

Personalities in sync: The covariation of psychological resources in leader–follower dyads



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Abstract

Based on a two-week daily diary study of 31 leader–follower dyads, this article demonstrates that within-person variation in the leader's level of state core self-evaluations is associated with within-person variation in the follower's level of state core self-evaluations. Moreover, we provide tentative evidence that this crossover effect might be mediated by transformational leadership behavior. Our study contributes to personality and leadership research by exploring within-leader, within-follower, and within-dyad personality processes. By showing that the personality states of leader and follower fluctuate in sync, we shed light on a new way in which leaders and followers connect.

Keywords

core self-evaluations, leader-member dyad, crossover of resources, psychological resources

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Personality dynamics are an increasing focus of study in both the personality (e.g., Sosnowska et al., 2019) and work (e.g., Lievens et al., 2018) psychology literatures. Within both realms of research, early efforts have clearly documented that there is significant within-individual variation in personality states (e.g., Beckmann et al., 2010; Huang & Ryan, 2011). As noted by Fleeson and Jayawickreme (2015), however, more research is needed on the factors that *explain* such dynamic (within-individual) variation in state personality. Some work has focused on situational factors that underlie personality dynamics, such as work pressure (Hofmans et al., 2015) and interpersonal conflict at work (Judge et al., 2014). Yet, the literature is mute on how relational dynamics may explain personality dynamics. This is odd given that many of our behaviors are interpersonal in nature (Rauthmann et al., 2015). In the present paper, we address this gap in the literature by studying how within-individual personality variation in one actor might covary with within-individual variation in another actor, in the context of leader–follower relationships.

While most personality dynamics literature has focused on the Big Five framework, we focus on core self-evaluations (CSE). Core self-evaluations—

being a higher-order dimension composed of self-esteem, self-efficacy, locus of control, and emotional stability—is a cognitive-evaluative personality dimension that expresses a person's fundamental appraisals of their worth, abilities, and capacities to cope with life's challenges (Judge et al., 2003). Research has shown that people with high core self-evaluations are healthier both physically and psychologically (Tsaousis et al., 2007), experience higher levels of well-being (W. Liu et al., 2016; Smedema, 2014), experience less stress (Kammeyer-Mueller et al., 2009), experience higher life and job satisfaction (Judge & Bono, 2001), and lead more constructively (Dóci & Hofmans, 2015). These examples illustrate

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that core self-evaluations is a concept of broad importance to explaining well-being in organizations.

Researchers have recently demonstrated that the level of core self-evaluations varies within the individual across situations (Debusscher et al., 2016c; Dóci & Hofmans, 2015; Hofmans et al., 2015). *State core-self evaluations* represent one's momentary level of psychological resources (Dóci & Hofmans, 2015). Because individuals' core self-evaluations impact their life satisfaction, job satisfaction, income, career success, and mental and physical health (Best et al., 2005; Judge et al., 2005; Judge & Hurst, 2008; Tsaousis et al., 2007), the notion that it fluctuates across situations is meaningful. Employees appear to feel and function better *when* their core self-evaluations are high, and therefore it is critical to understand the various influences that impact their core self-evaluations (beyond the typical trait-based paradigm). Thus, widening our understanding of the role that the context and relationships with others may play in the fluctuation of core self-evaluations is important both for theory and for practice. Nevertheless, until now little research attention has been paid to contextual features related to changes in state core self-evaluations.

The paucity of research that has examined state core self-evaluations to date has shown that within-person fluctuations in core self-evaluations can be predicted from within-person fluctuations in environmental stressors such as task complexity (Dóci & Hofmans, 2015), time pressure (Dóci et al., 2020), or work pressure (Hofmans et al., 2015). In this paper, we will further our understanding of features that predict fluctuations in employees' core self-evaluations by introducing a social-relational dimension as yet another mechanism that accompanies within-person variation in core self-evaluations. Drawing on Conservation of Resources Theory (Hobfoll, 1989), we suggest that during dyadic interactions leaders and followers transmit their psychological resources to each other, and that because of those mutual influences, their state core-self evaluations covary within the dyad across interactions.

Conceptual model and theoretical concepts

The social-relational approach

Core self-evaluations is an evaluative personality dimension that concerns one's overall self-concept. Theories on the relational self (Andersen & Chen, 2002; Brewer & Gardner, 1996), relational identity (Sluss & Ashforth, 2007), relational self-construal (Cross et al., 2000), and relational self-worth (Harter et al., 1998) suggest that the working self-concept is shaped by the relation in which the individual momentarily partakes (Andersen & Chen, 2002). When interacting with different individuals,

different self-expectations, self-definitions, self-ideals, and self-evaluations are activated, which in turn drive one's cognitions, affects, and behavior (Andersen & Chen, 2002; Andersen & Glassman, 1996; Brewer & Gardner, 1996). Building on the relational premise that others play a crucial role in the evaluation of the self (Chen et al., 2006), we suggest that an important factor that may predict variation in one's core self-evaluations is the presence and behavior of others.

In our employment of the relational approach, we theorize that there are not only between-dyad differences in one's working self-concepts (meaning that one feels different about oneself when interacting with, e.g., one's friend as compared to one's supervisor) but also within-dyad differences (meaning that, e.g., one feels different about oneself when interacting with their supervisor on Monday, when the supervisor is recharged and therefore considerate, as compared to Friday when the supervisor is exhausted and therefore irritable). We suggest that changing circumstances are related to cognitive, affective, and behavioral changes in one dyad member (alias state personality), thereby altering the relational dynamics between the dyad members and, by doing so, affecting the cognitive, affective, and behavioral functioning of the other dyad member (and vice versa).

In particular, we suggest that the state core self-evaluations of leader and follower covary when the leader and follower interact. To explain the mechanism underlying the suggested covariation of state core self-evaluations, we use conservation of resources theory (Halbesleben et al., 2014; Hobfoll, 1989) as a theoretical framework.

Core self-evaluations as psychological resources

Conservation of Resources Theory (Hobfoll, 1989) holds that individuals' fundamental drive is to maintain and enhance their valued resources. The theory defines resources "as those objects, personal characteristics, conditions, or energies that are valued by the individual or that serve as a means for attainment of these objects, personal characteristics, conditions, or energies" (Hobfoll, 1989, p. 516). Relevant to our study is that Hobfoll (2002) introduced self-esteem as an example of resources that are "centrally valued for their own right" (p. 307) and identified self-efficacy and internal locus of control as two of the mostly studied psychological resources. Core self-evaluations can thus be viewed as a construct that represents a person's pool of psychological resources, as it constitutes of one's level of self-esteem, self-efficacy, locus of control, and emotional stability (Judge, Locke, Durham & Kluger, 1998).

Similar to its lower level facets (Bandura, 2006; Beckmann et al., 2013; Debusscher et al., 2014, 2016b; Heatherton & Polivy, 1991; Kernis & Waschull, 1995; McNiel & Fleeson, 2006), core self-

evaluations have been shown to fluctuate within an individual across situations (Debusscher et al., 2016c; Dóci & Hofmans, 2015; Ferris et al., 2011; Hofmans et al., 2015; Schinkel et al., 2004). *State core self-evaluations* can therefore be seen as the momentary level of psychological resources available to a person to cope with life's challenges (Dóci & Hofmans, 2015). High state core self-evaluations is defined as

a state of personal agency characterized by positive evaluations of one's current capability and worthiness (self-esteem), one's current effectiveness (self-efficacy), one's current feelings of being confident, stable, calm, and relaxed (low neuroticism) and one's ability to control a given event (internal locus of control). (Nübold et al., p. 3).

Thus, high state core-self evaluations is a state rich in psychological resources, and within-person variation in core self-evaluations represents the intra-individual fluctuations in these psychological resources.

Intra-personal resource spirals

Conservation of Resources Theory (Hobfoll, 1989) suggests that when people are rich in resources and feel that their resources are safe, they act in ways that attempt to generate more resources. They take risks to acquire further resources and engage in constructive, approach behaviors. Furthermore, such behaviors are likely to lead to the onset of a positive resource spiral, whereby one's behaviors generate resources, which inclines one to engage in constructive behaviors that further augment these resources. On the other hand, when people feel that their resources are threatened, they act in ways that are aimed at preventing further degradation of valued resources. They may try to overly control situations to prevent loss of resources or avoid uncertain situations altogether. However, these behaviors often backfire as they consume already scarce resources in ways that do not allow the accumulation of new resources. Therefore, they may cause the onset of a negative spiral in which one feels less and less secure and acts in ways that cause further declines in resources.

