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**Title:** Back to Basics: The Relative Importance of Transformational and Fair Leadership for Employee Work Engagement and Exhaustion

**Year:** 2016

**Version:**

**Please cite the original version:**

Perko, K., Kinnunen, U., Tolvanen, A., & Feldt, T. (2016). Back to Basics: The Relative Importance of Transformational and Fair Leadership for Employee Work Engagement and Exhaustion. *Scandinavian Journal of Work and Organizational Psychology*, 1(1), Article 6. <https://doi.org/10.16993/sjwop.8>

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ORIGINAL ARTICLE

# Back to Basics: The Relative Importance of Transformational and Fair Leadership for Employee Work Engagement and Exhaustion

Kaisa Perko\*, Ulla Kinnunen\*, Asko Tolvanen† and Taru Feldt†

This study contributes to the literature on the supervisors' role in employee well-being by drawing on two separate lines of research: transformational leadership and organizational justice. The purpose of the study was to investigate the *unique* contributions of transformational and fair leadership (justice behaviours of supervisors) on work engagement and exhaustion among employees within the framework of the Job Demands-Resources model (Bakker and Demerouti, 2007). In determining the unique contributions, we additionally acknowledged the role of work characteristics. A questionnaire study was conducted among Finnish municipal employees in a variety of occupations (N = 333, 87% women). The analyses comprised fixed-order regression models with latent variables using Cholesky decomposition (de Jong, 1999) to examine unique contributions of highly correlating latent factors. The results showed no additive effects of transformational leadership above fair leadership in relation to work engagement, that is, fair leadership explained work engagement equally well. However, unfair leadership explained incremental variance in exhaustion beyond low levels of transformational leadership. Thus, our results suggest that transformational and fair leadership are interchangeable with respect to positive well-being, while concerning health impairment, unfair leadership is more detrimental than a lack of transformational leadership. Both forms of leadership demonstrated relationships with employee well-being that were partly independent from work characteristics (role clarity, autonomy and workload), thereby corroborating the specific role of leadership. Implications of the high empirical overlap between transformational and fair leadership are discussed from the point of view of leadership measurement and interpersonal affect within it.

**Keywords:** transformational leadership; organizational justice; interpersonal justice; work engagement; exhaustion; work characteristics

## Introduction

Considering the growing body of literature demonstrating the enhancing effects of transformational leadership on employee well-being (Arnold and Connelly, 2013; Skakon et al., 2010), very little is known about what is the added value of transformational leadership compared to other focal aspects of leadership, such as justice behaviours of supervisors. In this study, guided by the Job Demands-Resources (JD-R) model (Bakker and Demerouti, 2007; Schaufeli and Bakker, 2004), we aim to explicate the *unique* relevance of perceived transformational and fair leadership in relation to employee work engagement and exhaustion. In a further comparison, we investigate the unique roles of fair and transformational leadership in relation to employee well-being while acknowledging the effects of other job demands and job resources. Overall, this study serves the principle of parsimony with respect

to leadership concepts in the research of employee well-being.

Leadership is widely acknowledged to play an integral part in employees' accomplishment of work tasks, motivation, development and well-being (e.g. Judge and Piccolo, 2004). Among specific leadership styles, transformational leadership has reached an established position as the desirable leadership style with regard to employee well-being in occupational psychology research (for reviews, see Arnold and Connelly, 2013; Skakon et al., 2010). However, the added value of transformational leadership on employee well-being can be justified only if it explains unique variance in employee well-being beyond other established leadership aspects. Prior studies have not empirically investigated, possibly due to the multicollinearity problems, whether transformational and other aspects of leadership actually are complementary or redundant with respect to employee well-being outcomes.

