02	.25*	.12	.04	.30*	.06	---	
12. Procedural Justice	3.75	0.75	.07	-.10	.27*	-.36*	.27*	-.19*	.36*	.10	.77*	.58*	.21*	---

Note. Correlations above the diagonal are within-individual correlations ($N = 909$); Correlations below the diagonal are between-individual correlations ($N = 158$). Level 1 variables were aggregated when estimating between-individual (Level 2) correlations.

* $p < .05$

TABLE 6

Multilevel Path Analysis Results for the Expectancy Model

	Outcomes									
	Upward Social Comparison		Inspiration		Envy		In-Role and Extra-Role Behaviors		Interpersonal Counterproductive Work Behaviors	
	γ	<i>S.E.</i>	γ	<i>S.E.</i>	γ	<i>S.E.</i>	γ	<i>S.E.</i>	γ	<i>S.E.</i>
Predictors										
Observed Compliments	.39***	.08	.20***	.04	.05*	.02	.09**	.03	-.01	.01
Upward Social Comparison	.		.04	.07	.14***	.03	.12**	.04	.02	.02
Inspiration							.12**	.04		
Envy									.14**	.05
Core Self-Evaluation			.06	.12	-.34*	.14				
Perceived Similarity			.12	.08	.12**	.04				
Organizational Support			.34*	.11	-.20*	.09				
Upward Social Comparison × Core Self-Evaluation			.01	.13	-.04	.06				
Upward Social Comparison × Perceived Similarity			.16*	.07	.10***	.03				
Upward Social Comparison × Organizational Support			.01	.07	-.06	.06				

Note. Unstandardized coefficients are reported. Level-1 $N = 909$, Level-2 $N = 158$.

* $p < .05$, ** $p < .01$, *** $p < .001$

TABLE 7

Multilevel Path Analysis Results for the Instrumentality Model

	Outcomes									
	Upward Social Comparison		Inspiration		Envy		In-Role and Extra-Role Behaviors		Interpersonal Counterproductive Work Behaviors	
	γ	<i>S.E.</i>	γ	<i>S.E.</i>	γ	<i>S.E.</i>	γ	<i>S.E.</i>	γ	<i>S.E.</i>
Predictors										
Observed Compliments	.39***	.08	.19***	.04	.05*	.02	.09**	.03	-.01	.01
Upward Social Comparison	.		.03	.06	.13***	.03	.12**	.04	.02	.02
Inspiration							.12**	.04		
Envy									.14**	.05
Non-Zero-Sum Mentality			.01	.10	-.28**	.09				
Relative Leader-Member Exchange			.24**	.07	.14**	.05				
Procedural Justice			.21	.12	-.12	.09				
Upward Social Comparison \times Non-Zero-Sum Mentality			-.04	.08	-.08	.06				
Upward Social Comparison \times Relative Leader-Member Exchange			.27***	.06	.10**	.03				
Upward Social Comparison \times Procedural Justice			-.04	.08	-.03	.05				

Note. Unstandardized coefficients are reported. Level-1 $N = 909$, Level-2 $N = 158$.

* $p < .05$, ** $p < .01$, *** $p < .001$

TABLE 8

Indirect Effects, Indices of Moderated Mediation, and Conditional Indirect Effects for the Expectancy Model

Relationship	Effect	Point Estimate	Upper Level	Lower Level
<i>Overall</i>				
Observed Compliments → Upward Social Comparison → Inspiration → In-Role and Extra-Role Behaviors	IE	.003	-.002	.011
Observed Compliments → Upward Social Comparison → Envy → Interpersonal Counterproductive Work Behaviors	IE	.007	.003	.012
<i>Moderator: Core Self-Evaluation</i>				
Observed Compliments → Upward Social Comparison → Inspiration → In-Role and Extra-Role Behaviors	Index	.008	-.003	.029
	Low	-.001	-.007	.009
	High	.007	-.003	.026
Observed Compliments → Upward Social Comparison → Envy → Interpersonal Counterproductive Work Behaviors	Index	.001	-.007	.013
	Low	.008	.001	.023
	High	.007	.001	.022
<i>Moderator: Perceived Similarity</i>				
Observed Compliments → Upward Social Comparison → Inspiration → In-Role and Extra-Role Behaviors	Index	.008	.001	.022
	Low	-.003	-.010	.006
	High	.009	.001	.026

TABLE 8 (CONT.)

Relationship	Effect	Point Estimate	Upper Level	Lower Level
Observed Compliments → Upward Social Comparison → Envy → Interpersonal Counterproductive Work Behaviors	Index	.006	.001	.016
	Low	.002	-.001	.007
	High	.013	.002	.032
<i>Moderator: Organizational Support</i>				
Observed Compliments → Upward Social Comparison → Inspiration → In-Role and Extra-Role Behaviors	Index	-.001	-.007	.008
	Low	.004	-.003	.017
	High	.001	-.004	.013
Observed Compliments → Upward Social Comparison → Envy → Interpersonal Counterproductive Work Behaviors	Index	-.001	-.006	.011
	Low	.010	.001	.027
	High	.006	-.001	.019

Note. IE = indirect effect, index = index of moderated mediation, low = conditional indirect effect at -1SD, high = conditional indirect effect at +1SD, Lower Level = 95% lower confidence interval, Upper Level = 95% upper confidence interval.

TABLE 9

Indirect Effects, Indices of Moderated Mediation, and Conditional Indirect Effects for the Instrumentality Model

Relationship	Effect	Point Estimate	Upper Level	Lower Level
<i>Overall</i>				
Observed Compliments → Upward Social Comparison → Inspiration → In-Role and Extra-Role Behaviors	IE	.002	-.001	.008
Observed Compliments → Upward Social Comparison → Envy → Interpersonal Counterproductive Work Behaviors	IE	.007	.002	.014
<i>Moderator: Non-Zero-Sum Mentality</i>				
Observed Compliments → Upward Social Comparison → Inspiration → In-Role and Extra-Role Behaviors	Index	.002	-.004	.013
	Low	.003	-.004	.014
	High	.001	-.005	.013
Observed Compliments → Upward Social Comparison → Envy → Interpersonal Counterproductive Work Behaviors	Index	.006	-.001	.023
	Low	.011	.001	.028
	High	.004	-.001	.014
<i>Moderator: Relative Leader-Member Exchange</i>				
Observed Compliments → Upward Social Comparison → Inspiration → In-Role and Extra-Role Behaviors	Index	.014	.003	.033
	Low	-.009	-.020	-.002
	High	.014	.002	.035

TABLE 9 (CONT.)

Relationship	Effect	Point Estimate	Upper Level	Lower Level
Observed Compliments → Upward Social Comparison → Envy → Interpersonal Counterproductive Work Behaviors	Index	.006	.001	.016
	Low	.002	-.001	.007
	High	.013	.002	.033
<i>Moderator: Procedural Justice</i>				
Observed Compliments → Upward Social Comparison → Inspiration → In-Role and Extra-Role Behaviors	Index	-.001	-.007	.008
	Low	.004	-.003	.017
	High	.001	-.006	.012
Observed Compliments → Upward Social Comparison → Envy → Interpersonal Counterproductive Work Behaviors	Index	-.001	-.003	.009
	Low	.009	.001	.021
	High	.007	.001	.019

Note. IE = indirect effect, index = index of moderated mediation, low = conditional indirect effect at -1SD, high = conditional indirect effect at +1SD, Lower Level = 95% lower confidence interval, Upper Level = 95% upper confidence interval.

Tests of the Hypotheses

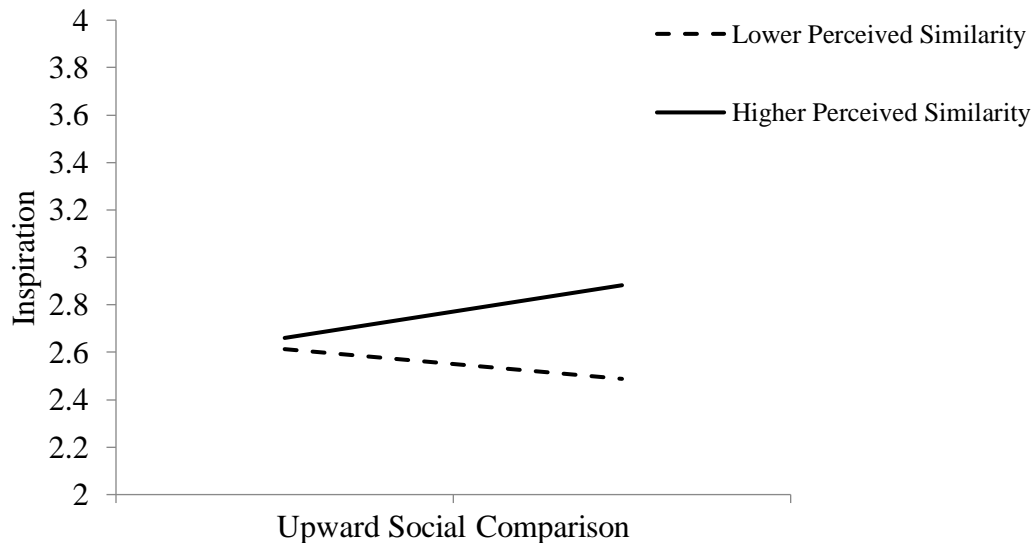
Hypothesis 1 predicted that observing coworkers receiving compliments from the leader is positively associated with upward social comparison. Results supported this hypothesis ($\gamma = .39, SE = .08, p < .001$), indicating that employees made an upward social comparison to the nominated coworker when they observed the coworker receiving compliments from their mutual leader. Hypothesis 2 predicted that upward social comparison is positively associated with inspiration. Results did not support this hypothesis in either the expectancy or instrumentality model ($\gamma = .04, SE = .06, p = .50$; $\gamma = .03, SE = .06, p = .64$, respectively). Hypothesis 3 predicted that upward social comparison is positively associated with envy. In support of this hypothesis, results showed that after making an upward social comparison, people experienced envy ($\gamma = .14, SE = .03, p < .001$, for the expectancy-related model; $\gamma = .13, SE = .03, p < .001$, for the instrumentality model).

Hypothesis 4 predicted that the positive association of upward social comparison with inspiration is moderated by the three factors relevant to expectancy, evident by (a) CSE, (b) perceived similarity, and (c) organizational support, such that the association is positive when a given factor is higher and negative when a given factor is lower. I found that while CSE ($\gamma = .01, SE = .13, p = .94$) and organizational support ($\gamma = .01, SE = .07, p = .95$) did not moderate the within-individual relationship between upward social comparison and inspiration, perceived similarity significantly moderated this relationship ($\gamma = .16, SE = .07, p < .05$). To better understand this cross-level interaction, I plotted the relationship at conditional values of perceived similarity (+1 and -1 *SD*; Cohen et al., 2003). As depicted in Figure 2, when perceived similarity was higher (i.e., +1 *SD*), upward social comparison was positively associated with inspiration (*simple slope estimate* = .19, $SE = .09, p < .05$, 95% CI = .01, .37). However, when

perceived similarity was lower (i.e., $-1\ SD$), upward social comparison was not associated with inspiration (*simple slope estimate* = $-.11$, $SE = .09$, $p = .24$, $95\% \text{ CI} = -.29, .07$). Thus, although Hypotheses 4(a) and 4(c) were not supported, Hypothesis 4(b) was partially supported.

FIGURE 2

Cross-level Interaction of Perceived Similarity and Upward Social Comparison Predicting Inspiration

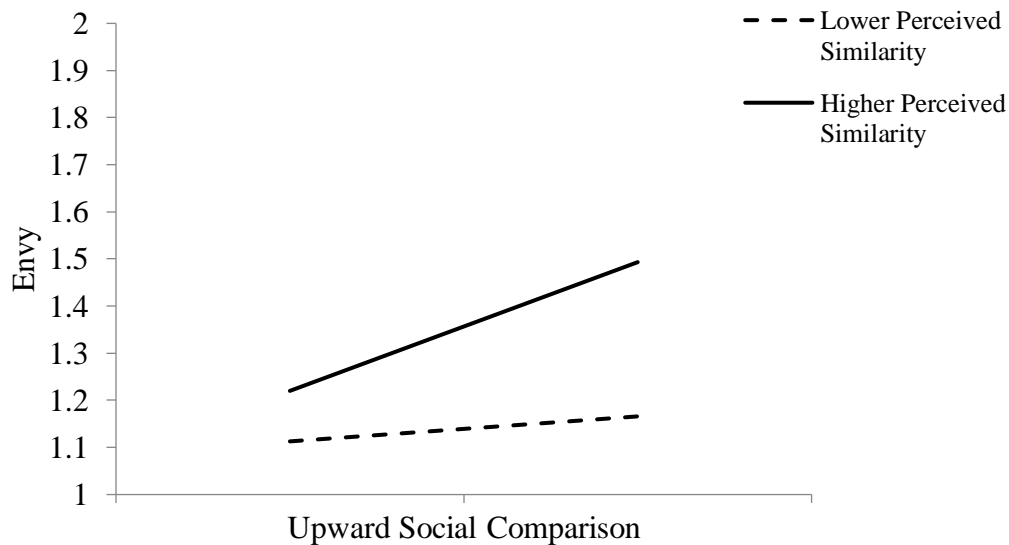


Hypothesis 5 predicted that the three factors related to expectancy, evident by (a) CSE, (b) perceived similarity, and (c) organizational support, moderate the positive association of upward social comparison with envy, such that the association is stronger when a given factor is lower. I found that CSE ($\gamma = -.04$, $SE = .06$, $p = .48$) and organizational support ($\gamma = -.06$, $SE = .06$, $p = .28$) did not moderate the within-individual relationship between upward social comparison and envy, thus not supporting Hypotheses 5(a) and 5(c). By contrast, perceived similarity significantly moderated the relationship ($\gamma = .10$, $SE = .03$, $p < .001$), which is consistent with Hypothesis 5(b). A plot of this interaction (see Figure 3) showed that when

perceived similarity was higher (i.e., +1 *SD*), upward social comparison was positively associated with envy (*simple slope estimate* = .22, *SE* = .05, *p* < .001, 95% *CI* = .12, .32). However, when perceived similarity was lower (i.e., -1 *SD*), upward social comparison was not associated with envy (*simple slope estimate* = .04, *SE* = .03, *p* = .21, 95% *CI* = -.02, .10). Notably, this interaction pattern was in contrary to my prediction. I hypothesized that as upward social comparison increases, lower levels of perceived similarity make people more likely to experience envy. However, I found that it was higher levels of perceived similarity that made people more likely to experience envy.