Inter-personal resource spirals

Research in the work–family interface domain suggests that personal resources do not only live a dynamic life within the individual but also cross over between individuals (Bakker & Demerouti, 2009; Bakker et al., 2009; Demerouti et al., 2005; Hammer et al., 1997; Shimazu et al., 2009; Westman, 2006). Such crossover is often mediated by behavior, for example, by positive or negative interpersonal exchanges and interactions (Westman et al., 2009). From the perspective of Conservation of Resources Theory, these findings can be

interpreted such that when an individual is rich in resources, the constructive, approach behaviors in which she/he engages generate resources for others, in addition to oneself. For example, individuals who have access to sufficient resources at work behave in supportive ways toward their partners at home, and such behaviors, in turn, enhance the partner's resource and energy level (Demerouti, 2012). Similarly, when people feel that their resources are threatened, the ensuing behaviors also deplete the resources of others. For example, depression has been shown to cross over between partners by means of social undermining behaviors (Westman & Vinokur, 1998).

The idea that relationships are critical for personal resources is not new. For example, according to sociometer theory, self-esteem is the output of a system that monitors other's reactions to the self, allowing one to register and respond to interpersonal rejection and acceptance (Leary et al., 1995). Similarly, reflected appraisals theory (Mead, 1934) suggests that one's self-concept is affected by the appraisals others make of one. Empirical support for this premise has been provided by the meta-analysis by Harris and Orth (2020), which demonstrated that relationships impact one's self-esteem development and that self-esteem in turn impacts one's relationships. Of course, the fact that relationships matter to one's personal resources does not imply that every relationship is equally relevant. In line with the relational approaches to the self (Andersen & Chen, 2002; Andersen & Glassman, 1996; Brewer & Gardner, 1996), primarily significant others are expected to have a strong effect on how one feels about oneself and evaluates one's capacities. Therefore, we expect the (psychological) resource-crossover effect to be especially meaningful in relationships where a person has a significant role in the other person's life. In the private domain, this may be a partner, a family member, or a close friend. At work, this may be a colleague that one works closely together with. For these reasons, when studying the crossover of psychological resources, it is particularly meaningful to focus on the leader–follower relationship.

Drawing on the idea that psychological resources do not only fluctuate within an individual, but also cross over between individuals, we expect the psychological resources of leaders and followers to covary during dyadic interactions. In support of this idea, Jayamaha and Overall (2019) pointed toward the central role of esteem-related support processes. In their study among romantic couples, they showed that people who are confident in their own worth are more likely to invest in providing esteem-related support to their partner, which in turn promotes positive self-evaluations in the other. Such esteem-related support can take many forms, including positive encouragements and comments regarding the other's efforts

and progress, complimenting the other's abilities, validating and agreeing with the other's perspective, and reducing self-blame and feelings of failure in the other (Jayamaha & Overall, 2019). Because in dyadic interactions, such behaviors can be shown by the leader to the follower but also vice versa, we expect the relationship to be a recursive one. This bidirectional thinking aligns well with the idea that both leader and follower are formative and agentic actors in the leader–follower relationship (Hofmans et al., 2019).

Hypothesis 1: Within-person fluctuations in leader and follower state core self-evaluations covary across shared situations

Resource crossover through leadership behavior

Because leader and follower mutually influence each other and depend on one another (Collinson, 2014), we expect psychological resources to cross-over in both directions in leader–follower dyads, from leader to follower and from follower to leader. At the same time, these relationships are typically characterized by an important power and status difference between leader and follower (Collinson, 2008). Because power and status have the potential to induce asymmetries in interpersonal behaviors (Talaifar et al., 2020), leaders might have an enhanced impact on their followers due to their power position and related capacity to control followers' resources, and their greater freedom to express their moods and emotions (Sy et al., 2005). Being in the dependent position in the leader–follower relationship, research shows that followers are indeed particularly affected by leaders' moods (Sy et al., 2005), as they are expected to accommodate them and adapt to them (Keltner et al., 2003; Van Kleef et al., 2008). Moreover, studies have shown that one's self-rating gets more strongly affected by the affective messages of their supervisors than of peers (Baldwin et al., 1990), and that leaders can have a transformative effect on their followers' self-efficacy (Pillai & Williams, 2004), self-expectations (Eden, 1993), and overall self-concept (Shamir et al., 1993). Thus, while the crossover of resources is undoubtedly a two-directional process between leader and follower, the leader's impact on the follower's resources may be more salient because of the leader's greater position of influence within the dyad. In line with this idea, we turn our attention toward one particular mechanism that may, in part, explain the covariation between leader and follower state core self-evaluations, namely, the crossover of psychological resources through leadership behavior.

From the perspective of Conservation of Resources Theory, when the supervisor is rich in resources, she/he will be likely to engage in constructive and resource building behaviors. In leadership

literature, the leadership style that is particularly recognized for generating resources for followers is transformational leadership (Burns, 1978). Therefore, we will focus our attention on this specific leadership style. Transformational leadership means motivating followers by supportive and empowering behaviors aimed at follower development, by offering an inspiring vision and innovative ideas, and by being charismatic and leading by example. While these behaviors generate resources for followers, they also require psychological resources on the part of the leader. One needs to feel confident about work challenges to make followers feel the same (inspirational motivation). One needs to feel sufficiently "in control" about tasks to embolden followers to think innovatively and solicit their ideas (intellectual stimulation). One needs to feel balanced and grounded to actively care for others (individualized consideration). On the contrary, when the supervisor experiences threat to their valued resources, they may be inclined to engage in avoidance behaviors (laissez-faire leadership) or to monitor and control followers to prevent further loss of resources (e.g., management by exception behaviors).

A broad range of studies support the assumption for a positive relationship between the leader's psychological resources and transformational leadership. Transformational leadership has been found to be positively associated with each facet of core self-evaluations: internal locus of control (Howell & Avolio, 1993), self-efficacy (Fitzgerald & Schutte, 2010), self-esteem (Matzler et al., 2015), and emotional stability (Bono & Judge, 2004). Feeling in control of work events (locus of control) enables the leader to convey a convincing and achievable vision to employees (Howell & Avolio, 1993). Feeling confident that one's efforts lead to desired goals (self-efficacy) allows the leader to instill confidence in others (Fitzgerald & Schutte, 2010; Peterson et al., 2009). Having a strong sense of self-worth provides the necessary confidence to act charismatically as a leader (House, 1976). And finally, having a positive outlook (low neuroticism) provides the psychological fuel it takes to inspire others (Bono & Judge, 2004; Peterson et al., 2009; Seo et al., 2008). Furthermore, researchers also found the higher order trait—core self-evaluations—to be positively related to transformational leadership. Using historiometric analyses, Resick et al. (2009) found that leaders with high core self-evaluations were more likely to be transformational leaders than those with low core self-evaluations. They argued that the positive association between core self-evaluations and transformational leadership can be explained by the self-confidence it takes to successfully engage in transformational leadership behaviors. In a later study, Hu et al. (2012) arrived at similar results, only that in their case followers rated leaders' transformational leadership. Furthermore, research in an experimental setting

has found that the higher leaders' (self-rated) state core self-evaluations are, the more likely they will engage in transformational leadership behaviors (as rated by followers) (Dóci & Hofmans, 2015).

Transforming psychological resources

The "transformational" label in transformational leadership stands for leaders' capacity to inspire positive change in followers (Burns, 1978). By caring for their followers, attending to their needs and coaching them to bring the best out of them, supervisors enhance their followers' sense of self-worth and their positive affective well-being (Arnold et al., 2007). By making them believe that they can overcome obstacles, supervisors boost their followers' self-confidence, self-efficacy, and sense of control (Fitzgerald & Schutte 2010; Gong et al., 2009; J. Liu et al., 2010). In other words, acting in "transformational" ways often boils down to providing esteem-related support (see Jayamaha & Overall, 2019), which implies that, by acting in "transformational" ways supervisors can enhance their followers' psychological resources (Densten, 2005; Dvir et al., 2002). Indeed, transformational leadership has been widely acknowledged for its positive effects on followers, such as employee well-being and constructive work attitudes (Dvir et al., 2002; J. Liu et al., 2010; Tsai et al., 2009). Studying the transfer of psychological resources between leader and follower is particularly important because this process may be one of the main mechanisms through which transformational leadership exerts its positive effects on employees.

In sum, we hypothesize that within-person fluctuations in leaders' and followers' state core self-evaluations covary and that one potential mechanism that is partially responsible for this covariation is resource transfer via transformational leadership behaviors from leader to follower. This means that, at times when the supervisors' core self-evaluations are increased, the supervisor will be more likely to engage in transformational leadership behaviors, and those leadership behaviors will in turn increase the followers' state core self-evaluations.

Hypothesis 2: The relationship between the leader's and the follower's state core self-evaluations is mediated by transformational leadership behaviors.

Method

Procedure

We conducted a two-week daily diary study with the participation of 31 leader–follower dyads. The data were collected in 2015 in different Belgian organizations, both from the private and the public sector.

The researchers contacted leaders and followers within their network to participate in the study, who in turn asked some of their colleagues to participate as well. The inclusion criteria were having regular one-to-one meetings between leader and follower. The participants received a demographics survey a few days before the start of the daily diary data collection. Next, a short questionnaire was sent to the leaders 1 hour before the end of each working day, asking them first to identify a situation where they worked together with their designated follower on that particular day. Then, questions about the leaders' state core self-evaluations as experienced within this particular situation followed. The morning(s) after, we sent a short questionnaire to the follower. In the beginning of this questionnaire, the follower was introduced to the situation the leader described on the previous day. Then, questions regarding the follower's state core self-evaluations and about the leader's transformational leadership behavior within that particular situation followed. As we were interested in within-person, within-dyad fluctuations, observations were required of at least two different days from every dyad. From the initial forty-four dyads, thirteen dyads failed to provide data on more than one day and were therefore excluded from further analyses. The remaining 31 dyads yielded 108 full observations, corresponding to an average of 3.48 observations per dyad.

The data and syntax can be found at https://osf.io/vkdeg/?view_only=5ff872d7c4204ba6b6117a094f6ef411. The study and our hypotheses were not pre-registered. Moreover, we followed the general guidelines of our institution at the time of data collection, which did not require formal permission from an ethical committee. Nevertheless, both leaders and followers were informed about the purpose and duration of the study, the confidentiality of their answers, and they were given the opportunity to contact us in case of questions or problems. Moreover, every day an opt out link was included in our emails, which allowed participants to opt out of the study whenever they wanted to.

Sample

The final sample consisted of 31 leader–follower dyads. One follower and four leaders did not fill in the demographic survey; therefore, we do not have their demographic data. The average age of the followers who filled in the survey was 37 years (standard deviation (*SD*) = 9.51) and 71% of them were women; 3.2% of them had no high school degree, 25.8% attained a high school degree, 12.9% attained a college degree, 6.5% attained a bachelor degree, 48.4% attained a master degree, and 3.2% attained a doctoral degree. On average, followers had been working in their respective companies for 11.28 years (*SD* = 10.63) of which 2.38 years (*SD* = 1.91) they

worked under their current leader. The average age among leaders who filled in the demographics survey was 42.57 ($SD = 7.83$) and 32.1% of them were women; 3.6% of them attained a high school degree, 17.9% attained a college degree, 17.9% attained a bachelor degree, 53.6% attained a master degree, and 7.1% attained a doctoral degree. On average, leaders had been working in their respective companies for 11.29 years ($SD = 8.58$) of which 7.36 years ($SD = 8.39$) in a leadership position. On average, they supervised 10.54 followers ($SD = 12.13$).

Measures

State core self-evaluations. To measure state core self-evaluations in the leaders and followers, we used a short, four-item measure (Dóci & Hofmans, 2015) that has been shown to correlate with a longer core self-evaluations scale of Judge et al. (2003). Each item in this measure represents one of the four dimensions of core self-evaluations. The item “to what extent did you experience negative emotions?” represents the neuroticism dimension, the item “to what extent did you feel good about yourself?” represents the self-esteem dimension, the item “to what extent did you feel confident in your abilities?” represents the self-efficacy dimension, and the item “to what extent did you feel in control of the situation?” represents the locus of control dimension. The participants had to indicate their response on a 1 to 7 scale, ranging from *not at all* to *absolutely*. Internal consistency reliability was tested using the multilevel confirmatory factor analysis approach of Geldhof et al. (2014), which allows separating the internal consistency reliability at the within- and at the between-person level. Since our hypotheses pertain to the within-person level only, we do only report the within-person omega reliability coefficient, which was .65 for the leaders and .73 for the followers.

Transformational leadership. To measure state transformational leadership, we used the Global Transformational Leadership (GTL) scale, a short, seven-item measure of Carless et al. (2000). This measure has already been used in experience sampling studies (Dóci et al., 2020; Nielsen & Cleal, 2011) and allowed us to capture momentary leadership behavior in a particular situation (unlike the

Multifactor Leadership Questionnaire (MLQ) by Bass & Avolio, 2000, that was designed to measure behavioral tendencies). Examples items include: “To what degree was your leader encouraging you to think about problems in new ways and question assumptions?” and “To what degree was your leader giving you encouragement and recognition?” The GTL items measure vision, staff development, supportive leadership, empowerment, innovative thinking, leading by example, and charisma. These items show substantial overlap with the subdimensions of the MLQ (Carless et al., 2000), which is why convergent validity with the MLQ is high (Nielsen & Cleal, 2011). The leaders had to indicate their answer on a 1 = *not at all* to 7 = *absolutely* scale. In our study, the within-person omega reliability coefficient equaled .84.

Results

Descriptive statistics and correlations

Table 1 shows the means, SD s, within- and between-person correlations, and intra-class correlation coefficients (ICCs) for all study variables. The ICCs show for each variable the percentage of variance that is accounted for by between-person differences. As can be seen in Table 1, these percentages vary from .63 for transformational leadership behavior to .21 for leader state core self-evaluations, implying that, for each of the study variables, a substantial part of their variation lies within the individual.

Turning to the correlations, our results show that the leader's state core self-evaluations, the follower's state core self-evaluations, and transformational leadership behavior are positively correlated, both at the within- and at the between-person level. Regarding the within-person correlations, our findings suggest that, during encounters when leaders report to experience increased levels of state CSE, their followers also experience increased levels of state CSE ($r(106) = .26$; $p = .007$) and rate the leader's behaviors as more transformational in nature ($r(104) = .27$; $p = .005$). Moreover, on occasions when followers perceive their leader to engage in more transformational leadership behaviors, they experience higher levels of state CSE ($r(104) = .27$; $p = .005$). The between-person correlations suggest that leaders

Table 1. Means, SD s, ICCs, and correlations for all study variables.

	Mean	SD	ICC	1	2	3
1. CSE leader	5.50	.82	.21	–	.44*	.40*
2. TFL	5.39	.45	.63	.27**	–	.73***
3. CSE follower	5.37	.74	.50	.26**	.27**	–

Note: Within-person correlations are below and between-person correlations are above the diagonal; CSE leader: core self-evaluations of the leader; TFL: transformational leadership behavior; CSE follower: core self-evaluations of the follower; ICC: intra-class correlation coefficient; SD : standard deviation.

* $p < .05$ (two-tailed). ** $p < .01$ (two-tailed). *** $p < .001$ (two-tailed).

who on average report higher levels of state CSE have followers who perceive their leader to be more transformational on average ($r(29) = .73$; $p < .001$) and have higher average levels of state CSE themselves ($r(29) = .40$; $p = .025$). Finally, there is a positive association between the followers' average ratings of transformational leadership behavior and their average level of state CSE ($r(29) = .44$; $p = .013$).

Hypotheses tests

Because of the hierarchical nature of the data—with repeated measurements being nested within dyads—we tested our hypotheses using multilevel modeling. Although multilevel structural equation modeling is getting increasingly popular for testing mediation models on multilevel data (Preacher et al., 2011), recent research shows that multilevel regression models yield less biased parameter estimates when the number of higher level units is small (McNeish, 2017a). Because the number of dyads in our study is fairly small ($N = 31$), we adopted this approach and tested our hypotheses using a system of multilevel models (MLMs). To minimize small sample bias and to prevent inflation of Type-1 error rates, we followed the recommendations by McNeish (2017b), estimating the multilevel regression models with restricted maximum likelihood (REML) and applying a Kenward-Roger correction. REML, by separating the estimation of the fixed effects from the estimation of the variance components, yields improved estimates of the variance components in small samples, thereby also improving the standard error (SE) estimates of the fixed effects (McNeish, 2017b). The Kenward-Roger correction in a first step corrects the SE estimates of the fixed effects to no longer rely on asymptotic assumptions and in a second step calculates the degrees of freedom in such way that inferential decisions are improved (McNeish, 2017b). Simulation studies have shown that MLMs that are fitted using REML and that apply a Kenward-Roger correction are well equipped to

handle multilevel mediation models with small numbers of Level 2 units (McNeish, 2017a).