FIGURE 3

Cross-level Interaction of Perceived Similarity and Upward Social Comparison Predicting Envy

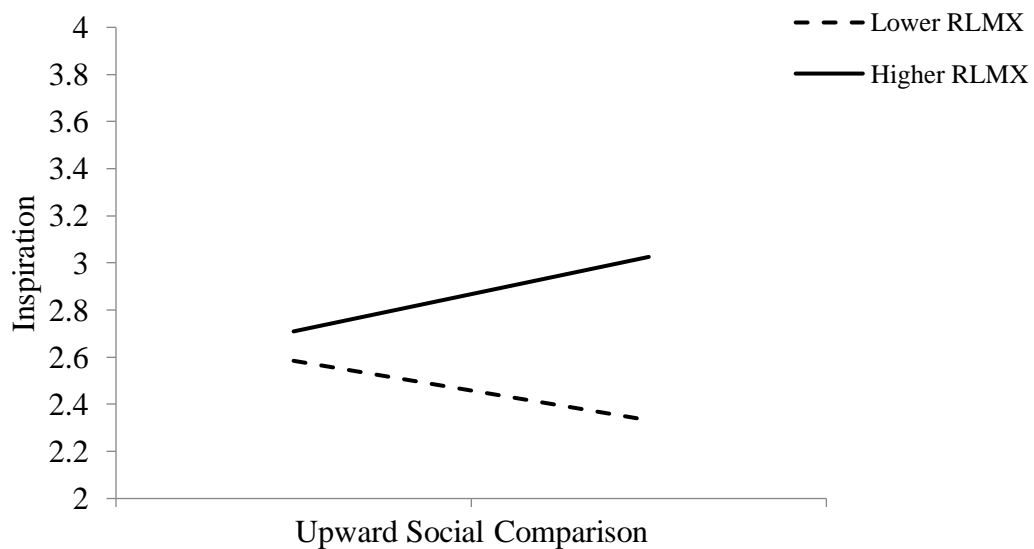


Hypothesis 6 involved the role that instrumentality plays in moderating the association between upward social comparison and inspiration. I hypothesized that when (a) non-zero-sum mentality, (b) RLMX, or (c) organizational procedural justice is higher, the association is

positive, and when a given factor is lower, the association is negative. I found that although the relationship between upward social comparison and inspiration was not significantly different at higher versus lower levels of non-zero-sum mentality ($\gamma = -.04$, $SE = .08$, $p = .59$) or organizational procedural justice ($\gamma = -.04$, $SE = .08$, $p = .61$), the relationship was significantly different at higher versus lower levels of RLMX ($\gamma = .27$, $SE = .06$, $p < .001$). I then plotted the relationship at conditional values of RLMX (+1 and -1 SD ; Cohen et al., 2003). As shown in Figure 4, consistent with my hypothesis, inspiration was positive when RLMX was higher (*simple slope estimate* = .27, $SE = .08$, $p < .01$, 95% CI = .12, .42) and negative when RLMX was lower (*simple slope estimate* = -.21, $SE = .08$, $p < .05$, 95% CI = -.38, -.05). Therefore, Hypothesis 6(b) was supported, but Hypotheses 6(a) and 6(c) were not.

FIGURE 4

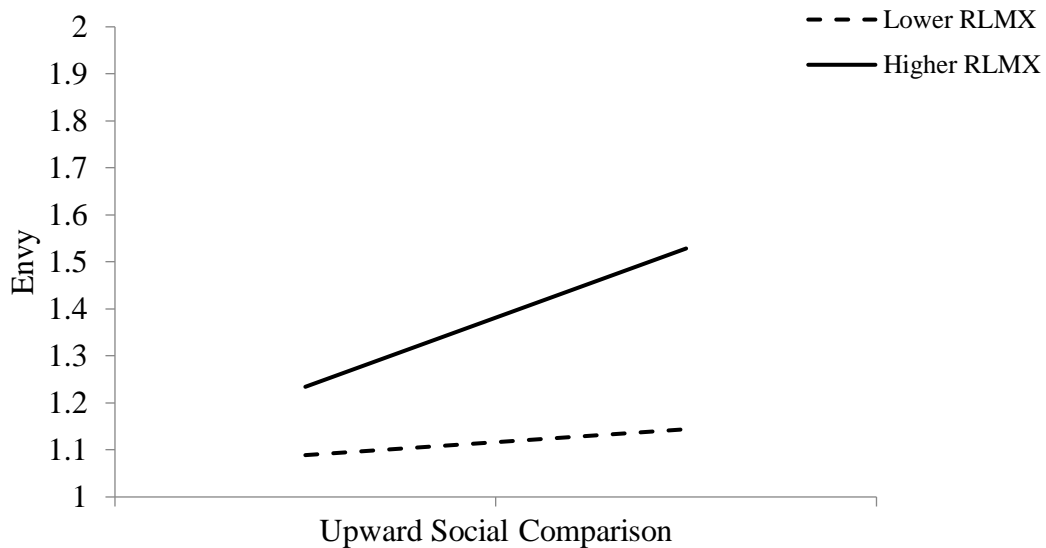
**Cross-level Interaction of RLMX and Upward Social Comparison
Predicting Inspiration**



Hypothesis 7 was about the three factors related to instrumentality as moderators of the positive association of upward social comparison with envy. I proposed that the association is stronger when (a) non-zero-sum mentality, (b) RLMX, or (c) organizational procedural justice is lower. Results suggested that RLMX moderated the within-person association between upward social comparison and envy ($\gamma = .10$, $SE = .03$, $p < .01$), but non-zero-sum mentality ($\gamma = -.08$, $SE = .07$, $p = .16$) and organizational procedural justice ($\gamma = -.03$, $SE = .05$, $p = .57$) did not, thus supporting Hypothesis 7(b) and failing to support Hypotheses 7(a) and 7(c). A plot of the interaction with RLMX as a moderator is depicted in Figure 5. When RLMX was higher (i.e., +1 SD), upward social comparison was positively associated with envy (*simple slope estimate* = .21, $SE = .05$, $p < .001$, 95% $CI = .12, .31$). However, when RLMX was lower (i.e., -1 SD), upward social comparison was not associated with envy (*simple slope estimate* = .04, $SE = .03$, $p = .21$, 95% $CI = -.02, .11$). Similar to the results related to expectancy, my prediction of the interaction pattern was in the opposite direction of the empirical evidence. I expected that compared to people with higher levels of RLMX, those with lower levels would experience envy as they engage in more upward social comparison, but results suggested that it was higher levels of RLMX that strengthened the relationship between upward social comparison and envy.

FIGURE 5

**Cross-level Interaction of RLMX and Upward Social Comparison
Predicting Envy**



Hypothesis 8 predicted that inspiration is positively associated with in-role and extra-role behaviors. Consistent with this hypothesis, inspiration had a positive effect on in-role and extra-role behaviors ($\gamma = .12$, $SE = .04$, $p = .001$, for both expectancy and instrumentality models).

Hypothesis 9 concerned the positive association between envy and interpersonal counterproductive work behaviors, which also received empirical support ($\gamma = .14$, $SE = .05$, $p < .01$, for both models).

Hypothesis 10 concerned the role that the three factors related to expectancy (i.e., CSE, perceived similarity, and organizational support) play in moderating the indirect, positive association of observed compliments with in-role and extra-role behaviors via upward social comparison and inspiration. Given that CSE ($estimate = .008$, 95% CI = $-.003$, $.029$) and organizational support ($estimate = -.001$, 95% CI = $-.007$, $.008$) did not moderate the within-person relationship between upward social comparison and inspiration, it was not surprising that

neither moderated mediation relationship was significant. In comparison, perceived similarity moderated the indirect relationship between observed compliments and in-role and extra-role behaviors. The estimate of the index of moderated mediation for perceived similarity as a moderator was .008, and the confidence interval of this index excluded zero (95% CI = .001, .022). I then calculated the conditional indirect effects of observed compliments on in-role and extra-role behaviors via upward social comparison and inspiration at higher and lower values (+1 and -1 *SD*) of perceived similarity (Edwards & Lambert, 2007). At higher levels of perceived similarity, the indirect effect was positive and significant (*estimate* = .009, 95% CI = .001, .026), whereas it was not significant at lower levels of perceived similarity (*estimate* = -.003, 95% CI = -.010, .006). Overall, Hypothesis 10 was partially supported.

Hypothesis 11 predicted that the indirect, positive association of observed compliments with interpersonal counterproductive work behaviors via upward social comparison and envy is stronger when a given expectancy-related factor (i.e., CSE, perceived similarity, and organizational support) is lower. The predicted moderated mediation relationship was significant for perceived similarity; the estimate of the index of moderated mediation was .006, and the confidence interval did not include zero (95% CI = .001, .016). Specifically, the indirect effect was positive and significant at higher levels of perceived similarity (*estimate* = .013, 95% CI = .002, .032), but it was not significant at lower levels of perceived similarity (*estimate* = .002, 95% CI = -.001, .007). The hypothesized moderated mediation relationship was not significant when CSE (*estimate* = .001, 95% CI = -.007, .013) or organizational support (*estimate* = -.001, 95% CI = -.006, .011) served as a moderator.

Hypothesis 12 was about the role that the three factors related to instrumentality (i.e., non-zero-sum mentality, RLMX, organizational procedural justice) play in moderating the

indirect, positive association of observed compliments with in-role and extra-role behaviors via upward social comparison and inspiration. I found that the estimate of the index of moderated mediation for RLMX as a moderator was .014 and the confidence interval of this index excluded zero (95% CI = .003, .033), thus supporting the hypothesized moderated mediation relationship. Calculation of the conditional indirect effects showed that while the indirect effect was positive and significant at higher levels of RLMX (*estimate* = .014, 95% CI = .002, .035), it was negative and significant at lower levels of RLMX (*estimate* = -.009, 95% CI = -.020, -.002). By contrast, results did not support a moderated mediation relationship involving either non-zero-sum mentality or organizational procedural justice as a moderator. The estimate of the index of moderated mediation for non-zero-sum mentality as a moderator was .002 (95% CI = -.004, .013). The estimate of the index of moderated mediation for organizational procedural justice as a moderator was -.001 (95% CI = -.007, .008).

In Hypothesis 13, I predicted that the indirect, positive association of observed compliments with interpersonal counterproductive work behaviors via upward social comparison and envy is stronger when a given instrumentality-related factor (i.e., non-zero-sum mentality, RLMX, organizational procedural justice) is lower. In terms of moderation of the indirect effects with RLMX as moderator, the estimate of the index of moderated mediation was .006, and the confidence interval did not include zero (95% CI = .001, .016). At higher levels of RLMX, the indirect effect was positive and significant (*estimate* = .013, 95% CI = .002, .033), but at lower levels of RLMX, it was not significant (*estimate* = .002, 95% CI = -.001, .007). Regarding moderation of the indirect effects by non-zero-sum mentality (*estimate* = .006, 95% CI = -.001, .023) and organizational procedural justice (*estimate* = -.001, 95% CI = -.003, .009), neither of the estimates of the index of moderated mediation was significant.

Tests of the Research Question

I raised the question of whether the type of compliment determines the extent to which observers engage in upward social comparison. Compliments may be distinguished according to whether they are person- versus process-focused or general versus behavior-specific. I first tested whether person-focused compliments (i.e., ability- and personality-centered compliments) versus process-focused compliments (i.e., relationship- and effort-centered compliments) would be differentially associated with upward social comparison. Results showed that in the expectancy and instrumentality models, when the average of ability- and personality-centered compliments and the average of relationship- and effort-centered compliments were parallel predictors, both the former ($\gamma = .27$, $SE = .08$, $p = .001$, for both models) and the latter ($\gamma = .31$, $SE = .08$, $p < .001$, for both models) significantly predicted upward social comparison. A Wald test did not suggest that the two paths were significantly different either ($\chi^2(1) = .10$, $p = .75$). All hypothesized relationships in the rest of the models remained the same. Thus, person-focused versus process-focused compliments did not differ when it came to eliciting upward social comparison, emotions, and behaviors.

I next tested whether behavior-specific versus general compliments would make a difference in prompting upward social comparison. I calculated the average of the four types of specific compliments (i.e., ability-, personality-, relationship-, and effort-centered compliments) and used it as a parallel predictor with general compliments in the expectancy and instrumentality models. I found that the association between general compliments and upward social comparison was nonsignificant ($\gamma = .01$, $SE = .06$, $p = .98$, for both models), whereas the association between specific compliments and upward social comparison was significant ($\gamma = .54$, $SE = .11$, $p < .001$, for both models). Furthermore, a Wald test suggested that these two

paths were significantly different ($\chi^2(1) = 14.73, p < .001$). All other hypothesized relationships in both models remained consistent. Thus, compared to general compliments, behavior-specific compliments were stronger unique predictors of upward social comparison and other downstream consequences, although caution of such interpretation is warranted given the high multicollinearity between these two factors.