To test our first hypothesis, we predicted follower state CSE using the leader's state CSE (see Model 1 in Table 2). Because the focus in our study is on within-person associations, in each model, we person-centered the predictor variable(s) (i.e., leader's state CSE in this case) and reintroduced the person mean(s) as a Level 2 predictor(s). In line with Hypothesis 1, we found that within-person fluctuations in leader state CSE were positively associated with within-person fluctuations in follower state CSE ($\gamma = .21$; $SE = .09$; $p = .023$). Moreover, between-person differences in leader state CSE related positively to between-person differences in follower state CSE ($\gamma = .48$; $SE = .21$; $p = .030$).

Subsequently, we tested the mediating effect of transformational leadership behaviors using a system of MLMs. First, we predicted transformational leadership behaviors from leader state CSE (see Model 2 in Table 2). Next, follower state CSE was predicted from leader state CSE and transformational leadership behaviors (see Model 3 in Table 2). Hypothesis 2 (i.e., the mediating role of transformational leadership behavior in the relationship between leaders and followers state core self-evaluations) was formally tested by assessing whether the product of the coefficients from leader state core self-evaluations to transformational leadership behavior (in Model 2) and from transformational leadership behavior to follower state core self-evaluations (in Model 3) was statistically significant (see Preacher et al., 2010, 2011). The indirect effect was tested for significance using the Monte Carlo method of Selig and Preacher (2008) using 20,000 repetitions.

The results of Model 2 (see Table 2) revealed that within-person fluctuations in transformational leadership behaviors were indeed positively predicted by within-person fluctuations in leader state CSE ($\gamma = .19$; $SE = .08$; $p = .016$), a relationship that was also found at the between-person level ($\gamma = .55$; $SE = .21$; $p = .015$). In the third model (see Table 2), within-person fluctuations in both leader state CSE

Table 2. Results of multilevel regression analyses predicting core self-evaluations of the follower (Models 1 and 3) and transformational leadership behavior (Model 2).

	Model 1 Outcome = CSE _{follower}	Model 2 Outcome = TFL	Model 3 Outcome = CSE _{follower}
Intercept	2.77*	2.35 [†]	1.16
CSE _{leader-within}	.21*	.19*	.16 [†]
CSE _{leader-between}	.48*	.55*	.11
TFL _{within}	—	—	.26 [†]
TFL _{between}	—	—	.67***
Random intercept variance	.50	.58	.20
R ² _{within}	.056	.064	.064
R ² _{between}	.138	.175	.663

Note: CSE: core self-evaluations; TFL: transformational leadership behavior.

* $p < .05$ (two-tailed). ** $p < .01$ (two-tailed). *** $p < .001$ (two-tailed). [†] $p < .10$ (two-tailed).

($\gamma = .16$; $SE = .10$; $p = .094$) and transformational leadership behaviors ($\gamma = .26$; $SE = .14$; $p = .059$) marginally predicted within-person fluctuations in follower state CSE. At the between-person level, follower state CSE was predicted by transformational leadership behaviors ($\gamma = .67$; $SE = .13$; $p < .001$) but not by leader state CSE ($\gamma = .11$; $SE = .17$; $p = .522$). To formally test for mediation, the product of coefficients was tested using the Monte Carlo method (Selig & Preacher, 2008). This test revealed that the 95% confidence interval ($[-.003, .113]$) did include zero, whereas the 90% confidence interval ($[-.005, .099]$) did not.

Discussion

Theoretical implications and future research

The main goal of this study was to examine covariation of core self-evaluations within the leader–follower dyad. In line with our expectations, we found that leaders and followers state core self-evaluations fluctuated “in sync,” revealing the existence of a social-relational dimension accompanying within-person variation in core self-evaluations. Moreover, we found tentative evidence for the mediating role of transformational leadership behaviors, meaning that one mechanism underlying this within-dyad association is that leaders high in state core self-evaluations engage more in transformational, esteem-related support behaviors, and that those behaviors are positively related to state core self-evaluations of the follower. The fact that we found tentative support for this mediation chain, however, does not imply that covariation in state core self-evaluations within the leader–follower dyad can be reduced to this unidirectional effect. The dyadic crossover of psychological resources is a bidirectional phenomenon, and the mediation through leadership behavior is one of the many ways through which leaders’ and followers’ state core self-evaluations become synchronized.

Our study contributes to the field of personality psychology literature by identifying within-dyad relational dynamics as a predictor of within-person variation in core self-evaluations. Previous studies have documented within-person variation in various personality dimensions in the work context, for example, in neuroticism (Debusscher et al., 2014, 2016b), conscientiousness (Debusscher et al., 2016a, in press), and recently core self-evaluations (Debusscher et al., 2016c; Dóci & Hofmans, 2015; Dóci et al., 2020; Heller et al., 2007). Our research extends these findings by showing that within-person fluctuations in core self-evaluations can also be predicted by a considerably different mechanism. Regarding the situational factor in the person-situation interaction, to date, researchers have mainly studied features of the work environment to predict variations in personality states, such as task complexity or work pressure

(Debusscher et al., 2014; Dóci & Hofmans, 2015; Dóci et al., 2020). We contribute to this area of research by bringing the relational dimension of the situation into focus. This dimension has been underservedly overlooked when studying person-situation interaction, as pointed out in the Cambridge Handbook of Personality:

One particularly relevant source of person-situation interaction has been surprisingly often ignored in discussions of cross-situational consistency within personality psychology: variation of dyadic social interaction in terms of who the interaction partners are. This question has been discussed much more by social psychologists but is obviously of great importance for personality psychology, because many of our daily situations are dyadic interactions. In this case, person-situation interactions are by and large person-person interactions because the interaction partner largely defines the situation. (Asendorpf, 2009, p. 49)

Our study also contributes to the *relational leadership* research domain by exploring associations *within* the leader–follower dyad, in addition to the classical focus of relational leadership research on *between-dyad* differences (Brower et al., 2000; Liden, 2009; Uhl-Bien, 2006). Leader-member exchange theory (Graen & Uhl-Bien, 1995), supported by a vast amount of empirical research (for a review, see Gerstner & Day, 1997; Liden, 2009), suggests that leaders engage in constructive leadership behaviors to differing extents toward different followers. Our study extends these findings by showing that the same leader engages in constructive leadership behaviors to differing extents toward the same follower across situations as well (Hofmans et al., 2019).

Practical implications

Our results suggest that, if organizations want to have healthy and balanced employees, they need to create conditions that allow employees from all levels to feel resourceful (that is, effective, in control and valuable). Sufficient job resources (e.g., time, rewards and recognition, autonomy, feedback) need to be available (Scanlan & Still, 2019), while hindrance stress (e.g., red tape, hassles) need to be reduced to a manageable level (Cavanaugh et al., 2000; Crane & Searle, 2016). Research on challenge stress (e.g., time pressure, task complexity) suggests that this type of stress shall be neither too low, nor too high, as both extremes have a depleting effect (De Jonge & Schaufeli, 1998; Hofmans et al., 2015; Xie & Johns, 1995). Our findings suggest that if organizations want to promote transformational leadership *and* employee well-being, employees across all hierarchical levels may benefit from training on how to manage their psychological resources effectively (Luthans et al., 2010). Workplace interventions

with a relational (in place of individual) focus, aiming at improving interpersonal relationships and relational skills, and raising awareness of the impact of esteem-related support behaviors on others, may also increase the psychological resources of the organizational community.

Limitations and future research

A distinct advantage of our study is the multi-source nature of our repeated measurements data. Beyond the fact that this practice is rather unique in the context of a dyadic daily diary study, it has the important implication that the association between leader and follower state core self-evaluations cannot be explained by same-source biases. At the same time, this way of collecting data brings a number of limitations as well.