Supplemental Analyses

Earlier in this dissertation, I noted that valence would not be tested as a third moderating factor because compliments are typically desired and similarly valued across individuals. In order to empirically verify this expectation, I measured valence using 4 items adapted from Sanchez et al. (2000) ($\alpha = .85$). I asked participants to indicate the degree to which they agree or disagree with each of the following items as they pertain to their work: “I would like to receive a compliment from my manager,” “I want my accomplishments to be commended by manager,” “It would be good to win my manager’s approval,” and “I want to get more praise and acknowledgement by my manager.” Responses were recorded using a 5-point scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). I found that the average was 4.08 ($SD = 0.69$), indicating that the vast majority of people viewed compliments as important, attractive, and desirable. I also controlled for valence in both the expectancy and instrumentality models, and the conclusions regarding my hypothesized relationships remained the same. I then used valence as a moderator along with expectancy and instrumentality-related moderators in their respective models. Results revealed that the positive association between upward social comparison and inspiration was not moderated by valence ($\gamma = .18, SE = .10, p = .06$; $\gamma = .13, SE = .09, p = .13$, for the expectancy and instrumentality models, respectively), and neither was the positive association of upward social comparison with envy ($\gamma = .01, SE = .07, p = .95$; $\gamma = -.02, SE = .06$,

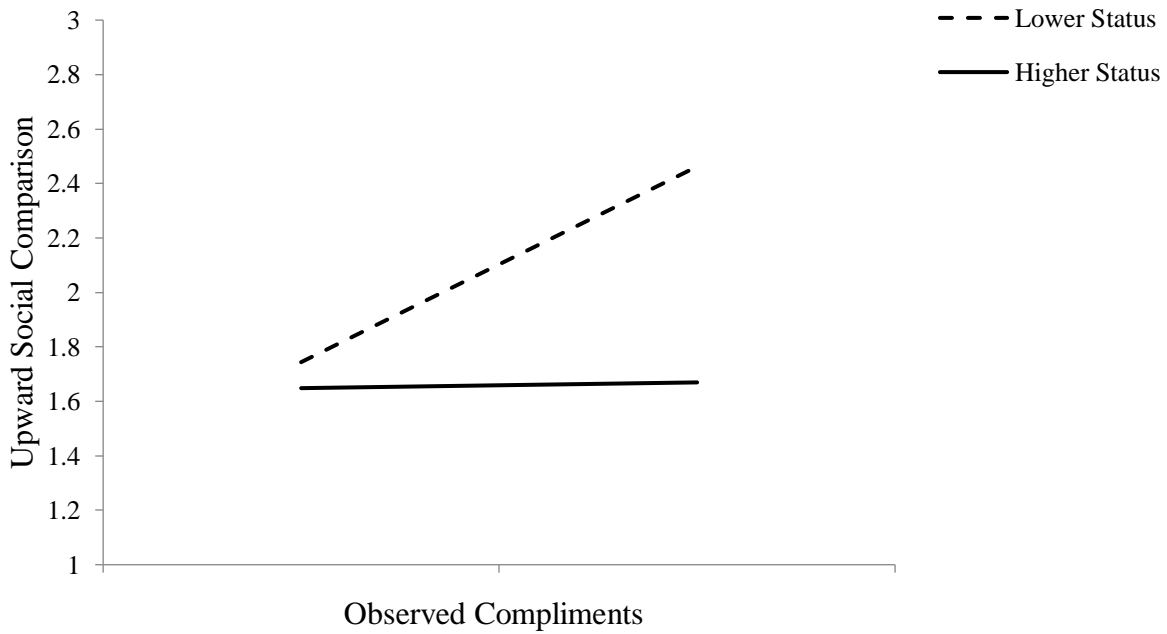
$p = .79$, for the expectancy and instrumentality models, respectively). These analyses further support my speculation about compliments being high in valence across individuals.

Although theorizing the roles that observers' own experiences and characteristics play in influencing people's engagement in upward social comparison is not a formal part of my conceptual models, I nevertheless conducted supplemental analyses to explore whether certain factors might influence the present findings. Specifically, people may have a decreased tendency to engage in upward social comparison when they do not perceive coworkers receiving compliments as superior. Such perception may manifest at both the within- and between-person levels. At the within-person level, it is possible that one's own received compliments serve as an affirmation and validation of their competence and performance. Thus, when people are recently complimented, they view themselves as being on an equal plane with their complimented coworkers, leading to the observation of compliments exerting a diminished impact on the nonrecipients. At the between-person level, because higher status individuals tend to attract more attention and have more opportunities to possess valued resources to obtain a desirable outcome (Magee & Galinsky, 2008), they may easily and often receive compliments themselves and care less about their coworkers' received compliments. Accordingly, compared to people with lower status, those with higher status may be less likely to view complimented coworkers as upward comparison targets. To address these possibilities, I conducted the following analyses. Regarding one's own received compliments, I first ran analyses using this variable as a parallel predictor (lagged prior week) with observed compliments (present week) and then tested whether it is a moderator of the relationship between observed compliments and upward social comparison in the expectancy and instrumentality models. One's own received compliments were measured on Fridays using the same six items on the same scale as observed compliments except for the

carrier phrase: “This week, I received compliments from my manager on...” I found that the statistical significance of all hypothesized relationships remained consistent with or without one’s own received compliments in the model. In addition, one’s own received compliments were not associated with upward social comparison ($\gamma = .01$, $SE = .03$, $p = .91$, for both models), and there was no moderation effect ($\gamma = .01$, $SE = .01$, $p = .63$, for both models). In terms of status, I first controlled for status and then tested it as a moderator shaping the within-person relationship between observed compliments and upward social comparison. Status captures the extent to which one is respected by others at work (Blader & Chen, 2014; Fiske, 2010), which was assessed using 6 items developed by Yu et al. (2019) ($\alpha = .92$) and rated on a 5-point scale (1 = *strongly disagree*; 5 = *strongly agree*). The items were: “Others often seek my opinion because they respect me,” “I have a good reputation among those I work with,” “I am highly respected by others at my work,” “People look up to me because I am good at my job,” “I am admired by others at my work because I am seen as competent in my work,” and “Coworkers come to me because they trust my judgement.” I found that the statistical significance of all hypothesized relationships remained the same when controlling for status. When testing status as a moderator, it moderated the within-individual relationship between observed compliments and upward social comparison ($\gamma = -.43$, $SE = .08$, $p < .001$, for both models). A plot of this interaction (see Figure 6) showed that observed compliments were positively associated with upward social comparison under conditions of lower status (i.e., $-1 SD$) (*simple slope estimate* = .53, $SE = .07$, $p < .001$, 95% CI = .39, .68). However, when status was higher (i.e., $+1 SD$), observed compliments were not associated with upward social comparison (*simple slope estimate* = .01, $SE = .07$, $p = .85$, 95% CI = -.13, .15).

FIGURE 6

**Cross-level Interaction of Status and Observed Compliments
Predicting Upward Social Comparison**



Although not hypothesized, I tested whether inspiration was associated with interpersonal counterproductive work behaviors and whether envy was associated with in-role and extra-role behaviors as part of my post-hoc supplemental analyses. I found that inspiration did not emerge as a significant predictor of interpersonal counterproductive work behaviors ($\gamma = -.03$, $SE = .07$, $p = .74$, for both models), nor did envy appear to be a significant predictor of in-role and extra-role behaviors ($\gamma = .01$, $SE = .01$, $p = .26$, for both models). Next, I explored the possibility of interaction effects between inspiration and envy on in-role and extra-role behaviors as well as on interpersonal counterproductive work behaviors. The interaction between inspiration and envy was significant for predicting in-role and extra-role behaviors ($\gamma = -.54$, $p < .001$). A plot of this interaction is shown in Figure 7; inspiration was positively associated with in-role and extra-role

behaviors when envy was lower (i.e., $-1\ SD$; $\gamma = .66, p < .001$), but inspiration became negatively associated with in-role and extra-role behaviors when envy was higher (i.e., $+1\ SD$; $\gamma = -.41, p < .001$). Inspiration and envy also interacted in predicting interpersonal counterproductive work behaviors ($\gamma = .16, p < .001$). As shown in Figure 8, envy was more positively associated with interpersonal counterproductive work behaviors when inspiration was higher (i.e., $+1\ SD$; $\gamma = .29, p < .001$) than when it was lower (i.e., $-1\ SD$; $\gamma = -.03, p = .42$).

FIGURE 7

**Interaction of Inspiration and Envy
Predicting In-role and Extra-role Behaviors**

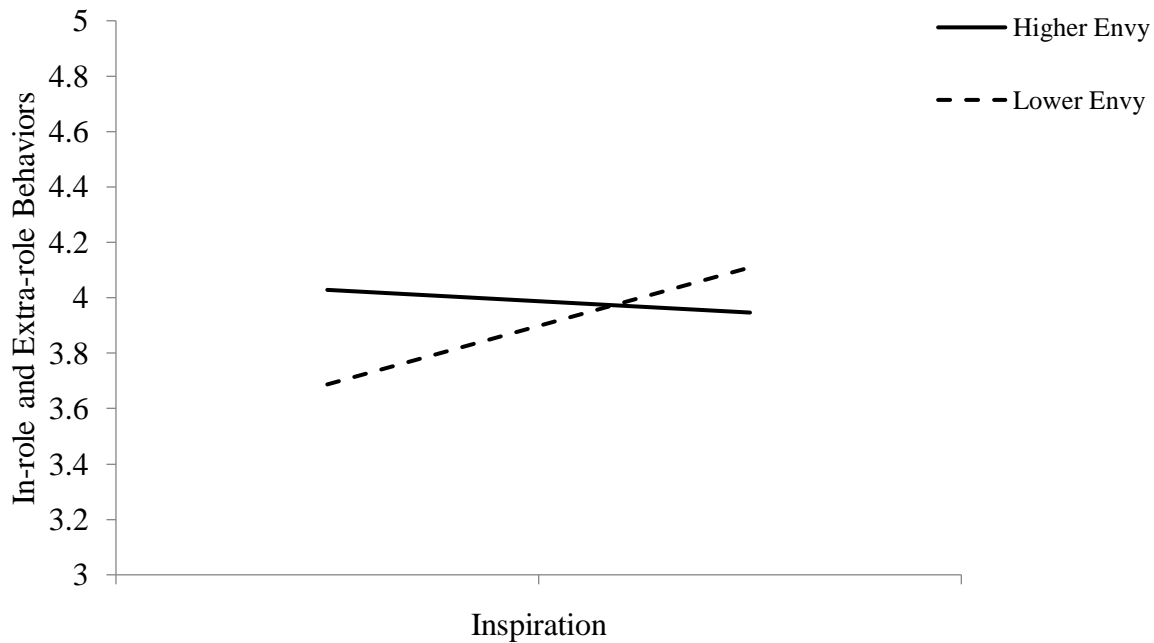
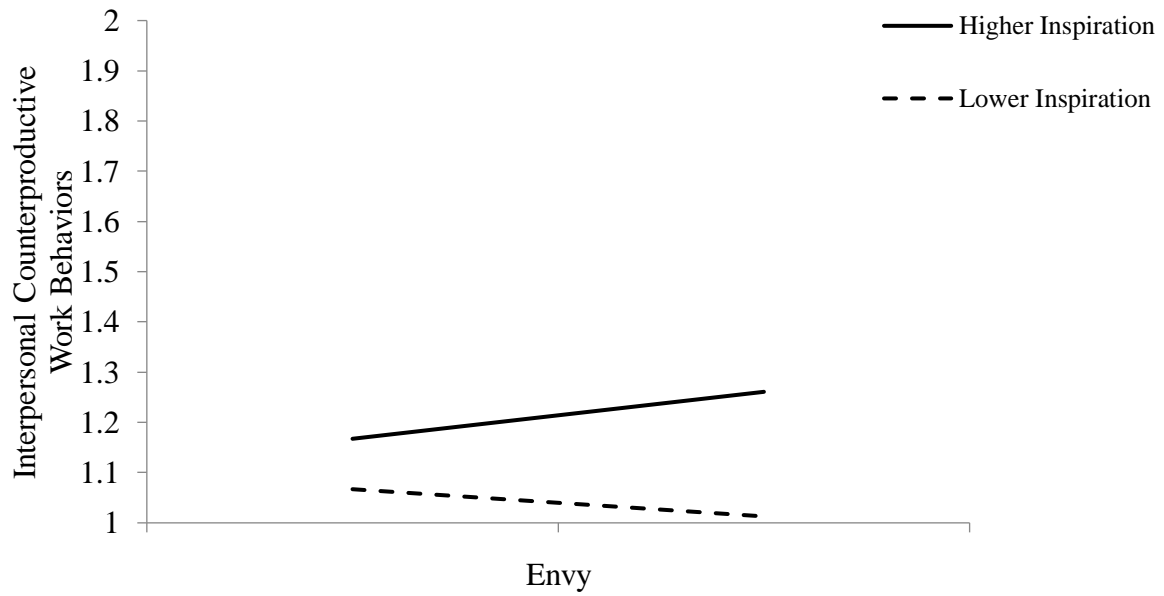


FIGURE 8

**Interaction of Inspiration and Envy
Predicting Interpersonal Counterproductive Work Behaviors**



STUDY 2 DISCUSSION

In Study 2, I tested the hypothesized relationships in the expectancy and instrumentality models using a field sample. The results of the path analyses were generally consistent across the two models. Specifically, interpersonal factors related to expectancy and instrumentality (i.e., perceived similarity and RLMX, respectively) each moderated the indirect, positive association of observed compliments with in-role and extra-role behaviors via upward social comparison and inspiration. There was one difference in the moderation effects between these two factors. That is, at higher levels of perceived similarity, the indirect association was positive, whereas at lower levels of perceived similarity, the indirect association was not significant. These results suggest that after observing a coworker receiving compliments from the mutual manager, people made upward social comparisons with the coworker, experienced inspiration and, in turn, engaged in in-role and extra-role behaviors, only when they perceived that they and their coworker were similar. Comparatively, the indirect association was positive at higher levels of RLMX but was negative at lower levels of RLMX. These results show that when people perceived that their relationship with their manager was better than their coworker's, witnessing their coworker receiving compliments made people compare with the coworker, feel inspired, and participate in in-role and extra-role behaviors. However, when people perceived that their relationship with their manager was worse than their coworker's, the more upward social comparison people engaged in as a result of observing compliments, the less they felt inspired, which led to fewer in-role and extra-role behaviors.

Perceived similarity and RLMX also moderated the indirect, positive association of observed compliments with interpersonal counterproductive work behaviors via upward social comparison and envy. However, both interaction patterns were in the opposite direction from

what was hypothesized, with those higher in perceived similarity or RLMX experiencing higher envy and those lower in perceived similarity or RLMX not experiencing envy. Thus, when people perceived a higher similarity in themselves and their coworker who received compliments or when they viewed their manager having a higher relationship quality with them than with their coworker, they were more envious and acted in more interpersonally counterproductive ways toward the coworker. Despite the opposite patterns of results, my findings lend support for the importance of interpersonal relationships, but not individual differences and organization factors, in shaping employees' differential reactions to observed compliments.

Furthermore, I tested whether different types of compliments differentially elicited upward social comparison, emotions, and workplace behaviors. I specifically focused on the difference between person- and process-focused compliments as well as the difference between general and behavior-specific compliments. I found that person-focused compliments (i.e., ability- and personality-centered compliments) and process-focused compliments (i.e., relationship- and effort-centered compliments) similarly prompted upward social comparison and other downstream consequences. By contrast, behavior-specific and general compliments were different in triggering upward social comparison. Compared to witnessing general compliments, observing behavior-specific compliments was more likely to make people engage in upward social comparison with the complimented coworker, which in turn influenced people's emotions and behaviors.

A series of supplemental analyses confirmed an assumption made in this dissertation, demonstrated the robustness of my findings, and broadened the scope of my theoretical models. Specifically, I provided evidence that people universally value receiving compliments from their manager, which justified my focus on only expectancy- and instrumentality-related factors as

moderators. I also showed that regardless of whether people received compliments themselves, they encountered emotional and behavioral consequences of observing a coworker receiving compliments. Moreover, status emerged as a significant moderator of the relationship between observed compliments and upward social comparison, such that after observing a coworker receiving compliments from the mutual manager, only those with low status at work compared themselves with the complimented coworker and reacted in subsequent ways. Lastly, observers' inspiration and envy interacted in predicting both in-role and extra-role behaviors and interpersonal counterproductive work behaviors. High inspiration with low envy increased in-role and extra-role behaviors. In contrast, when high inspiration was paired with high envy, it led to less engagement in in-role and extra-role behaviors and more engagement in interpersonal counterproductive work behaviors.

GENERAL DISCUSSION

Despite the abundance of research demonstrating the positive effects of receiving compliments, scholars have only recently begun to understand the observer effects. My dissertation sought to offer theoretical explanations that reconcile the conflicting effects of publicly recognizing employees, with the argument that compliments are events that occur frequently in the workplace. Across two studies, I developed a multidimensional scale for compliments and tested two models that link observed compliments to employee behavioral outcomes. Grounded in social comparison theory (Festinger, 1954) and expectancy theory (Vroom, 1964), my moderated mediation models explain the emotional processes that underlie the potential benefits and drawbacks of observing compliments and identified how individual, interpersonal, and organizational contingencies may influence these processes. My theoretical framework yields significant implications for management research and practices.

Theoretical Implications

My dissertation moves beyond prior approaches to studying the effects of compliments at the dyadic level, shifting the focus of compliment research from employees who receive compliments (i.e., “first party”) to employees who witness them (i.e., “third party”). Studying compliments from a third-party perspective is valuable because compliments not only are linked to emotional and behavioral consequences for first-party recipients but also have implications for third-party observers. My findings demonstrate that when leader compliments are given in public, they can create a ripple effect. On the one hand, third party observations can widen compliments’ positive influence and promote feelings of inspiration in observers under certain relational contexts, which motivates their in-role and extra-role behaviors. On the other hand, observing leader compliments can also simultaneously promote envy, which triggers observers’

interpersonal counterproductive work behaviors that specifically target the compliment recipient. Considering this effect, leader compliments may not always create an uplifting experience for recipients as previous research has suggested (Boothby & Bohns, 2021; Zhao & Epley, 2021). Rather, compliment recipients may become targets of interpersonal harm as a result of observer envy (Campbell et al., 2017; Kim & Glomb, 2014; Lam et al., 2011).

I identify the observation of leader compliments as an organizational event that may pull people in two different emotional directions simultaneously. Most people react to other people, objects, tasks, goals, and situations in everyday life with a blend of emotions (Scherer & Tannenbaum, 1986). Previous emotional ambivalence research has mostly focused on people's experience of high levels of general positive and negative emotions in reaction to a particular work episode (Chang & Raver, 2020; Gabriel et al., 2022). However, comparatively, discrete emotions are more informative because they have specific triggers and convey more specific messages (Barrett, 1998). Only a few studies have illustrated people's co-experience of discrete positive and negative emotions, such as happiness and sadness (Williams & Aaker, 2002; Larsen et al., 2001) as well as excitement and fear (Vince & Broussine, 1996). I suggest that observing coworkers receiving compliments constitutes an emotionally complex situation for observers; inspiration and envy together characterize a unique and novel emotional co-experience. Such co-occurrence is at its peak when people perceive a high similarity between themselves and a complimented coworker or when they view their manager's relationship quality with them as higher than with the complimented coworker.

My research highlights the relevance of emotions for understanding the distinct behavioral outcomes of observing leader compliments in an organization. Because very few studies have directly tested the observer effects of compliments in the literature, my arguments

are drawn heavily from recognition literature (Bradler et al., 2016; Hoogveld & Zubanov, 2017; Li et al., 2016; Liao et al., in press; Neckermann & Yang, 2017; Zheng et al., 2019). However, these studies lack consistent findings and especially mechanisms explaining these findings. Building on social comparison theory (Festinger, 1954), my dissertation provides an integrative theoretical framework that simultaneously considers positive and negative influences of complimenting employees in public. Furthermore, my research suggests that behavioral consequences of observing leader compliments take place via emotional avenues. While inspiration leads to in-role and extra-role behaviors, envy is related to interpersonal counterproductive work behaviors particularly targeted toward the complimented coworker. These results suggest that distinguishing performance-based outcomes (e.g., in-role and extra-role behaviors) from social outcomes (e.g., interpersonal counterproductive work behaviors) is crucial when studying the observer effects of leader compliments and may help reconcile the mixed findings in recognition literature.

My dissertation systematically tests whether people's beliefs about themselves, their relationships with others, and their perceived organizational environments influence the extent to which inspiration and envy arise after observing a coworker receiving compliments and making an upward social comparison with that coworker. Based on the concept of expectancy and instrumentality guided by expectancy theory (Vroom, 1964), I propose and examine six highly relevant moderators. Surprisingly, neither environmental differences in organizational support and organizational procedural justice nor individual differences in CSE and non-zero-sum mentality had moderating effects on the direct relationships between upward social comparison and the two emotions. These results suggest that the direct relationships are not context- or individual-dependent. The nonsignificant findings related to perceived organizational

environments might be due to broad organizational contexts being too distal to exert an influence. After all, compared to people's beliefs about themselves and their relationships with people in their workgroups, organizational environments should have the least impact on people's opportunities to improve performance and receive compliments from their manager. It is noteworthy that the nonsignificant findings related to individual differences are inconsistent with prior studies showing that self-esteem (Aspinwall & Taylor, 1993; Buunk et al., 1990; Gibbons & Gerrard, 1989) and attainability of the comparison standard (Lockwood & Kunda, 1997) influence assimilative and contrastive processes of social comparison. This discrepancy may be due to social comparison in the laboratory being contextually divergent from social comparison in everyday lives, with experimental studies involving compulsory comparisons to targets of little prior relationship and field studies incorporating spontaneous comparisons to targets of real relationships (Greenberg et al., 2007; Suls & Wheeler, 2000). Indeed, my finding of the two interpersonal factors (i.e., perceived similarity and RLMX) being significant moderators reinforces the significance of interpersonal dynamics. The direct relationships between upward social comparison and emotions are highly interpersonal-dependent; people's relationships with both their manager and coworker play a critical role in shaping the emotional and behavioral consequences of observing compliments.

There is another unexpected finding in this study that requires further theoretical and empirical scrutiny. Specifically, expectancy theory (Vroom, 1964) suggests that when people believe that efforts can reduce the performance gap between themselves and the complimented coworker (i.e., expectancy) or when they believe that good performance can lead to future compliments (i.e., instrumentality), they should feel less envious. However, I found that these beliefs, which are manifested by perceived similarity and RLMX, actually made people

experience more envy. Rather than expectancy- and instrumentality-related beliefs mitigating envy following the observation of compliments, people might have encountered counterfactual thinking, which is contemplation of what could have been (Kahneman & Varey, 1990; Medvec et al., 1995). Past research has demonstrated that the closer people are to a desired but unattained outcome, the more negative affect they experience (De Cremer & Van Dijk, 2011; Liao et al., in press; Zeelenberg et al., 1998). Therefore, when people perceive a high similarity between themselves and their complimented coworker, they have a “near-miss” experience, making them ruminate about the fact they were not complimented and feel envious of the coworker who was complimented. Relatedly, people tend to believe that those who are similar to them ought to receive equivalent advantages, which is violated when one perceives a similar coworker receiving compliments that they did not (Heider, 1958). In cases where people believe that their manager’s relationship quality with them is better than with the complimented coworker, not receiving compliments enhances people’s counterfactual thinking and even embeds a sense of injustice or betrayal (Smith et al., 1994). In support of my conjecture, Schaubroeck and Lam (2004) found that people who were rejected for promotion were most envious when they expected to be promoted and perceived the promotee as being similar to themselves.

Practical Implications

Beyond the theoretical implications highlighted above, my research offers practical strategies for managerial practices. Leaders giving compliments to employees can be a quick and cost-free way to enhance employee recipients’ well-being and performance (Boothby & Bohns, 2021; Zhao & Epley, 2021). As evident from the results of my dissertation, managers not only need to consider how to best utilize compliments to motivate recipients, but they also need to consider the implications of compliments to other employees who might observe those

compliments. My research findings suggest that when giving compliments in public, managers should be aware of their messages' potential impact on observers and especially on those with low status in the organization. In addition, because specific compliments are more influential than general compliments, managers could be more specific in telling employees exactly what they have done well in order to strengthen compliment ripple effects. For example, instead of saying "You made a contribution as an employee," managers could say, "You delivered a presentation proficiently." Managers also should recognize that observing compliments is a double-edged sword for observers, not only triggering their in-role and extra-role behaviors that may benefit the organization but also eliciting interpersonal counterproductive behaviors that may harm the complimented coworker. Notably, these dual positive and negative effects equally impact observers who have recently received compliments from the manager.

My research also offers practical strategies that employees can rely on to maximize the benefits of observing compliments and minimize their negative impact. It is important for employees to recognize that they are inevitably influenced by witnessing their coworkers receiving compliments. Following such an encounter, they may experience a mix of positive and negative emotions (i.e., inspiration and envy, respectively). Employees should be especially cautious about their emotional responses when they perceive that they and the complimented coworker are similar or that they themselves have a better relationship with their manager. In either case, although the experience of inspiration may empower observing employees to perform better, accompanying envy can give employees a deteriorating relationship with the complimented coworker and press them to construct a less inclusive culture within the organization. Awareness of this negative emotion helps people better navigate the workplace by

expanding their opportunities to effectively exert control and respond in a healthy manner, such as reappraisal and perspective taking (Sheppes, 2014; Troy et al., 2013; Webb et al., 2012).

Limitations and Future Directions

Although my studies have several notable strengths (e.g., the use of experience sampling method to capture weekly variations in focal variables and the separation of the measurement of focal variables in time), one major limitation should be noted. That is, all variables of interest relied on self-reported measures, which may raise concerns about common method variance (CMV). However, this concern is mitigated by three factors: (a) temporally separating the predictor and criterion measures reduces CMV (Podsakoff et al., 2003; Johnson et al., 2011); (b) group-mean-centering exogenous variables at the within-person level removes between-person confounds (e.g., recall biases) (Raudenbush & Bryk, 2002); and (c) cross-level moderating effects do not spuriously result from CMV (Siemens et al., 2010). Moreover, employee observers, as opposed to their managers or coworkers, may in fact be in the best position to report many of the focal variables; some compliments are given but not observed. Thus, neither managers who give compliments nor coworkers who receive compliments are in a better position to report on the frequency of compliments that are witnessed. Also, because emotions are often more internally felt than explicitly expressed, observers can more accurately report the emotions they experience. Likewise, employees may have the best knowledge of their own performance and especially interpersonal counterproductive work behaviors that have a low base-rate of occurrence.

My research findings also highlight fruitful directions for future research. First, a key motivator of my dissertation is to identify moderating factors that can enhance the positive influence of observing compliments and minimize its negative consequences. However, my

results lend support to two interpersonal factors that strengthen *both* positive and negative emotional and behavioral reactions to compliments. Future research coming from a different theoretical basis and using different moderators might come to an alternative conclusion that is more consistent with my predicted patterns. For example, given that inspiration is a future-oriented emotion and envy is present- and past-focused (Lazarus, 1991), a promising direction that merits consideration involves the examination of factors that orient people to focus more on the future and less on the present or past (e.g., temporal orientation; Maglio & Trope, 2019). Discovering ways to increase employee inspiration and lessen envy will allow leaders to not only empower employees to experience greater meaning in work but also cultivate an inclusive and vibrant culture within the organization.

Second, future research would benefit from conceptualizing and testing whether and how observers' perceived motives of the compliment giver play a role in influencing observers' social comparison processes. Employees' reactions to leader compliments are subjective and a result of appraisal (Morton et al., 2022). Observers may view managers giving compliments to employees for various reasons, such as pro-self motives, pro-social motives, and pro-organization motives. Regarding pro-self motives, observers view leader compliments as a way to enhance a leader's own self-image or to get employees on their side. In terms of pro-social motives, observers attribute leader compliments to genuine admiration and appreciation of employees. For pro-organization motives, observers believe that leaders give compliments because compliments are beneficial to the organization and contribute to organizational goals. When observing compliments, employees may consider some motives behind compliments to be more pertinent to their own improvement and well-being than other motives. For example, it is possible that social comparison processes are most likely to occur when leaders are perceived to give

compliments with pro-social motives and least likely to occur when leader compliments are attributed to pro-self motives.

Conclusion

Taken together, leader compliments may create a ripple effect that continues to influence all employees who witness them. In this way, social functions of compliments expand beyond the dyadic level and reverberate within a workgroup. By giving compliments in public, a leader can make the impact of the compliments more substantial by inspiring observers to excel. However, in the meantime, a leader's public compliments toward one employee may cause observers to be envious and resent the recipient of compliments. These emotional and behavioral processes are more likely to occur in observers who perceive a high similarity between themselves and their coworker or who view their manager's relationship quality with them as higher than with the recipient. This dissertation is only the first step in examining the observer effects of leader compliments. I hope the insights gleaned from my theoretical integration and results will spark further research in the observer effects of compliments.

REFERENCES

- Alexander, S., & Ruderman, M. (1987). The role of procedural and distributive justice in organizational behavior. *Social Justice Research, 1*, 177–198.
- Allen, R. E., Lucero, M. A., & Van Norman, K. L. (1997). An examination of the individual's decision to participate in an employee involvement program. *Group and Organization Management, 22*(1), 117–143.
- Ambrose, M. L., & Kulik, C. T. (1999). Old friends, new faces: Motivation research in the 1990s. *Journal of Management, 25*(3), 231–292.
- Anderson, D. C., Crowell, C. R., Doman, M., & Howard, G. S. (1988). Performance posting, goal setting, and activity-contingent praise as applied to a university hockey team. *Journal of Applied Psychology, 73*(1), 87–95.
- Anderson, J. C., & Gerbing, D. W. (1991). Predicting the performance of measures in a confirmatory factor analysis with a pretest assessment of their substantive validities. *Journal of Applied Psychology, 76*(5), 732–740.
- Ashford, S. J., & Cummings, L. L. (1983). Feedback as an individual resource: Personal strategies of creating information. *Organizational Behavior and Human Performance, 32*(3), 370–398.
- Aspinwall, L. G. (1997). Future-oriented aspects of social comparisons: A framework for studying health-related comparison activity. In B. P. Buunk & F. X. Gibbons (Eds.), *Health, coping, and well-being: Perspectives from social comparison theory* (pp. 125–165). Lawrence Erlbaum Associates.
- Aspinwall, L. G., & Taylor, S. E. (1993). Effects of social comparison direction, threat, and self-esteem on affect, self-evaluation, and expected success. *Journal of Personality and Social Psychology, 64*(5), 708–722.
- Ayduk, O., Gyurak, A., Akinola, M., & Mendes, W. B. (2013). Consistency over flattery: Self-verification processes revealed in implicit and behavioral responses to feedback. *Social Psychological and Personality Science, 4*(5), 538–545.
- Balliet, D., Parks, C., & Joireman, J. (2009). Social value orientation and cooperation in social dilemmas: A meta-analysis. *Group Processes & Intergroup Relations, 12*(4), 533–547.
- Bamberger, P., & Belogolovsky, E. (2017). The dark side of transparency: How and when pay administration practices affect employee helping. *Journal of Applied Psychology, 102*(4), 658–671.
- Banaji, M. R., Lemm, K. M., & Carpenter, S. J. (2001). The social unconscious. In A. Tesser & N. Schwartz (Eds.), *Blackwell handbook of social psychology: Intraindividual processes* (pp. 134–158). Blackwell.