First, the sample size in our study is relatively small. As leaders are a “hard-to-get” population that is the least inclined to spend its scarce time filling out surveys, doing empirical research among leaders is challenging. On top of the usual challenges of a daily diary design that requires participants to fill in surveys repeatedly, responses of this particular study were only valid if the leader and follower were in contact on any given day and if for that day both leaders *and* their followers filled in the questionnaire. This further diminished the response rate. Despite these challenges, we acquired 108 observations from 31 dyads, which is fair provided that all of our hypotheses are situated at the lowest, within-person level. Of particular relevance here is that, using simulation research, Maas and Hox (2005) demonstrated that even with small sample sizes (i.e., samples as small as 30 groups), the obtained Level 1 regression coefficients in an MLM are estimated fairly unbiased. Moreover, we took additional precautions by using a method that performs well when the Level 2 sample size is small (McNeish, 2017b). With this method (i.e., REML along with a Kenward-Roger correction), only 15 Level 2 units are required for parameter estimates to be stable and trustworthy (Hox & McNeish, 2020). Of course, whereas such precautions help reducing bias in the estimated parameters, they do not alleviate concerns about statistical power. To address these concerns, we calculated observed power using the method of Bliese and Wang (2020). This method gives an indication about the percentage of studies with similar measures and a similar design (e.g., sample size) that would result in statistically significant results. As such, it helps interpreting the findings by being explicit about the level of uncertainty associated with one’s findings. For our particular study, the cumulative probability of finding statistically significant effects ($p < .05$) was 63% for the association between leader and follower core self-evaluations, 68% for the association between leader core self-evaluations and transformational leadership

behavior, and 68% for the association between transformational leadership behavior and follower core self-evaluations. Although those numbers are fair provided the moderate sample size, they indicate a clear need for further empirical scrutiny. Ideally, this scrutiny would initially take the form of direct or conceptual replication research, because apart from the power issues associated with the moderate sample size, the finding of within-dyad covariation of leader and follower core self-evaluations is quite novel. In direct replication research, future research may mimic our study as closely as possible with a large(r) sample size, while in a conceptual replication, the covariation of psychological resources in leader–follower dyads could be tested using different methods and/or on other samples.

Second, having asked the leaders to identify the situation that needed to be rated by both leaders and followers may have led to some compromises. We asked the leaders to identify the situations because we assumed that, due to their dependent position, followers may have dared less to identify sensitive or conflictual situations. However, this way we may have missed out on situations that were relevant from the followers’ perspective and thereby made room for situation-selection bias. Moreover, because leaders and followers reported on their state core-self evaluations and the leaders’ behavior in particular situations, we cannot establish temporal precedence in our mediation model. Thus, whereas we tested the model at the appropriate (within-person and within-dyad) level, our findings are still correlational in nature. This is an important limitation because the crossover effects probably result from leaders and followers influencing each other’s state core self-evaluations in a “loop.” We would like to stress at this point that leadership behavior as an explanatory mechanism is just one of the many ways through which leaders’ and followers’ state core self-evaluations covary. Indeed, we did not take into account mechanisms other than leadership behavior when explaining the observed convergence between leader and follower state core self-evaluations. For example, emphatic processes or shared stressors (Westman, 2006) may be other important factors responsible for the synchronicity in the dyad-members personality state variations. To acquire a fuller picture of the relational personality dynamics, such mechanisms would also need to be unraveled, also because the mediation effect through transformational leadership behavior approached conventional levels of statistical significance. Finally, the framework of a “real-life study” did not allow us to control for potential confounding variables. To address these issues, future studies may want to study the recursiveness of the crossover effect by breaking up the interaction episode in smaller episodes, which allows looking at time-lagged relations between leader and follower state core self-evaluations. In addition,

future research might want to include or control for other mediating variables and use experimental designs to show the casual nature of the relationships.

Exploring the moderating effect of trait personality in the relational process may be another worthwhile future research endeavor. For example, as people with a positive self-image are typically less influenced by external events and feedback (Judge et al., 2005), employees with high trait core self-evaluations may be less susceptible to behaviors of the other dyad member. For example, self-confident followers may depend less on the recognition of the supervisor to maintain their positive self-regard. The research finding that core self-evaluations can act as a substitute for transformational leadership points indeed in this direction (Nübold et al., 2013). Individual differences in differentiation (Bowen, 1976) or relational interdependent self-construal (Cross et al., 2003) may also play a role in the extent to which one's self-regard is affected by the reactions of the important other. As people who are less differentiated have a stronger tendency to converge with others (Bowen, 1976), they may be more likely to get affected by, internalize and mirror their colleagues' and supervisors' state core self-evaluations.

Our study may also inspire future research that aims at unraveling the everyday mechanisms through which one's trait level of core self-evaluations changes over large time periods. Personalities get shaped throughout the lifetime (Mroczek & Spiro, 2007; Srivastava et al., 2003; Terracciano et al., 2005), and the life course approach suggests that our life experiences and social roles are responsible for this (Roberts et al., 2005). Even though it has been acknowledged that relationship experiences affect adult personality development (Roberts et al., 2003), the mechanisms through which relational experiences shape personality, and personalities shape each other remains largely uncharted territory. While major life and relational events can certainly cause a sudden shift in personality (Roberts et al., 2002), change is more often slow-paced, resulting from recurrent experiences (Roberts & Jackson, 2008). If one is immersed in certain relational dynamics for an extended period of time, these dynamics may ultimately lead to the adaptation of one's personality traits, as "long-term exposure to specific contingencies may produce lasting personality changes" (Donnellan & Robins, 2009, p. 199). Our results reveal one of the every-day mechanisms, that may, if regularly repeated over long time periods, result in changes in one's trait core self-evaluations. As frequently experienced states can alter traits over a long time period (Roberts & Jackson, 2008), the trait core self-evaluations of dyad partners who for years work closely (or live) together, may, to some extent, also converge. This prediction is in line with research that has demonstrated that people's personality gets shaped by the work conditions to which they are continuously exposed (Wille et al., 2014).

Conclusion

This study showed the importance of relational dynamics in the variation in leader and follower personality states. Our results demonstrated that within-person fluctuations in leader and follower state core self-evaluations covary across situations, and they tentatively suggest that one reason for this association might be the mediational mechanism through transformational leadership behavior. By doing so, our findings show that personality states of dyad members show covariation, thereby providing an impetus for future research in this domain.

Data Accessibility Statement

 The data and syntax can be found at https://osf.io/vkdeg/?view_only=5ff872d7c4204ba6b6117a094f6ef411. The study and our hypotheses were not pre-registered.

Declaration of conflicting interests

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References

- Andersen, S. M., & Chen, S. (2002). The relational self: An interpersonal social-cognitive theory. *Psychological Review*, 109(4), 619–645. <https://doi.org/10.1037/0033-295X.109.4.619>
- Andersen, S. M., & Glassman, N. S. (1996). Responding to significant others when they are not there: Effects on interpersonal inference, motivation, and affect. Responding to significant others when they are not there: Effects on interpersonal inference, motivation, and affect. In R. M. Sorrentino & E. T. Higgins (Eds.), *Handbook of motivation and cognition*, vol. 3: *The interpersonal context* (pp. 262–321). Guilford Press.
- Arnold, K. A., Turner, N., Barling, J., Kelloway, E. K., & McKee, M. C. (2007). Transformational leadership and psychological well-being: The mediating role of meaningful work. *Journal of Occupational Health Psychology*, 12(3), 193–203. <https://doi.org/10.1037/1076-8998.12.3.193>
- Asendorpf, J. B. (2009). Personality: Traits and situations. In P. J. Corr & G. Matthews (Eds.), *The Cambridge handbook of personality psychology* (pp. 43–54). Cambridge University Press. <https://doi.org/10.1017/CBO9780511596544.006>
- Bakker, A. B., & Demerouti, E. (2009). The crossover of work engagement between working couples: A closer look at the role of empathy. *Journal of Managerial Psychology*, 24, 220–236. <https://doi.org/10.1108/02683940910939313>

- Bakker, A. B., Demerouti, E., & Burke, R. (2009). Workaholism and relationship quality: A spillover/crossover perspective. *Journal of Occupational Health Psychology, 14*, 23–33. <https://doi.org/10.1037/a0013290>
- Baldwin, M. W., Carrell, S. E., & Lopez, D. F. (1990). Priming relationship schemas: My advisor and the Pope are watching me from the back of my mind. *Journal of Experimental Social Psychology, 26*(5), 435–454. [https://doi.org/10.1016/0022-1031\(90\)90068-W](https://doi.org/10.1016/0022-1031(90)90068-W)
- Bandura, A. (2006). Guide for constructing self-efficacy scales. *Self-efficacy Beliefs of Adolescents, 5*, 307–337.
- Bass, B. M., & Avolio, B. J. (2000). *MLQ: Multifactor leadership questionnaire*. Mind Garden.
- Beckmann, N., Beckmann, J. F., Minbashian, A., & Birney, D. P. (2013). In the heat of the moment: On the effect of state neuroticism on task performance. *Personality and Individual Differences, 54*, 447–452. <https://doi.org/10.1016/j.paid.2012.10.022>
- Beckmann, N., Wood, R. E., & Minbashian, A. (2010). It depends how you look at it: On the relationship between neuroticism and conscientiousness at the within- and the between-person levels of analysis. *Journal of Research in Personality, 44*(5), 593–601.
- Best, R. G., Stapleton, L. M., & Downey, R. G. (2005). Core self-evaluations and job burnout: The test of alternative models. *Journal of Occupational Health Psychology, 10*(4), 441–451.
- Bliese, P. D., & Wang, M. (2020). Results provide information about cumulative probabilities of finding significance: Let's report this information. *Journal of Management, 46*, 1275–1288.
- Bono, J. E., & Judge, T. A. (2004). Personality and transformational and transactional leadership: A meta-analysis. *Journal of Applied Psychology, 89*(5), 901.
- Bowen, M. (1976). Theory in the practice of psychotherapy. *Family Therapy: Theory and Practice, 4*, 2–90.
- Brewer, M. B., & Gardner, W. (1996). Who is this “We”? Levels of collective identity and self representations. *Journal of Personality and Social Psychology, 71*(1), 83. <https://doi.org/10.1037/0022-3514.71.1.83>
- Brower, H. H., Schoorman, F. D., & Tan, H. H. (2000). A model of relational leadership: The integration of trust and leader–member exchange. *The Leadership Quarterly, 11*(2), 227–250. [https://doi.org/10.1016/S1048-9843\(00\)00040-0](https://doi.org/10.1016/S1048-9843(00)00040-0)
- Burns, J. M. (1978). *Leadership*. Harper & Row.
- Carless, S. A., Wearing, A. J., & Mann, L. (2000). A short measure of transformational leadership. *Journal of Business and Psychology, 14*(3), 389–405. <https://doi.org/10.1023/A:1022991115523>
- Cavanaugh, M. A., Boswell, W. R., Roehling, M. V., & Boudreau, J. W. (2000). An empirical examination of self-reported work stress among US managers. *Journal of Applied Psychology, 85*(1), 65.
- Chen, S., Boucher, H. C., & Tapias, M. P. (2006). The relational self revealed: Integrative conceptualization and implications for interpersonal life. *Psychological Bulletin, 132*(2), 151–179. <https://doi.org/10.1037/0033-2909.132.2.151>
- Collinson, D. (2008). Conformist, resistant and disguised selves: A post-structuralist approach to identity and work-place followership. In R. Riggio, I. Chaleff, & J. Lipmen-Blumen (Eds.), *The art of followership* (pp. 309–324). Jossey-Bass.
- Collinson, D. (2014). Dichotomies, dialectics and dilemmas: New directions for critical leadership studies? *Leadership, 10*(1), 36–55.
- Crane, M. F., & Searle, B. J. (2016). Building resilience through exposure to stressors: The effects of challenges versus hindrances. *Journal of Occupational Health Psychology, 21*(4), 468.
- Cross, S. E., Bacon, P. L., & Morris, M. L. (2000). The relational- interdependent self-construal and relationships. *Journal of Personality and Social Psychology, 78*, 791–808. <https://doi.org/10.1037/0022-3514.78.4.791>
- Cross, S. E., Gore, J. S., & Morris, M. L. (2003). The relational-interdependent self-construal, self-concept consistency, and well-being. *Journal of Personality and Social Psychology, 85*(5), 933–944. <https://doi.org/10.1037/0022-3514.85.5.933>
- Debusscher, J., Hofmans, J., & De Fruyt, F. (2014). The curvilinear relationship between state neuroticism and momentary task performance. *PLoS One, 9*. <https://doi.org/10.1371/journal.pone.0106989>
- Debusscher, J., Hofmans, J., & De Fruyt, F. (2016a). Do personality states predict momentary task performance? The moderating role of personality variability. *Journal of Occupational and Organizational Psychology, 89*, 330–351. <https://doi.org/10.1111/joop.12126>
- Debusscher, J., Hofmans, J., & De Fruyt, F. (2016b). From state neuroticism to momentary task performance: A person $\times$ situation approach. *European Journal of Work and Organizational Psychology, 25*, 301–315. <https://doi.org/10.1080/1359432X.2014.983085>
- Debusscher, J., Hofmans, J., & De Fruyt, F. (2016c). The effect of state CSE on task performance, organizational citizenship behavior and counterproductive work behavior. *European Journal of Work and Organizational Psychology, 25*(2), 301–315. <https://doi.org/10.1080/1359432X.2015.1063486>
- Debusscher, J., Hofmans, J., & De Fruyt, F. (2017). The multiple face(s) of state conscientiousness: Predicting task performance and organizational citizenship behavior. *Journal of Research in Personality, 69*, 78–85.
- De Jonge, J., & Schaufeli, W. B. (1998). Job characteristics and employee well-being: A test of Warr's Vitamin Model in health care workers using structural equation modelling. *Journal of Organizational Behavior: The International Journal of Industrial, Occupational and Organizational Psychology and Behavior, 19*(4), 387–407.
- Demerouti, E. (2012). The spillover and crossover of resources among partners: The role of work–self and family–self facilitation. *Journal of Occupational Health Psychology, 17*(2), 184–195. <https://doi.org/10.1037/a0026877>
- Demerouti, E., Bakker, A. B., & Schaufeli, W. B. (2005). Spillover and crossover of exhaustion and life satisfaction among dual-earner parents. *Journal of Vocational Behavior, 67*, 266–289. <https://doi.org/10.1016/j.jvb.2004.07.001>
- Densten, I. L. (2005). The relationship between visioning behaviours of leaders and follower burnout. *British Journal of Management, 16*(2), 105–118. <https://doi.org/10.1111/j.1467-8551.2005.00428.x>
- Dóci, E., & Hofmans, J. (2015). Task complexity and transformational leadership: The mediating role of leaders' state core self-evaluations. *The Leadership Quarterly*,