- Barrett, L. F. (1998). Discrete emotions or dimensions? The role of valence focus and arousal focus. *Cognition and Emotion*, 12(4), 579–599.
- Barsade, S. G., & Gibson, D. E. (2007). Why does affect matter in organizations? *Academy of Management Perspectives*, 21(1), 36–59.
- Baumeister, R. F. (1982). A self-presentational view of social phenomena. *Psychological Bulletin*, 91(1), 3–26.
- Baumeister, R. F., & Leary, M. R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin*, 117(3), 497–529.
- Bazerman, M. H., Baron, J., & Shonk, K. (2001). *You can't enlarge the pie*. Basic Books.
- Beaman, R., & Wheldall, K. (2000). Teachers' use of approval and disapproval in the classroom. *Educational Psychology*, 20(4), 431–446.
- Biernat, M., Manis, M., & Kobrynowicz, D. (1997). Simultaneous assimilation and contrast effects in judgments of self and others. *Journal of Personality and Social Psychology*, 73(2), 254–269.
- Blader, S. L., & Chen, Y.-R. (2014). What's in a name? Status, power, and other forms of social hierarchy. In J. T. Cheng, J. L. Tracy, & C. Anderson (Eds.). *Psychology of social response to job stressors and organizational justice: Some mediator and moderator status* (pp. 77–95). Springer.
- Blanton, H., Buunk, B. P., Gibbons, F. X., & Kuyper, H. (1999). When better-than-others compare upward: Choice of comparison and comparative evaluation as independent predictors of academic performance. *Journal of Personality and Social Psychology*, 76(3), 420–430.
- Bono, J. E., & Colbert, A. E. (2005). Understanding responses to multi-source feedback: The role of core self-evaluations. *Personnel Psychology*, 58(1), 171–203.
- Bono, J. E., Glomb, T. M., Shen, W., Kim, E., & Koch, A. J. (2013). Building positive resources: Effects of positive events and positive reflection on work stress and health. *Academy of Management Journal*, 56(6), 1601–1627.
- Boothby, E. J., & Bohns, V. K. (2021). Why a simple act of kindness is not as simple as it seems: Underestimating the positive impact of our compliments on others. *Personality and Social Psychology Bulletin*, 47(5), 826–840.
- Bradler, C., Dur, R., Neckermann, S., & Non, A. (2016). Employee recognition and performance: A field experiment. *Management Science*, 62(11), 3085–3099.

- Brewer, M. B., & Weber, J. G. (1994). Self-evaluation effects of interpersonal versus intergroup social comparison. *Journal of Personality and Social Psychology*, 66(2), 268–275.
- Brickman, P., & Bulman, R. (1977). Pleasure and pain in social comparison. In J. M. Suls and R. L. Miller (Eds.), *Social comparison processes: Theoretical and empirical perspectives* (pp. 149–186). Hemisphere Press.
- Brooks, L., & Betz, N. E. (1990). Utility of expectancy theory in predicting occupational choices in college students. *Journal of Counseling Psychology*, 37(1), 57–64.
- Brown, J. D., Novick, N. J., Lord, K. A., & Richards, J. M. (1992). When Gulliver travels: Social context, psychological closeness, and self-appraisals. *Journal of Personality and Social Psychology*, 62(5), 717–727.
- Brun, J.-P., & Dugas, N. (2008). An analysis of employee recognition: Perspectives on human resources practices. *The International Journal of Human Resource Management*, 19(4), 716–730.
- Buengeler, C., Piccolo, R. F., & Locklear, L. R. (2021). LMX differentiation and group outcomes: A framework and review drawing on group diversity insights. *Journal of Management*, 47(1), 260–287.
- Burton, F. G., Chen, Y., Grover, V., & Stewart, K. A. (1992). An application of expectancy theory for assessing user motivation to utilize an expert system. *Journal of Management Information Systems*, 9(3), 183–198.
- Buunk, A. P., & Gibbons, F. X. (2007). Social comparison: The end of a theory and the emergence of a field. *Organizational Behavior and Human Decision Processes*, 102(1), 3–21.
- Buunk, A. P., Peiro, J. M., & Griffioen, C. (2007). A positive role model may stimulate career-oriented behavior. *Journal of Applied Social Psychology*, 37(7), 1489–1500.
- Buunk, B. P., Collins, R. L., Taylor, S. E., VanYperen, N. W., & Dakof, G. A. (1990). The affective consequences of social comparison: Either direction has its ups and downs. *Journal of Personality and Social Psychology*, 59(6), 1238–1249.
- Buunk, B. P., Kuyper, H., & Van Der Zee, Y. G. (2005). Affective response to social comparison in the classroom. *Basic and Applied Social Psychology*, 27(3), 229–237.
- Caligiuri, P., Lepak, D., & Bonache, J. (2010). *Global dimensions of human resources management: Managing the global workforce*. John Wiley & Sons, Inc.
- Campbell, D. J., & Pritchard, R. (1976). Motivation theory in industrial and organizational psychology. In M. D. Dunnette (Ed.), *Handbook of industrial and organizational psychology* (pp. 63–130). Rand McNally.

- Campbell, E. M., Liao, H., Chuang, A., Zhou, J., & Dong, Y. (2017). Hot shots and cool reception? An expanded view of social consequences for high performers. *Journal of Applied Psychology, 102*(5), 845–866.
- Chang, C.-H. (D.), Ferris, D. L., Johnson, R. E., Rosen, C. C., & Tan, J. A. (2012). Core self-evaluations: A review and evaluation of the literature. *Journal of Management, 38*(1), 81–128.
- Chang, X., & Raver, J. L. (2020). The gendered nature of emotional ambivalence towards coworkers and its relational consequences. *Journal of Business and Psychology, 35*(6), 831–852.
- Chen, G., Gully, S. M., & Eden, D. (2001). Validation of a new general self-efficacy scale. *Organizational Research Methods, 4*(1), 62–83.
- Chen, M.-J., & Miller, D. (1994). Competitive attack, retaliation and performance: An expectancy-valence framework. *Strategic Management Journal, 15*, 85–102.
- Cimpian, A., Arce, H.-M. C., Markman, E. M., & Dweck, C. S. (2007). Subtle linguistic cues affect children's motivation. *Psychological Science, 18*(4), 314–316.
- Cohen, J., Cohen, P., West, S. G., & Aiken, L. S. (2003). *Applied multiple regression/correlation analysis for the behavioral sciences*. Lawrence Erlbaum Associates.
- Cohen-Charash, Y., & Mueller, J. S. (2007). Does perceived unfairness exacerbate or mitigate interpersonal counterproductive work behaviors related to envy? *Journal of Applied Psychology, 92*(3), 666–680.
- Colquitt, J. A. (2001). On the dimensionality of organizational justice: A construct validation of a measure. *Journal of Applied Psychology, 86*(3), 386–400.
- Colquitt, J. A., Conlon, D. E., Wesson, M. J., Porter, C. O. L. H., & Ng, K. Y. (2001). Justice at the millennium: A meta-analytic review of 25 years of organizational justice research. *Journal of Applied Psychology, 86*(3), 425–445.
- Colquitt, J. A., Noe, R. A., & Jackson, C. L. (2002). Justice in teams: Antecedents and consequences of procedural justice climate. *Personnel Psychology, 55*(1), 83–109.
- Colquitt, J. A., Sabey, T. B., Rodell, J. B., & Hill, E. T. (2019). Content validation guidelines: Evaluation criteria for definitional correspondence and definitional distinctiveness. *Journal of Applied Psychology, 104*(10), 1243–1265.
- Corcoran, K., Crusius, J., & Mussweiler, T. (2011). Social comparison: Motives, standards, and mechanisms. In D. Chadee (Ed.), *Theories in social psychology* (pp. 119–139). Wiley-Blackwell.

- Crocker, J., Canevello, A., & Lewis, K. A. (2017). Romantic relationships in the ecosystem: Compassionate goals, nonzero-sum beliefs, and change in relationship quality. *Journal of Personality and Social Psychology*, 112(1), 58–75.
- Crowell, C. R., Anderson, D. C., Abel, D. M., & Sergio, J. P. (1988). Task clarification, performance feedback, and social praise: Procedures for improving the customer service of bank tellers. *Journal of Applied Behavior Analysis*, 21(1), 65–71.
- Cusella, L. P. (1987). Feedback, motivation, and performance. In F. M. Jablin, L. L. Putnam, K. H. Roberts, & L. W. Porter (Eds.), *Handbook of organizational communication: An interdisciplinary perspective* (pp. 624–678). Sage Publications, Inc.
- Dansereau, F., Graen, G., & Haga, W. J. (1975). A vertical dyad linkage approach to leadership within formal organizations: A longitudinal investigation of the role making process. *Organizational Behavior and Human Performance*, 13(1), 46–78.
- De Cremer, D., & Van Dijk, E. (2011). On the near miss in public good dilemmas: How upward counterfactuals influence group stability when the group fails. *Journal of Experimental Social Psychology*, 47(1), 139–146.
- De Dreu, C. K. W., Koole, S. L., & Steinel, W. (2000). Unfixing the fixed pie: A motivated information-processing approach to integrative negotiation. *Journal of Personality and Social Psychology*, 79(6), 975–987.
- De Gieter, S., De Cooman, R., Pepermans, R., & Jegers, M. (2008). Manage through rewards not only through pay: Establishing the psychological reward satisfaction scale (PReSS). In M. Vartiainen, C. Antoni, Z. Baeten, N. Hakonen, R. Lucas, & H. Thierry (Eds.), *Rewards management – Facts and trends in Europe* (pp. 97–117). Pabst Science Publishers.
- Delin, C. R., & Baumeister, R. F. (1994). Praise: More than just social reinforcement. *Journal for the Theory of Social Behaviour*, 24(3), 219–241.
- Diener, E., & Emmons, R. A. (1984). The independence of positive and negative affect. *Journal of Personality and Social Psychology*, 47(5), 1105–1117.
- Dubinsky, A. J., Jolson, M. A., Michaels, R. E., Kotabe, M., & Lim, C. U. (1993). Perceptions of motivational components: Salesmen and saleswomen revisited. *Journal of Personal Selling & Sales Management*, 13(4), 16–37.
- Duffy, M. K., & Shaw, J. D. (2000). The Salieri Syndrome: Consequences of envy in groups. *Small Group Research*, 31(1), 3–23.
- Duffy, M. K., Lee, K., & Adair, E. A. (2021). Workplace envy. *Annual Review of Organizational Psychology and Organizational Behavior*, 8, 19–44.

- Duffy, M. K., Scott, K. L., Shaw, J. D., Tepper, B. J., & Aquino, K. (2012). A social context model of envy and social undermining. *Academy of Management Journal*, 55(3), 643–666.
- Dulebohn, J. H., Bommer, W. H., Liden, R. C., Brouer, R. L., & Ferris, G. R. (2012). A meta-analysis of antecedents and consequences of leader-member exchange: Integrating the past with an eye toward the future. *Journal of Management*, 38(6), 1715–1759.
- Dunn, J., & Schweitzer, M. (2006). Green and mean: Envy and social undermining in organizations. In A. Tenbrunsel (Ed.), *Research on managing groups and teams: Ethics in groups* (pp. 177–197). Elsevier.
- Dunning, D., & Hayes, A. F. (1996). Evidence for egocentric comparison in social judgment. *Journal of Personality and Social Psychology*, 71(2), 213–229.
- Edwards, J. R., & Lambert, L. S. (2007). Methods for integrating moderation and mediation: A general analytical framework using moderated path analysis. *Psychological Methods*, 12(1), 1–22.
- Eisenberger, R., Huntington, R., Hutchison, S., & Sowa, D. (1986). Perceived organizational support. *Journal of Applied Psychology*, 71(3), 500–507.
- Enders, C. K., & Tofighi, D. (2007). Centering predictor variables in cross-sectional multilevel models: A new look at an old issue. *Psychological Methods*, 12(2), 121–138.
- Epitropaki, O., & Martin, R. (2013). Transformational–transactional leadership and upward influence: The role of relative leader–member exchanges (RLMX) and perceived organizational support (pos). *The Leadership Quarterly*, 24(2), 299–315.
- Erez, A., & Judge, T. A. (2001). Relationship of core self-evaluations to goal setting, motivation, and performance. *Journal of Applied Psychology*, 86(6), 1270–1279.
- Evans, M. G. (1991). Problems of analyzing multiplicative composites. *American Psychologist*, 46(1), 6–15.
- Fairhurst, G. T., & Chandler, T. A. (1989). Social structure in leader-member interaction. *Communication Monographs*, 56(3), 215–239.
- Festinger, L. (1954). A theory of social comparison processes. *Human Relations*, 7(2), 117–140.
- Fischer, P., Kastenmuller, A., Frey, D., & Peus, C. (2009). Social comparison and information transmission in the work context. *Journal of Applied Social Psychology*, 39(1), 42–61.
- Fiske, S. T. (2010). Interpersonal stratification: Status, power, and subordination. In S. T. Fiske, D. T. Gilbert, & G. Lindzey (5th ed.), *Handbook of social psychology* (Vol. 2, pp. 941–982). John Wiley & Sons, Inc.