- 26(3), 436–447. <https://doi.org/10.1016/j.leaqua.2015.02.008>
- Dóci, E., Hofmans, J., Nijs, S., & Judge, T. A. (2020). Leaders under pressure: Time pressure and state core self-evaluations as antecedents of transformational leadership behaviour. *European Journal of Work and Organizational Psychology*. Advance online publication. <https://doi.org/10.1080/1359432X.2020.1714717> <https://doi.org/10.1111/1467-6494.00179>
- Donnellan, M. B., & Robins, R. W. (2009). The development of personality across the life span. In P. J. Corr & G. Matthews (Eds.), *The Cambridge handbook of personality psychology* (pp. 191–204). Cambridge University Press. <https://doi.org/10.1017/CBO9780511596544.015>
- Dvir, T., Eden, D., Avolio, B. J., & Shamir, B. (2002). Impact of transformational leadership on follower development and performance: A field experiment. *Academy of Management Journal*, 45(4), 735–744. <https://doi.org/10.2307/3069307>
- Eden, D. (1993). Leadership and expectations: Pygmalion effects and other self-fulfilling prophecies in organizations. *The Leadership Quarterly*, 3(4), 271–305. [https://doi.org/10.1016/1048-9843\(92\)90018-B](https://doi.org/10.1016/1048-9843(92)90018-B)
- Ferris, D. L., Rosen, C. R., Johnson, R. E., Brown, D. J., Risavy, S. D., & Heller, D. (2011). Approach or avoidance (or both?): Integrating core self-evaluations within an approach/avoidance framework. *Personnel Psychology*, 64(1), 137–161. <https://doi.org/10.1111/j.1744-6570.2010.01204.x>
- Fitzgerald, S., & Schutte, N. S. (2010). Increasing transformational leadership through enhancing self-efficacy. *Journal of Management Development*, 29(5), 495–505. <https://doi.org/10.1108/02621711011039240>
- Fleeson, W., & Jayawickreme, E. (2015). Whole trait theory. *Journal of Research in Personality*, 56, 82–92.
- Geldhof, G. J., Preacher, K. J., & Zyphur, M. J. (2014). Reliability estimation in a multilevel confirmatory factor analysis framework. *Psychological Methods*, 19(1), 72–91. <https://doi.org/10.1037/a0032138>
- Gerstner, C. R., & Day, D. V. (1997). Meta-Analytic review of leader-member exchange theory: Correlates and construct issues. *Journal of Applied Psychology*, 82(6), 827–844. <https://doi.org/10.1037/0021-9010.82.6.827>
- Gong, Y., Huang, J. C., & Farh, J. L. (2009). Employee learning orientation, transformational leadership, and employee creativity: The mediating role of employee creative self-efficacy. *Academy of Management Journal*, 52(4), 765–778. <https://doi.org/10.5465/AMJ.2009.43670890>
- 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. [https://doi.org/10.1016/1048-9843\(95\)90036-5](https://doi.org/10.1016/1048-9843(95)90036-5)
- Halbesleben, J. R., Neveu, J. P., Paustian-Underdahl, S. C., & Westman, M. (2014). Getting to the “COR” understanding the role of resources in conservation of resources theory. *Journal of Management*. Advance online publication. <https://doi.org/10.1177/0149206314527130>
- Hammer, L. B., Allen, E., & Grigsby, T. D. (1997). Work-family conflict in dual-earner couples: Within-individual and crossover effects of work and family. *Journal of Vocational Behavior*, 50, 185–203. <https://doi.org/10.1006/jvbe.1996.1557>
- Harris, M. A., & Orth, U. (2020). The link between self-esteem and social relationships: A meta-analysis of longitudinal studies. *Journal of Personality and Social Psychology*, 119, 1459–1477.
- Harter, S., Waters, P., & Whitesell, N. R. (1998). Relational self-worth: Differences in perceived worth as a person across interpersonal contexts among adolescents. *Child Development*, 69(3), 756–766. <https://doi.org/10.1111/j.1467-8624.1998.tb06241.x>
- Heatherton, T. F., & Polivy, J. (1991). Development and validation of a scale for measuring state self-esteem. *Journal of Personality and Social Psychology*, 60(6), 895–910. <https://doi.org/10.1037/0022-3514.60.6.895>
- Heller, D., Komar, J., & Lee, W. B. (2007). The dynamics of personality states, goals, and well-being. *Personality and Social Psychology Bulletin*, 33(6), 898–910. <https://doi.org/10.1177/0146167207301010>
- Hobfoll, S. E. (1989). Conservation of resources: A new attempt at conceptualizing stress. *American Psychologist*, 44(3), 513–524. <https://doi.org/10.1037/0003-066X.44.3.513>
- Hobfoll, S. E. (2002). Social and psychological resources and adaptation. *Review of General Psychology*, 6(4), 307–324. <https://doi.org/10.1037/1089-2680.6.4.307>
- Hofmans, J., Debusscher, J., Dóci, E., Spanouli, A., & De Fruyt, F. (2015). The curvilinear relationship between work pressure and momentary task performance: The role of state and trait core self-evaluations. *Frontiers in Psychology*.
- Hofmans, J., Dóci, E., Solinger, O. N., Choi, W., & Judge, T. (2019). Capturing the dynamics of leader-follower interactions: Stalemates and future theoretical progress. *Journal of Organizational Behavior*, 40(3), 382–385. <https://doi.org/10.1002/job.2317>
- House, R. J. (1976). *A 1976 theory of charismatic leadership*. University of Toronto, Faculty of Management Studies.
- Howell, J. M., & Avolio, B. J. (1993). Transformational leadership, transactional leadership, locus of control, and support for innovation: Key predictors of consolidated-business-unit performance. *Journal of Applied Psychology*, 78(6), 891–902. <https://doi.org/10.1037/0021-9010.78.6.891>
- Hox, J. J., & McNeish, D. (2020). Small samples in multilevel modeling. In R. Van de Schoot & M. Miočević (Eds.), *Small sample size solutions: A guide for applied researchers and practitioners* (pp. 215–225). Routledge.
- Hu, J., Wang, Z., Liden, R. C., & Sun, J. (2012). The influence of leader core self-evaluation on follower reports of transformational leadership. *The Leadership Quarterly*, 23(5), 860–868.
- Huang, J. L., & Ryan, A. M. (2011). Beyond personality traits: A study of personality states and situational contingencies in customer service jobs. *Personnel Psychology*, 64, 451–488.
- Jayamaha, S. D., & Overall, N. C. (2019). The dyadic nature of self-evaluations: Self-esteem and efficacy shape and are shaped by support processes in relationships. *Social Psychological and Personality Science*, 10, 244–256.
- Judge, T. A., & Bono, J. E. (2001). Relationship of core self-evaluations traits—self-esteem, generalized self-efficacy, locus of control, and emotional stability—with job

- satisfaction and job performance: A meta-analysis. *Journal of Applied Psychology*, 86(1), 80–92. <https://doi.org/10.1037//0021-9010.86.1.80>
- 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. <https://doi.org/10.1037/0021-9010.90.2.257>
- 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), 303–332. <https://doi.org/10.1111/j.1744-6570.2003.tb00152.x>
- Judge, T. A., & Hurst, C. (2008). How the rich (and happy) get richer (and happier): Relationship of core self-evaluations to trajectories in attaining work success. *Journal of Applied Psychology*, 93(4), 849–863. <https://doi.org/10.1037/0021-9010.93.4.849>
- 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.
- Judge, T. A., Simon, L. S., Hurst, C., & Kelley, K. (2014). What I experienced yesterday is who I am today: Relationship of work motivations and behaviors to within-individual variation in the five-factor model of personality. *Journal of Applied Psychology*, 99(2), 199.
- Kammeyer-Mueller, J. D., Judge, T. A., & Scott, B. A. (2009). The role of core self-evaluations in the coping process. *Journal of Applied Psychology*, 94(1), 177–195. <https://doi.org/10.1037/a0013214>
- Keltner, D., Gruenfeld, D. H., & Anderson, C. (2003). Power, approach, and inhibition. *Psychological Review*, 110(2), 265.
- Kernis, M. H., & Waschull, S. B. (1995). The interactive roles of stability and level of self-esteem: Research and theory. *Advances in Experimental Social Psychology*, 27, 93–141. [https://doi.org/10.1016/S0065-2601\(08\)60404-9](https://doi.org/10.1016/S0065-2601(08)60404-9)
- Leary, M. R., Tambor, E. S., Terdal, S. K., & Downs, D. L. (1995). Self-esteem as an interpersonal monitor: The sociometer hypothesis. *Journal of Personality and Social Psychology*, 68, 518–530.
- Liden, R. C. (2009). Leader-member exchange model of leadership: A critique and further development. *Management*, 11(3), 618–634.
- Lievens, F., Lang, J. W., De Fruyt, F., Corstjens, J., Van de Vijver, M., & Bledow, R. (2018). The predictive power of people's intraindividual variability across situations: Implementing whole trait theory in assessment. *Journal of Applied Psychology*, 103(7), 753.
- Liu, J., Siu, O. L., & Shi, K. (2010). Transformational leadership and employee well-being: The mediating role of trust in the leader and self-efficacy. *Applied Psychology*, 59(3), 454–479. <https://doi.org/10.1111/j.1464-0597.2009.00407.x>
- Liu, W., Li, Z., Ling, Y., & Cai, T. (2016). Core self-evaluations and coping styles as mediators between social support and well-being. *Personality and Individual Differences*, 88, 35–39.
- Luthans, F., Avey, J. B., Avolio, B. J., & Peterson, S. J. (2010). The development and resulting performance impact of positive psychological capital. *Human Resource Development Quarterly*, 21(1), 41–67. <https://doi.org/10.1002/hrdq.20034>
- Maas, C. J. M., & Hox, J. J. (2005). Sufficient sample sizes for multilevel modeling. *Methodology*, 1, 86–92. <https://doi.org/10.1027/1614-1881.1.3.86>
- Matzler, K., Bauer, F. A., & Mooradian, T. A. (2015). Self-esteem and transformational leadership. *Journal of Managerial Psychology*, 30, 815–831.
- McNeish, D. (2017a). Multilevel mediation with few clusters: A cautionary note on the multilevel structural equation modeling framework. *Structural Equation Modeling*, 24, 609–625.
- McNeish, D. (2017b). Small sample methods for multilevel modeling: A colloquial elucidation of REML and the Kenward-Roger correction. *Multivariate Behavioral Research*, 52, 661–670.
- McNeil, J. M., & Fleeson, W. (2006). The causal effects of extraversion on positive affect and neuroticism on negative affect: Manipulating state extraversion and state neuroticism in an experimental approach. *Journal of Research in Personality*, 40(5), 529–550. <https://doi.org/10.1016/j.jrp.2005.05.003>
- Mead, G. H. (1934). *Mind, self, and society from the standpoint of a social behaviorist*. University of Chicago Press.
- Mroczek, D. K., & Spiro, A. (2007). Personality change influences mortality in older men. *Psychological Science*, 18(5), 371–376. <https://doi.org/10.1111/j.1467-9280.2007.01907.x>
- Nielsen, K., & Cleal, B. (2011). Under which conditions do middle managers exhibit transformational leadership behaviors?—An experience sampling method study on the predictors of transformational leadership behaviors. *The Leadership Quarterly*, 22(2), 344–352. <https://doi.org/10.1016/j.leaqua.2011.02.009>
- Nübold, A., Muck, P. M., & Maier, G. W. (2013). A new substitute for leadership? Followers' state core self-evaluations. *The Leadership Quarterly*, 24(1), 29–44. <https://doi.org/10.1016/j.leaqua.2012.07.002>
- Peterson, S. J., Walumbwa, F. O., Byron, K., & Myrowitz, J. (2009). CEO positive psychological traits, transformational leadership, and firm performance in high-technology start-up and established firms. *Journal of Management*, 35(2), 348–368.
- Pillai, R., & Williams, E. A. (2004). Transformational leadership, self-efficacy, group cohesiveness, commitment, and performance. *Journal of Organizational Change Management*, 17(2), 144–159. <https://doi.org/10.1108/09534810410530584>
- Preacher, K. J., Zhang, Z., & Zyphur, M. J. (2011). Alternative methods for assessing mediation in multilevel data: The advantages of multilevel SEM. *Structural Equation Modeling*, 18(2), 161–182. <https://doi.org/10.1080/10705511.2011.557329>
- Preacher, K. J., Zyphur, M. J., & Zhang, Z. (2010). A general multilevel SEM framework for assessing multilevel mediation. *Psychological Methods*, 15(3), 209. <https://doi.org/10.1037/a0020141>
- Rauthmann, J. F., Sherman, R. A., & Funder, D. C. (2015). Principles of situation research: Towards a better understanding of psychological situations. *European Journal of Personality*, 29(3), 363–381.
- Resick, C. J., Whitman, D. S., Weingarden, S. M., & Hiller, N. J. (2009). The bright-side and the dark-side of CEO personality: Examining core self-evaluations, narcissism, transformational leadership, and strategic influence. *Journal of Applied Psychology*, 94(6), 1365.