- Floress, M. T., & Jenkins, L. N. (2015). A preliminary investigation of kindergarten teachers' use of praise in general education classrooms. *Preventing School Failure: Alternative Education for Children and Youth*, 59(4), 253–262.
- Folger, R., & Konovsky, M. A. (1989). Effects of procedural and distributive justice on reactions to pay raise decisions. *Academy of Management Journal*, 32(1), 115–130.
- Ford, J. K., MacCallum, R. C., & Tait, M. (1986). The application of exploratory factor analysis in applied psychology: A critical review and analysis. *Personnel Psychology*, 39(2), 291–314.
- Fox, S., Ben-Nahum, Z., & Yinon, Y. (1989). Perceived similarity and accuracy of peer ratings. *Journal of Applied Psychology*, 74(5), 781–786.
- Furnham, A., & Zacherl, M. (1986). Personality and job satisfaction. *Personality and Individual Differences*, 7(4), 453–459.
- Gabriel, A. S., Butts, M. M., Chawla, N., da Motta Veiga, S. P., Turban, D. B., & Green, J. D. (2022). Feeling positive, negative, or both? Examining the self-regulatory benefits of emotional ambivalence. *Organization Science*, 33(6), 2085–2540.
- Gabriel, A. S., Podsakoff, N. P., Beal, D. J., Scott, B. A., Sonnentag, S., Trougakos, J. P., & Butts, M. M. (2019). Experience sampling methods: A discussion of critical trends and considerations for scholarly advancement. *Organizational Research Methods*, 22(4), 969–1006.
- Gallus, J., & Frey, B. S. (2016). Awards: A strategic management perspective. *Strategic Management Journal*, 37(8), 1699–1714.
- Ganegoda, D. B., & Bordia, P. (2019). I can be happy for you, but not all the time: A contingency model of envy and positive empathy in the workplace. *Journal of Applied Psychology*, 104(6), 776–795.
- Garcia, S. M., Tor, A., & Schiff, T. M. (2013). The psychology of competition: A social comparison perspective. *Perspectives on Psychological Science*, 8(6), 634–650.
- Gardner, W. L., Gabriel, S., & Hochschild, L. (2002). When you and I are “we,” you are not threatening: The role of self-expansion in social comparison. *Journal of Personality and Social Psychology*, 82(2), 239–251.
- George, J. M., Reed, T. F., Ballard, K. A., Colin, J., & Fielding, J. (1993). Contact with AIDS patients as a source of work-related distress: Effects of organizational and social support. *Academy of Management Journal*, 36(1), 157–171.
- Gerrard, M., Gibbons, F. X., Lane, D. J., & Stock, M. L. (2005). Smoking cessation: Social comparison level predicts success for adult smokers. *Health Psychology*, 24(6), 623–629.

- Gibbons, F. X., & Gerrard, M. (1989). Effects of upward and downward social comparison on mood states. *Journal of Social and Clinical Psychology*, 8(1), 14–31.
- Gibbons, F. X., Blanton, H., Gerrard, M., Buunk, B., & Eggleston, T. (2000). Does social comparison make a difference? Optimism as a moderator of the relation between comparison level and academic performance. *Personality and Social Psychology Bulletin*, 26(5), 637–648.
- Gilbert, D. T., Giesler, R. B., & Morris, K. A. (1995). When comparisons arise. *Journal of Personality and Social Psychology*, 69(2), 227–236.
- Goldberg, L. R. (1999). A broad-bandwidth, public domain, personality inventory measuring the lower-level facets of several five-factor models. In I. Mervielde, I. Deary, F. De Fruyt, & F. Ostendorf (Eds.), *Personality Psychology in Europe* (Vol. 7, pp. 7–28). Tilburg University Press.
- Gorsuch, R. (1983). *Factor analysis* (2nd ed.). Lawrence Erlbaum Associates.
- Gostick, A. R., & Elton, C. (2007). *The carrot principle: How the best managers use recognition to engage their people, retain talent, and accelerate performance*. Free Press.
- Graen, G. B., & Cashman, J. (1975). A role-making model of leadership in formal organizations: A developmental approach. In J. G. Hunt & L. L. Larson (Eds.), *Leadership frontiers* (pp. 143–166). Kent State University Press.
- Graen, G. B., & Scandura, T. (1987). Toward a psychology of dyadic organizing. In B. Staw & L. L. Cumming (Eds.), *Research in organizational behavior* (Vol. 9, pp. 175–208). JAI Press.
- Graen, G. B., & Uhl-Bien, M. (1995). Relationship-based approach to leadership: Development of leader-member exchange (LMX) theory of leadership over 25 years: Applying a multi-level multi-domain perspective. *The Leadership Quarterly*, 6(2), 219–247.
- Green, S. G., Anderson, S. E., & Shivers, S. L. (1996). Demographic and organizational influences on leader-member exchange and related work attitudes. *Organizational Behavior and Human Decision Processes*, 66(2), 203–214.
- Greenberg, J., Ashton-James, C. E., & Ashkanasy, N. M. (2007). Social comparison processes in organizations. *Organizational Behavior and Human Decision Processes*, 102(1), 22–41.
- Hafner, M. (2003). How dissimilar others may still resemble the self: Assimilation and contrast after social comparison. *Journal of Consumer Psychology*, 14(1–2), 187–196.
- Hayes, A. F. (2015). An index and test of linear moderated mediation. *Multivariate Behavioral Research*, 50(1), 1–22.
- Heider, F. (1958). *The psychology of interpersonal relations*. John Wiley & Sons, Inc.

- Helgeson, V. S., & Taylor, S. E. (1993). Social comparisons and adjustment among cardiac patients. *Journal of Applied Social Psychology*, 23(15), 1171–1195.
- Henderson, D. J., Wayne, S. J., Shore, L. A., Bommer, W. H., & Tetrick, L. E. (2008). Leader-member exchange, differentiation, and psychological contract fulfillment: A multilevel examination. *Journal of Applied Psychology*, 93(6), 1208–1219.
- Heneman, H. G., & Schwab, D. P. (1972). Evaluation of research on expectancy theory predictions of employee performance. *Psychological Bulletin*, 78(1), 1–9.
- Herold, D. M., & Greller, M. M. (1977). Feedback: The definition of a construct. *Academy of Management Journal*, 20(1), 142–147.
- Hill, C. A. (1987). Affiliation motivation: People who need people...but in different ways. *Journal of Personality and Social Psychology*, 52(5), 1008–1018.
- Hinkin, T. R. (1998). A brief tutorial on the development of measures for use in survey questionnaires. *Organizational Research Methods*, 1(1), 104–121.
- Hinkin, T. R., & Schriesheim, C. A. (1989). Development and application of new scales to measure the French and Raven (1959) bases of social power. *Journal of Applied Psychology*, 74(4), 561–567.
- Hogg, M. A., Martin, R., Epitropaki, O., Mankad, A., Svensson, A., & Weeden, K. (2005). Effective leadership in salient groups: Revisiting leader-member exchange theory from the perspective of the social identity theory of leadership. *Personality and Social Psychology Bulletin*, 31(7), 991–1004.
- Hoogveld, N., & Zubanov, N. (2017). The power of (no) recognition: Experimental evidence from the university classroom. *Journal of Behavioral and Experimental Economics*, 67, 75–84.
- Huguet, P., Dumas, F., Monteil, J. M., & Genestoux, N. (2001). Social comparison choices in the classroom: Further evidence for students' upward comparison tendency and its beneficial impact on performance. *European Journal of Social Psychology*, 31(5), 557–578.
- Johnson, R. E., Rosen, C. C., & Djurdjevic, E. (2011). Assessing the impact of common method variance on higher order multidimensional constructs. *Journal of Applied Psychology*, 96(4), 744–761.
- Johnson, R. E., Rosen, C. C., Chang, C.-H., & Lin, S.-H. (2015). Getting to the core of locus of control: Is it a core evaluation of the self or the environment? *Journal of Applied Psychology*, 100(5), 1568–1578.
- Johnson, R. E., Selenta, C., & Lord, R. G. (2006). When organizational justice and the self-concept meet: Consequences for the organization and its members. *Organizational Behavior and Human Decision Processes*, 99(2), 175–201.

- Johnson, S. G. B., Zhang, J., & Keil, F. C. (2022). Win–win denial: The psychological underpinnings of zero-sum thinking. *Journal of Experimental Psychology: General*, 151(2), 455–474.
- Jones, E. E. (1964). *Ingratiation: A Social Psychological Analysis*. Appleton Century-Crofts.
- Judge, T. A., & Hurst, C. (2007). Capitalizing on one's advantages: Role of core self-evaluations. *Journal of Applied Psychology*, 92(5), 1212–1227.
- Judge, T. A., Bono, J. E., Erez, A., & Locke, E. A. (2005). Core self-evaluations and job and life satisfaction: The role of self-concordance and goal attainment. *Journal of Applied Psychology*, 90(2), 257–268.
- Judge, T. A., Erez, A., Bono, J. E., & Thoresen, C. J. (2003). The core self-evaluations scale: Development of a measure. *Personnel Psychology*, 56(2), 303–331.
- Judge, T. A., Locke, E. A., Durham, C. C., & Kluger, A. N. (1998). Dispositional effects on job and life satisfaction: The role of core evaluations. *Journal of Applied Psychology*, 83(1), 17–34.
- Judge, T. A., Van Vianen, A. E. M., & De Pater, I. E. (2004). Emotional stability, core self-evaluations, and job outcomes: A review of the evidence and an agenda for future research. *Human Performance*, 17(3), 325–346.
- Judge, T. A., Weiss, H. M., Kammeyer-Mueller, J. D., & Hulin, C. L. (2017). Job attitudes, job satisfaction, and job affect: A century of continuity and of change. *Journal of Applied Psychology*, 102(3), 356–374.
- Kahneman, D., & Varey, C. A. (1990). Propensities and counterfactuals: The loser that almost won. *Journal of Personality and Social Psychology*, 59(6), 1101–1110.
- Kakkar, H., & Sivanathan, N. (2022). The impact of leader dominance on employees' zero-sum mindset and helping behavior. *Journal of Applied Psychology*, 107(10), 1706–1724.
- Kamins, M. L., & Dweck, C. S. (1999). Person versus process praise and criticism: Implications for contingent self-worth and coping. *Developmental Psychology*, 35(3), 835–847.
- Kammeyer-Mueller, J. D., Judge, T. A., & Scott, B. A. (2009). The role of core self-evaluations in the coping process: Testing an integrative model. *Journal of Applied Psychology*, 94(1), 177–195.
- Kanouse, D. E., Gumpert, P., & Canavan-Gumpert, D. (1981). The Semantics of praise. In J. H. Harvey, W. Ickes, & R. R. Kidd (Eds.), *New directions in attribution research* (pp. 97–115). Lawrence Erlbaum Associates.
- Kemmelmeier, M., & Oyserman, D. (2001). Gendered influence of downward social comparisons on current and possible selves. *Journal of Social Issues*, 57(1), 129–148.

- Kim, E., & Glomb, T. M. (2014). Victimization of high performers: The roles of envy and work group identification. *Journal of Applied Psychology*, 99(4), 619–634.
- Kim, J. S., & Hamner, W. C. (1976). Effect of performance feedback and goal setting on productivity and satisfaction in an organizational setting. *Journal of Applied Psychology*, 61(1), 48–57.
- Kim, J.-O., & Mueller, C. W. (1978). *Factor analysis: statistical methods and practical issues*. Sage.
- Klein, W. M., & Kunda, Z. (1993). Maintaining self-serving social comparisons: Biased reconstruction of one's past behaviors. *Personality and Social Psychology Bulletin*, 19(6), 732–739.
- Kline, R. B. (2005). *Principles and practice of structural equation modeling*. Guilford Press.
- Kluger, A. N., & DeNisi, A. (1996). The effects of feedback interventions on performance: A historical review, a meta-analysis, and a preliminary feedback intervention theory. *Psychological Bulletin*, 119(2), 254–284.
- Knapp, M. L., Hopper, R., & Bell, R. A. (1984). Compliments: A descriptive taxonomy. *Journal of Communication*, 34(4), 12–31.
- Koestner, R., Zuckerman, M., & Koestner, J. (1987). Praise, involvement, and intrinsic motivation. *Journal of Personality and Social Psychology*, 53(2), 383–390.
- Kosfeld, M., & Neckermann, S. (2011). Getting more work for nothing? Symbolic awards and worker performance. *American Economic Journal: Microeconomics*, 3(3), 86–99.
- Kozlowski, S. W. J., & Bell, B. S. (2003). Work groups and teams in organizations. In W. C. Borman, D. R. Ilgen, & R. J. Klimoski (Eds.), *Handbook of psychology: Industrial and organizational psychology* (Vol. 12, pp. 333–375). John Wiley & Sons, Inc.
- Kristof-Brown, A. L., Zimmerman, R. D., & Johnson, E. C. (2005). Consequences of individual's fit at work: A meta-analysis of person-job, person-organization, person-group, and person-supervisor fit. *Personnel Psychology*, 58(2), 281–342.
- Kurtessis, J. N., Eisenberger, R., Ford, M. T., Buffardi, L. C., Stewart, K. A., & Adis, C. S. (2017). Perceived organizational support: A meta-analytic evaluation of organizational support theory. *Journal of Management*, 43(6), 1854–1884.
- Lam, C. K., Van Der Vegt, G. S., Walter, F., & Huang, X. (2011). Harming high performers: A social comparison perspective on interpersonal harming in work teams. *Journal of Applied Psychology*, 96(3), 588–601.
- Larsen, J., McGraw, A., & Cacioppo, J. (2001). Can people feel happy and sad at the same time? *Journal of Personality and Social Psychology*, 81(4), 684–696.

- Lazarus, R. S. (1991). *Emotion and adaptation*. Oxford University Press.
- Li, N., Zheng, X., Harris, T. B., Liu, X., & Kirkman, B. L. (2016). Recognizing “me” benefits “we”: Investigating the positive spillover effects of formal individual recognition in teams. *Journal of Applied Psychology*, 101(7), 925–939.
- Li, S., Miller, J. E., Stuart, J. O., Jules, S. J., Scherer, A. M., Smith, A. R., & Windschitl, P. D. (2021). The effects of tool comparisons when estimating the likelihood of task success. *Judgment and Decision Making*, 16(1), 165–200.
- Liao, H., & Rupp, D. E. (2005). The impact of justice climate and justice orientation on work outcomes: A cross-level multifoci framework. *Journal of Applied Psychology*, 90(2), 242–256.
- Liao, H., Feng, Q., Zhu, L., & Guan, O. Z. (in press). The award goes to... someone else: A natural quasi-experiment examining the impact of performance awards on nominees’ workplace collaboration. *Academy of Management Journal*.
- Liden, R. C., & Graen, G. (1980). Generalizability of the vertical dyad linkage model of leadership. *Academy of Management Journal*, 23(3), 451–465.
- Liden, R. C., & Maslyn, J. M. (1998). Multidimensionality of leader–member exchange: An empirical assessment through scale development. *Journal of Management*, 24(1), 43–72.
- Liden, R. C., Sparrowe, R. T., & Wayne, S. J. (1997). Leader–member exchange theory: The past and potential for the future. In G. R. Ferris (Ed.), *Research in personnel and human resources management* (pp. 47–119). Elsevier.
- Liden, R. C., Wayne, S. J., & Stilwell, D. (1993). A longitudinal study on the early development of leader-member exchanges. *Journal of Applied Psychology*, 78(4), 662–674.
- Little, T. D., Cunningham, W. A., Shahar, G., & Widaman, K. F. (2002). To parcel or not to parcel: Exploring the question, weighing the merits. *Structural Equation Modeling*, 9(2), 151–173.
- Lockwood, P., & Kunda, Z. (1997). Superstars and me: Predicting the impact of role models on the self. *Journal of Personality and Social Psychology*, 73(1), 91–103.
- Lockwood, P., Shaughnessy, S. C., Fortune, J. L., & Tong, M.-O. (2012). Social comparisons in novel situations: Finding inspiration during life transitions. *Personality and Social Psychology Bulletin*, 38(8), 985–996.
- Lown, E. L., Radley, K. C., Dart, E. H., Dufrene, B. A., Tingstrom, D. H., Hayes, L., & Tannehill, J. A. (2021). A comparison of real-time and delayed visual performance feedback on teacher praise. *Psychology in the Schools*, 58(5), 804–817.

- MacKenzie, S. B., Podsakoff, P. M., & Fetter, R. (1991). Organizational citizenship behavior and objective productivity as determinants of managerial evaluations of salespersons' performance. *Organizational Behavior and Human Decision Processes*, 50(1), 123–150.
- Magee, J. C., & Galinsky, A. D. (2008). Social hierarchy: The self-reinforcing nature of power and status. *Academy of Management Annals*, 2(1), 351–398.
- Maglio, S. J., & Trope, Y. (2019). Temporal orientation. *Current Opinion in Psychology*, 26, 62–66.
- Major, B., Testa, M., Bylsma, W. H. (1991). Responses to upward and downward social comparisons: The impact of esteem-relevance and perceived control. In Suls, J. M., Wills, T. A. (Eds.), *Social comparison: Contemporary theory and research* (pp. 237–260). Lawrence Erlbaum Associates.
- Manis, M., Biernat, M., & Nelson, T. F. (1991). Comparison and expectancy processes in human judgment. *Journal of Personality and Social Psychology*, 61(2), 203–211.
- Marigold, D. C., Holmes, J. G., & Ross, M. (2007). More than words: Reframing compliments from romantic partners fosters security in low self-esteem individuals. *Journal of Personality and Social Psychology*, 92(2), 232–248.
- Markham, S. E., Scott, K. D., & McKee, G. H. (2002). Recognizing good attendance: A longitudinal, quasi-experimental field study. *Personnel Psychology*, 55(3), 639–660.
- Martin, R., Thomas, G., Legood, A., & Dello Russo, S. (2018). Leader–member exchange (LMX) differentiation and work outcomes: Conceptual clarification and critical review. *Journal of Organizational Behavior*, 39(2), 151–168.
- Masterson, S. S., Lewis, K., Goldman, B. M., & Taylor, M. S. (2000). Integrating justice and social exchange: The differing effects of fair procedures and treatment on work relationships. *Academy of Management Journal*, 43(4), 738–748.
- Medvec, V. H., Madey, S. F., & Gilovich, T. (1995). When less is more: Counterfactual thinking and satisfaction among Olympic medalists. *Journal of Personality and Social Psychology*, 69(4), 603–610.
- Mischel, W. (1977). The interaction of person and situation. In D. Magnusson & N. S. Endler (Eds.), *Personality at the crossroads: Current issues in interactional psychology* (pp. 333–352). Lawrence Erlbaum Associates.
- Mitchell, T. R., & Biglan, A. (1971). Instrumentality theories: Current uses in psychology. *Psychological Bulletin*, 76(6), 432–454.
- Molleman, E., Nauta, A., & Buunk, B. P. (2007). Social comparison-based thoughts in groups: Their associations with interpersonal trust and learning outcomes. *Journal of Applied Social Psychology*, 37(6), 1163–1180.

- Molleman, E., Pruyn, J., & Van Knippenberg, A. (1986). Social comparison processes among cancer patients. *British Journal of Social Psychology*, 25(1), 1–13.
- Moore, D. A. (2007). Not so above average after all: When people believe they are worse than average and its implications for theories of bias in social comparison. *Organizational Behavior and Human Decision Processes*, 102(1), 42–58.
- Morton, J. S., Mikolajczak, M., & Luminet, O. (2022). New perspectives on the praise literature: Towards a conceptual model of compliment. *Current Psychology*, 41(9), 6038–6050.
- Mumford, M. D. (1983). Social comparison theory and the evaluation of peer evaluations: A review and some applied implications. *Personnel Psychology*, 36(4), 867–881.
- Mussweiler, T. (2001). Focus of comparison as a determinant of assimilation versus contrast in social comparison. *Personality and Social Psychology Bulletin*, 27(1), 38–47.
- Mussweiler, T. (2003). Comparison processes in social judgment: Mechanisms and consequences. *Psychological Review*, 110(3), 472–489.
- Mussweiler, T., & Epstude, K. (2009). Relatively fast! Efficiency advantages of comparative thinking. *Journal of Experimental Psychology: General*, 138(1), 1–21.
- Mussweiler, T., Gabriel, S., & Bodenhausen, G. V. (2000). Shifting social identities as a strategy for deflecting threatening social comparisons. *Journal of Personality and Social Psychology*, 79(3), 398–409.
- Mussweiler, T., Rüter, K., & Epstude, K. (2004a). The man who wasn't there: Subliminal social comparison standards influence self-evaluation. *Journal of Experimental Social Psychology*, 40(5), 689–696.
- Mussweiler, T., Rüter, K., & Epstude, K. (2004b). The ups and downs of social comparison: Mechanisms of assimilation and contrast. *Journal of Personality and Social Psychology*, 87(6), 832–844.
- Muthén, L., & Muthén, B. (2017). *Mplus user's guide (eighth edition)*. Los Angeles, CA: Muthén & Muthén.
- Naumann, S., & Bennett, N. (2000). A case for procedural justice climate: Development and test of a multilevel model. *Academy of Management Journal*, 43(5), 881–889.
- Neckermann, S., & Frey, B. S. (2013). And the winner is...? The motivating power of employee awards. *The Journal of Socio-Economics*, 46, 66–77.
- Neckermann, S., & Yang, X. (2017). Understanding the (unexpected) consequences of unexpected recognition. *Journal of Economic Behavior & Organization*, 135, 131–142.
- Neckermann, S., Cueni, R., & Frey, B. S. (2014). Awards at work. *Labour Economics*, 31, 205–217.

- Nelson, B. (2005). *1001 ways to reward employees* (2nd ed.). Workman Publishing.
- Organ, D. W. (1988). *Organizational citizenship behavior: The good soldier syndrome*. Lexington Books/D. C. Heath and Com.
- Palan, S., & Schitter, C. (2018). Prolific. ac-A subject pool for online experiments. *Journal of Behavioral and Experimental Finance*, 17, 22–27.
- Pelham, B. W., & Wachsmuth, J. O. (1995). The waxing and waning of the social self: Assimilation and contrast in social comparison. *Journal of Personality and Social Psychology*, 69(5), 825–838.
- Podsakoff, P. M., MacKenzie, S. B., Lee, J.-Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88(5), 879–903.
- Preacher, K. J., & Selig, J. P. (2012). Advantages of Monte Carlo confidence intervals for indirect effects. *Communication Methods and Measures*, 6(2), 77–98.
- Raudenbush, S. W., & Bryk, A. S. (2002). *Hierarchical linear models: Applications and data analysis methods* (2nd ed.). Sage Publications, Inc.
- Rees-Miller, J. (2011). Compliments revisited: Contemporary compliments and gender. *Journal of Pragmatics*, 43(11), 2673–2688.
- Reis, T. J., Gerrard, M., & Gibbons, F. X. (1993). Social comparison and the pill: Reactions to upward and downward comparison of contraceptive behavior. *Personality and Social Psychology Bulletin*, 19(1), 13–20.
- Rhoades, L., & Eisenberger, R. (2002). Perceived organizational support: A review of the literature. *Journal of Applied Psychology*, 87(4), 698–714.
- Rindskopf, D., & Rose, T. (1988). Some theory and applications of confirmatory second-order factor analysis. *Multivariate Behavioral Research*, 23(1), 51–67.
- Rosenberg, M. (1965). *Society and the adolescent self-image*. Princeton University Press.
- Rothman, N. B., Pratt, M. G., Rees, L., & Vogus, T. J. (2017). Understanding the dual nature of ambivalence: Why and when ambivalence leads to good and bad outcomes. *Academy of Management Annals*, 11(1), 33–72.
- Rupp, D. E., & Cropanzano, R. (2002). The mediating effects of social exchange relationships in predicting workplace outcomes from multifoci organizational justice. *Organizational Behavior and Human Decision Processes*, 89(1), 925–946.
- Salovey, P., & Rodin, J. (1984). Some antecedents and consequences of social-comparison jealousy. *Journal of Personality and Social Psychology*, 47(4), 780–792.

- Sanchez, R. J., Truxillo, D. M., & Bauer, T. N. (2000). Development and examination of an expectancy-based measure of test-taking motivation. *Journal of Applied Psychology*, 85(5), 739–750.
- Schaubroeck, J., & Lam, S. S. K. (2004). Comparing lots before and after: Promotion rejectees' invidious reactions to promotees. *Organizational Behavior and Human Decision Processes*, 94(1), 33–47.
- Scherer, K. R., & Tannenbaum, P. H. (1986). Emotional experiences in everyday life: A survey approach. *Motivation and Emotion*, 10(4), 295–314.
- Schriesheim, C. A., Powers, K. J., Scandura, T. A., Gardiner, C. C., & Lankau, M. J. (1993). Improving construct measurement in management research: Comments and a quantitative approach for assessing the theoretical content adequacy of paper-and-pencil survey-type instruments. *Journal of Management*, 19(2), 385–417.
- Schunk, D. H. (1983). Ability versus effort attributional feedback: Differential effects on self-efficacy and achievement. *Journal of Educational Psychology*, 75(6), 848–856.
- Schunk, D. H., & Rice, J. M. (1986). Extended attributional feedback: Sequence effects during remedial reading instruction. *The Journal of Early Adolescence*, 6(1), 55–66.
- Schwab, D. P. (1980). Construct validity in organizational behavior. In B. M. Staw & L. L. Cummings (Eds.), *Research in organizational behavior* (pp. 3–43). JAI Press.
- Schwarz, N., & Clore, G. L. (1996). Feelings and phenomenal experiences. In E. T. Higgins & A. W. Kruglanski (Eds.), *Social psychology: Handbook of basic principles* (pp. 433–465). The Guilford Press.
- Sedikides, C. (1993). Assessment, enhancement, and verification determinants of the self-evaluation process. *Journal of Personality and Social Psychology*, 65(2), 317–338.
- Shanock, L. R., & Eisenberger, R. (2006). When supervisors feel supported: Relationships with subordinates' perceived supervisor support, perceived organizational support, and performance. *Journal of Applied Psychology*, 91(3), 689–695.
- Sheppes, G. (2014). Emotion regulation choice: Theory and findings. In J. J. Gross (Ed.), *Handbook of emotion regulation* (pp. 126–139). The Guilford Press.
- Siemens, E., Roth, A., & Oliveira, P. (2010). Common method bias in regression models with linear, quadratic, and interaction effects. *Organizational Research Methods*, 13(3), 456–476.
- Sirola, N., & Pitesa, M. (2017). Economic downturns undermine workplace helping by promoting a zero-sum construal of success. *Academy of Management Journal*, 60(4), 1339–1359.

- Skipper, Y., & Douglas, K. (2012). Is no praise good praise? Effects of positive feedback on children's and university students' responses to subsequent failures. *British Journal of Educational Psychology*, 82(2), 327–339.
- Smith, C. A., & Kirby, L. D. (2000). Consequences require antecedents: Toward a process model of emotion elicitation. In J. P. Forgas (Ed.), *Feeling and thinking: The role of affect in social cognition* (pp. 83–106). Cambridge University Press.
- Smith, R. H. (2000). Assimilative and contrastive emotional reactions to upward and downward social comparisons. In J. Suls L. Wheeler (Eds.), *Handbook of social comparison: Theory and research* (pp.173–200). Plenum.
- Smith, R. H., Parrott, W. G., Ozer, D., & Moniz, A. (1994). Subjective injustice and inferiority as predictors of hostile and depressive feelings in envy. *Personality and Social Psychology Bulletin*, 20(6), 705–711.
- Spector, P. E. (1982). Behavior in organizations as a function of employee's locus of control. *Psychological Bulletin*, 91(3), 482–497.
- Stajkovic, A. D., & Luthans, F. (1997). A meta-analysis of the effects of organizational behavior modification on task performance, 1975–1995. *Academy of Management Journal*, 40(5), 1122–1149.
- Stajkovic, A. D., & Luthans, F. (2001). Differential effects of incentive motivators on work performance. *Academy of Management Journal*, 44(3), 580–590.
- Stinglhamber, F., & Vandenberghe, C. (2003). Organizations and supervisors as sources of support and targets of commitment: A longitudinal study. *Journal of Organizational Behavior*, 24(3), 251–270.
- Suls, J., & Wheeler, L. (2000). *Handbook of social comparison: Theory and research*. Plenum Press.
- Tai, K., Narayanan, J., & McAllister, D. J. (2012). Envy as pain: Rethinking the nature of envy and its implications for employees and organizations. *The Academy of Management Review*, 37(1), 107–129.
- Taylor, S. E., & Lobel, M. (1989). Social comparison activity under threat: Downward evaluation and upward contacts. *Psychological Review*, 96(4), 569–575.
- Tesser, A. (1988). Toward a self-evaluation maintenance model of social behavior. In L. Berkowitz (Ed.), *Advances in experimental social psychology*. Social psychological studies of the self: Perspectives and programs (Vol. 21, pp. 181–227). Academic Press.
- Tesser, A., Millar, M., & Moore, J. (1988). Some affective consequences of social comparison and reflection processes: The pain and pleasure of being close. *Journal of Personality and Social Psychology*, 54(1), 49–61.