- Roberts, B. W., Caspi, A., & Moffitt, T. E. (2003). Work experiences and personality development in young adulthood. *Journal of Personality and Social Psychology*, 84(3), 582.
- Roberts, B. W., Helson, R., & Klohnen, E. C. (2002). Personality development and growth in women across 30 years: Three perspectives. *Journal of Personality*, 70(1), 79–102.
- Roberts, B. W., & Jackson, J. J. (2008). Sociogenomic personality psychology. *Journal of Personality*, 76, 1523–1544. <https://doi.org/10.1111/j.1467-6494.2008.00530.x>
- Roberts, B. W., Wood, D., & Smith, J. L. (2005). Evaluating five factor theory and social investment perspectives on personality trait development. *Journal of Research in Personality*, 39(1), 166–184. <https://doi.org/10.1016/j.jrp.2004.08.002>
- Scanlan, J. N., & Still, M. (2019). Relationships between burnout, turnover intention, job satisfaction, job demands and job resources for mental health personnel in an Australian mental health service. *BMC Health Services Research*, 19(1), 1–11.
- Schinkel, S., Van Dierendonck, D., & Anderson, N. (2004). The impact of selection encounters on applicants: An experimental study into feedback effects after a negative selection decision. *International Journal of Selection and Assessment*, 12(1–2), 197–205. <https://doi.org/10.1111/j.0965-075X.2004.00274.x>
- Selig, J. P., & Preacher, K. J. (2008, June). *Monte Carlo method for assessing mediation: An interactive tool for creating confidence intervals for indirect effects* [Computer software]. <http://quantpsy.org/>
- Seo, M., Jin, S., & Shapiro, D. L. (2008). Do happy leaders lead better? Affective and attitudinal antecedents of transformational leadership behavior [Paper presentation]. *Academy of Management Annual Conference*, Anaheim, CA, United States.
- Shamir, B., House, R. J., & Arthur, M. B. (1993). The motivational effects of charismatic leadership: A self-concept based theory. *Organization Science*, 4(4), 577–594. <https://doi.org/10.1287/orsc.4.4.577>
- Shimazu, A., Bakker, A. B., & Demerouti, E. (2009). How job demands affect the intimate partner: A test of the spillover–crossover model in Japan. *Journal of Occupational Health*, 51, 239–248. <https://doi.org/10.1539/joh.L8160>
- Sluss, D. M., & Ashforth, B. E. (2007). Relational identity and identification: Defining ourselves through work relationships. *Academy of Management Review*, 32(1), 9–32. <https://doi.org/10.5465/AMR.2007.23463672>
- Smedema, S. M. (2014). Core self-evaluations and well-being in persons with disabilities. *Rehabilitation Psychology*, 59(4), 407.
- Sosnowska, J., Kuppens, P., De Fruyt, F., & Hofmans, J. (2019). A dynamic systems approach to personality: The Personality Dynamics (PersDyn) model. *Personality and Individual Differences*, 144, 11–18.
- Srivastava, S., John, O. P., Gosling, S. D., & Potter, J. (2003). Development of personality in early and middle adulthood: Set like plaster or persistent change? *Journal of Personality and Social Psychology*, 84, 1041–1053. <https://doi.org/10.1037/0022-3514.84.5.1041>
- Sy, T., Côté, S., & Saavedra, R. (2005). The contagious leader: Impact of the leader's mood on the mood of group members, group affective tone, and group processes. *Journal of Applied Psychology*, 90(2), 295–305. <https://doi.org/10.1037/0021-9010.90.2.295>
- Talaifar, S., Buhrmester, M. D., Ayduk, Ö., & Swann Jr, W. B. (2020). Asymmetries in mutual understanding: People with low status, power, and self-esteem understand better than they are understood. *Perspectives on Psychological Science*, 1745691620958003.
- Terracciano, A., McCrae, R. R., Brant, L. J., & Costa, P. T., Jr. (2005). Hierarchical linear modeling analyses of the NEO-PI-R scales in the Baltimore Longitudinal Study of Aging. *Psychology and Aging*, 20(3), 493.
- Tsai, W. C., Chen, H. W., & Cheng, J. W. (2009). Employee positive moods as a mediator linking transformational leadership and employee work outcomes. *The International Journal of Human Resource Management*, 20(1), 206–219. <https://doi.org/10.1080/09585190802528714>
- Tsaousis, I., Nikolaou, I., Serdaris, N., & Judge, T. A. (2007). Do the core self-evaluations moderate the relationship between subjective well-being and physical and psychological health? *Personality and Individual Differences*, 42(8), 1441–1452. <https://doi.org/10.1016/j.paid.2006.10.025>
- Uhl-Bien, M. (2006). Relational leadership theory: Exploring the social processes of leadership and organizing. *The Leadership Quarterly*, 17(6), 654–676. <https://doi.org/10.1016/j.leaqua.2006.10.007>
- Van Kleef, G. A., Oveis, C., Van Der Löwe, I., LuoKogan, A., Goetz, J., & Keltner, D. (2008). Power, distress, and compassion: Turning a blind eye to the suffering of others. *Psychological Science*, 19(12), 1315–1322.
- Westman, M. (2006). Models of work–family interactions: Stress and strain crossover. In R. K. Suri (Ed.), *International encyclopedia of organizational behavior* (pp. 498–522). Pentagon Press.
- Westman, M., Etzion, D., & Chen, S. (2009). Crossover of positive experiences from business travelers to their spouses. *Journal of Managerial Psychology*, 24(3), 269–284. <https://doi.org/10.1108/02683940910939340>
- Westman, M., & Vinokur, A. (1998). Unraveling the relationship of distress levels within couples: Common stressors, emphatic reactions, or crossover via social interactions? *Human Relations*, 51, 137–156. <https://doi.org/10.1177/001872679805100202>
- Wille, B., Hofmans, J., Feys, M., & De Fruyt, F. (2014). Maturation of work attitudes: Correlated change with Big Five personality traits and reciprocal effects over 15 years. *Journal of Organizational Behavior*, 35(4), 507–529. <https://doi.org/10.1002/job.1905>
- Xie, J. L., & Johns, G. (1995). Job scope and stress: Can job scope be too high? *Academy of Management Journal*, 38(5), 1288–1309. <https://doi.org/10.2307/256858>