- Thibaut, J., & Walker, L. (1975). *Procedural justice: A psychological analysis*. Lawrence Erlbaum Associates.
- Thomas, G., Martin, R., Epitropaki, O., Guillaume, Y., & Lee, A. (2013). Social cognition in leader–follower relationships: Applying insights from relationship science to understanding relationship-based approaches to leadership. *Journal of Organizational Behavior*, 34(Suppl 1), S63–S81.
- Thrash, T. M., & Elliot, A. J. (2003). Inspiration as a psychological construct. *Journal of Personality and Social Psychology*, 84(4), 871–889.
- Troy, A. S., Shallcross, A. J., & Mauss, I. B. (2013). A person-by-situation approach to emotion regulation: Cognitive reappraisal can either help or hurt, depending on the context. *Psychological Science*, 24(12), 2505–2514.
- Tse, H. H. M., Lam, C. K., Lawrence, S. A., & Huang, X. (2013). When my supervisor dislikes you more than me: The effect of dissimilarity in leader-member exchange on coworkers' interpersonal emotion and perceived help. *Journal of Applied Psychology*, 98(6), 974–988.
- Van Eerde, W., & Thierry, H. (1996). Vroom's expectancy models and work-related criteria: A meta-analysis. *Journal of Applied Psychology*, 81(5), 575–586.
- Verduyn, P., Van Mechelen, I., & Tuerlinckx, F. (2011). The relation between event processing and the duration of emotional experience. *Emotion*, 11(1), 20–28.
- Vidyardhi, P. R., Liden, R. C., Anand, S., Erdogan, B., & Ghosh, S. (2010). Where do I stand? Examining the effects of leader-member exchange social comparison on employee work behaviors. *Journal of Applied Psychology*, 95(5), 849–861.
- Vince, R., & Broussine, M. (1996). Paradox, defense and attachment: Accessing and working with emotions and relations underlying organizational change. *Organization Studies*, 17(1), 1–21.
- Vroom, V. H. (1964). *Work and motivation*. John Wiley & Sons, Inc.
- Warr, P. B., Barter, J., & Brownbridge, G. (1983). On the independence of positive and negative affect. *Journal of Personality and Social Psychology*, 44(3), 644–651.
- Webb, T. L., Miles, E., & Sheeran, P. (2012). Dealing with feeling: A meta-analysis of the effectiveness of strategies derived from the process model of emotion regulation. *Psychological Bulletin*, 138(4), 775–808.
- Wheeler, L., & Reis, H. T. (1991). Self-recording of everyday life events: Origins, types, and uses. *Journal of Personality*, 59(3), 339–354.
- Wheeler, L., Martin, R., & Suls, J. (1997). The proxy model of social comparison for self-assessment of ability. *Personality and Social Psychology Review*, 1(1), 54–61.

- Williams, L. J., & Anderson, S. E. (1991). Job satisfaction and organizational commitment as predictors of organizational citizenship and in-role behaviors. *Journal of Management*, 17(3), 601–617.
- Williams, L. J., & O’Boyle, E. H., Jr. (2008). Measurement models for linking latent variables and indicators: A review of human resource management research using parcels. *Human Resource Management Review*, 18(4), 233–242.
- Williams, P., & Aaker, J. (2002). Can mixed emotions peacefully coexist? *Journal of Consumer Research*, 28, 636–649.
- Wills, T. A. (1981). Downward comparison principles in social psychology. *Psychological Bulletin*, 90(2), 245–271.
- Wilson, K. S., Sin, H.-P., & Conlon, D. E. (2010). What about the leader in leader-member exchange? The impact of resource exchanges and substitutability on the leader. *Academy of Management Review*, 35(3), 358–372.
- Wolfson, N., & Manes, J. (1980). The compliment as a social strategy. *Research on Language and Social Interaction*, 13(3), 391–410.
- Wood, J. V. (1989). Theory and research concerning social comparisons of personal attributes. *Psychological Bulletin*, 106(2), 231–248.
- Wood, J. V. (1996). What is social comparison and how should we study it? *Personality and Social Psychology Bulletin*, 22(5), 520–537.
- Yrle, A. C., Hartman, S., & Galle, W. P. (2002). An investigation of relationships between communication style and leader-member exchange. *Journal of Communication Management*, 6(3), 257–268.
- Yu, A., Hays, N. A., & Zhao, E. (2019). Development of a bipartite measure of social hierarchy: The perceived power and perceived status scales. *Organizational Behavior and Human Decision Processes*, 152, 84–104.
- Yu, A., Matta, F. K., & Cornfield, B. (2018). Is leader–member exchange differentiation beneficial or detrimental for group effectiveness? A meta-analytic investigation and theoretical integration. *Academy of Management Journal*, 61(3), 1158–1188.
- Zeelenberg, M., Van Dijk, W. W., Van Der Pligt, J., Manstead, A. S., Van Empelen, P., & Reinderman, D. (1998). Emotional reactions to the outcomes of decisions: The role of counterfactual thought in the experience of regret and disappointment. *Organizational Behavior and Human Decision Processes*, 75(2), 117–141.
- Zhao, X., & Epley, N. (2021). Insufficiently complimentary?: Underestimating the positive impact of compliments creates a barrier to expressing them. *Journal of Personality and Social Psychology*, 121(2), 239–256.

Zheng, X., Zhao, H. H., Liu, X., & Li, N. (2019). Network reconfiguration: The implications of recognizing top performers in teams. *Journal of Occupational and Organizational Psychology*, 92(4), 825–847.

APPENDIX

Items	Scale
<p>Compliments</p> <p><u>In the past week, I observed X receive compliments from our supervisor on...</u></p> <p><i>General Compliments</i> adding value to the company. being a good addition to the workplace. being an asset to the company. playing an important role in the company's success. making a contribution as an employee. strengthening the organizational culture.</p> <p><i>Effort-Centered Compliments</i> putting in effort to complete a task. putting in the extra time to reach goals. doing more work than expected. coming in early/staying late to finish work. going above and beyond for every piece of their job. working hard.</p> <p><i>Relationship-Centered Compliments</i> creating a pleasant working relationship. helping coworkers get up to speed. assisting someone with their work. extending extra kindness to a coworker. working collaboratively with others. being flexible as a team member. being willing to lend a hand.</p> <p><i>Ability-Centered Compliments</i> having strong technical skills. delivering presentations proficiently. demonstrating analytical ability. solving problems creatively. bringing good ideas to the table. having innovative ideas. approaching a problem using new methods. bringing insights from experience to the table.</p> <p><i>Personality-centered Compliments</i> being enthusiastic.</p>	<p>1 = Never (Zero) 2 = Rarely (Once) 3 = Occasionally (Twice) 4 = Often (Three times) 5 = Always (Four or more times)</p>

being extraverted. being confident. being open-minded. being levelheaded. being trustworthy. being conscientious. being agreeable. having a high ethical standard.	
<p>Core Self-Evaluation</p> <p><u>Please indicate the degree to which you agree or disagree with the following items.</u></p> <p><i>Self-Esteem</i> On the whole, I am satisfied with myself. I feel that I have a number of good qualities. I am able to do things as well as most other people. I feel that I'm a person of worth, at least on an equal plane with others. I take a positive attitude toward myself.</p> <p><i>Generalized Self-Efficacy</i> I complete tasks successfully. I excel in what I do. I handle tasks smoothly. I am sure of my ground. I know how to get things done.</p> <p><i>Emotional Stability</i> I am relaxed most of the time. I seldom feel blue. I am not easily bothered by things. I rarely get irritated. I seldom get mad.</p> <p><i>Internal Locus of Control</i> I believe that my success depends on ability rather than luck. I believe that events in my life are determined only by me. I believe that by working hard a person can achieve anything. I always know why I do things. I just know that I will be a success.</p>	Goldberg (1999) Rosenberg (1965) 1 = Strongly disagree 2 = Disagree 3 = Neutral 4 = Agree 5 = Strongly agree

<p>Perceived Similarity</p> <p><u>Thinking about X...</u></p> <p>How similar is X to you in general? How similar are your and X's work knowledge? How similar are your and X's work skills? How similar are your and X's work experience?</p>	<p>Fox et al. (1989)</p> <p>1 = Very dissimilar 2 = Dissimilar 3 = Neutral 4 = Similar 5 = Very similar</p>
<p>Organizational Support</p> <p><u>Please indicate the degree to which you agree or disagree with the following items.</u></p> <p>My organization values my contribution to its well-being. If my organization could hire someone to replace me at a lower salary it would do so. My organization fails to appreciate any extra effort from me. (R) My organization strongly considers my goals and values. My organization would ignore any complaint from me. (R) My organization disregards my best interests when it makes decisions that affect me. (R) Help is available from my organization when I have a problem. My organization really cares about my well-being. Even if I did the best job possible, my organization would fail to notice. (R) My organization is willing to help me when I need a special favor. My organization cares about my general satisfaction at work. If given the opportunity, my organization would take advantage of me. (R) My organization shows very little concern for me. (R) My organization cares about my opinions. My organization takes pride in my accomplishments at work. My organization tries to make my job as interesting as possible.</p> <p>(R) indicates the item is reverse scored.</p>	<p>Eisenberger et al. (1986)</p> <p>1 = Strongly disagree 2 = Disagree 3 = Neutral 4 = Agree 5 = Strongly agree</p>
<p>Non-Zero-Sum Mentality</p> <p><u>Please indicate the degree to which you agree or disagree with the following items.</u></p> <p>More compliments for some employees means fewer compliments for other employees. (R)</p>	<p>Sirola & Pitesa (2017)</p> <p>1 = Strongly disagree 2 = Disagree 3 = Neutral 4 = Agree 5 = Strongly agree</p>

<p>When one person receives social rewards, the other loses out. (R)</p> <p>People who want to get ahead must do so at the expense of others. (R)</p> <p>The more employees a manager commends, the harder it is for other employees to be praised. (R)</p> <p>Not everyone in my workplace can be complimented. (R)</p> <p>What is good for one employee is often bad for other employees. (R)</p> <p>(R) indicates the item is reverse scored.</p>	
<p>Relative Leader-Member Exchange</p> <p><u>The following questions ask you to consider how aspects of your job compare to X. With that person in mind, please indicate the degree to which you agree or disagree with the following items.</u></p> <p>I have a better relationship with my manager than X.</p> <p>When my manager cannot make it to an important meeting, it is likely that he or she will ask me instead of X to fill in.</p> <p>Relative to X, I receive more support from my manager.</p> <p>The working relationship I have with my manager is more effective than the relationship X has with my manager.</p> <p>My manager is more loyal to me compared to X.</p> <p>My manager enjoys my company more than he or she enjoys the company of X.</p>	<p>Vidyarthi et al. (2010)</p> <p>1 = Strongly disagree 2 = Disagree 3 = Neutral 4 = Agree 5 = Strongly agree</p>
<p>Organizational Procedural Justice</p> <p><u>Please indicate the degree to which you agree or disagree with the following items.</u></p> <p>The organization's procedures and guidelines are very fair.</p> <p>I can count on the organization to have fair policies.</p> <p>The procedures the organization uses to make decisions are not fair. (R)</p> <p>We don't have any fair policies at the organization. (R)</p> <p>(R) indicates the item is reverse scored.</p>	<p>Rupp & Cropanzano (2002)</p> <p>1 = Strongly disagree 2 = Disagree 3 = Neutral 4 = Agree 5 = Strongly agree</p>

<p>Upward Social Comparison</p> <p><u>This week...</u></p> <p>I considered how X might be better than me. I thought about what I lack but X possesses. I reflected on the compliments I have not received but X has.</p>	<p>1 = Not at all 2 = A little 3 = Moderately 4 = Quite a bit 5 = Extremely</p>
<p>Inspiration</p> <p><u>Today...</u></p> <p>I experienced inspiration. The compliments inspired me. I was inspired to do something. I felt inspired.</p>	<p>Thrash & Elliot (2003)</p> <p>1 = Not at all 2 = A little 3 = Moderately 4 = Quite a bit 5 = Extremely</p>
<p>Envy</p> <p><u>Today...</u></p> <p>I felt frustrated to see X succeed so easily. Feelings of envy toward X constantly tormented me. I felt inferior to X's success. X' success made me want to resent them.</p>	<p>Schaubroeck & Lam (2004)</p> <p>1 = Not at all 2 = A little 3 = Moderately 4 = Quite a bit 5 = Extremely</p>
<p>In-Role and Extra-Role Behaviors</p> <p><u>Today...</u></p> <p><i>In-Task Behaviors</i> Adequately completes assigned duties. Fulfills responsibilities specified in job description. Performs tasks that are expected of him/her. Meets formal performance requirements of the job. Engages in activities that will directly affect his/her performance evaluation. Neglects aspects of the job he/she is obligated to perform. (R) Fails to perform essential duties. (R)</p> <p><i>Organizational Citizenship Behaviors – Individually-Directed (OCBI)</i> Helps others who have been absent. Helps others who have heavy workloads. Assists supervisor with his/her work (when not asked).</p>	<p>Williams & Anderson (1991)</p> <p>1 = Never 2 = Rarely 3 = Sometimes 4 = Often 5 = Always</p>

<p>Takes time to listen to co-workers' problems and worries. Goes out of way to help new employees. Takes a personal interest in other employees. Passes along information to co-workers.</p> <p><i>Organizational citizenship behaviors – Organizationally-Directed (OCBO)</i> Attendance at work is above the norm. Gives advance notice when unable to come to work. Conserves and protects organizational property. Adheres to informal rules devised to maintain order. Takes undeserved work breaks. (R) Great deal of time spent with personal phone conversations. (R) Complains about insignificant things at work. (R)</p> <p>(R) indicates the item is reverse scored.</p>	
<p>Interpersonal Counterproductive Work Behaviors</p> <p><u>Today, how often did you...</u></p> <p>Fail to help X? Withhold work-related information from X? Play a practical joke on X at work? Purposely interfere with X doing their job? Start or continue a damaging or harmful rumor about X at work? Blame X for errors that you made? Start an argument with X at work? Say nasty things to X? Steal something that belonged to X? Verbally abuse X? Physically attack X?</p>	<p>Fox & Spector (1999)</p> <p>1 = Never 2 = Rarely 3 = Sometimes 4 = Often 5 = Always</p>