In this study we adopt this goal and build on two separate lines of research, i.e., literature on transformational leadership and literature on supervisor related justice that

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derives from organizational justice research (e.g. Kivimäki et al., 2003; Kivimäki et al., 2005; Colquitt et al., 2013). Of importance for this goal, we overcame the problem of multicollinearity by employing the Cholesky decomposition in SEM framework (de Jong, 1999). Thereby it was possible to examine the extent to which transformational and fair aspects of leadership are empirically interchangeable when employee well-being is the criterion. As both transformational and fair (just) leadership have been shown to be associated with favourable employee health and well-being outcomes, integration of these lines of research and explication of their associations with employee well-being seem relevant. From a practical point of view, it is important to ascertain whether there is empirical evidence for encouraging leaders to adopt a full-scale transformational leadership framework in an effort to enhance employee well-being, or whether the same level of well-being can be attained with more general elements in leadership.

#### ***Leadership in the Job Demands-Resources model***

The essence of transformational leadership may be summarized such that transformational leaders are able to make followers aware of the importance and higher purpose of the work, transcend focus from self-interest to the common good and, as a result, achieve more than was initially expected (Bass, 1985; Yukl, 1999). To describe transformational leadership on a more behavioural level, these kind of leaders convey an appealing vision of the future, provide an admirable role model with clearly expressed values, encourage thinking about issues in new ways and foster trust and involvement among group members while also providing individualized support for employees (Carless, Wearing and Mann, 2000).

With regard to fair leadership, justice is a profound aspect in organizational life and the importance of fair, respectful and considerate interpersonal treatment for employee health and well-being has been well-documented (e.g. Elovainio et al., 2006; Kivimäki et al., 2005; Robbins, Ford and Tetrick, 2012). While immediate supervisors have traditionally been considered to display only interactional aspects of justice (respectful treatment and justification with information), more recent studies have pointed to the relevance of examining immediate supervisors as the sources of other justice dimensions besides interactional (see Colquitt et al., 2013, for a meta-analysis; Liao and Rupp, 2005). The meta-analysis by Colquitt et al. (2013) reveals that multiple ways of referencing the justice experiences have been used in the justice literature, with many of these being directly relevant for supervisors, such as a reference to performance evaluation. In the present study fair leadership refers to focal justice aspects in daily supervisory work that are each recognised by earlier research (Colquitt et al., 2013; Elovainio et al., 2006; Kivimäki et al., 2005; Lusa et al., 2006; Vincent, 2012), such as perceived fairness in respectful, equal treatment, distribution of work and evaluation of performance.

Both transformational and fair leadership refer to constructive leader behaviours that fit the broad definition of job resources in the JD-R model (Bakker and Demerouti, 2007). In this regard, it is essential to note that in the JD-R

model, job demands and job resources refer not only to task-level work characteristics but to all physical, psychological, social, and organizational aspects of the job that influence well-being. As central social aspects of work environment, these leadership behaviours may serve as resources that facilitate achievement of work goals and can be considered important for employees' internal motivation by promoting personal growth, learning and development. In the motivational process proposed by the JD-R model, job resources foster the motivational aspect of well-being, work engagement, which in turn is posited to promote positive organizational outcomes.

Job demands, in turn, refer to all those physical, psychological, social, or organizational aspects of work that require sustained effort or skills and are therefore associated with physiological and psychological costs (Bakker and Demerouti, 2007). In the health-impairment process, high demands and lack of adequate resources drain an employee's energy reserve and lead to burnout symptoms and potentially, to other health problems in the long run (Bakker and Demerouti, 2007; Schaufeli and Bakker, 2004). There is one important difference to consider regarding transformational and fair leadership as job resources: it is difficult to think about a lack of fairness without thinking about unfairness. In accordance with this, typically in the organizational justice literature, only justice is explicitly inquired and injustice is inferred from low justice levels (e.g., Colquitt et al., 2013; Robbins et al., 2012). When dealing with unfair leadership, employees need to exert additional psychological effort to cope with the situation. On this basis, we assume in this study that a breach of fairness resembles more of a job demand, whereas a lack of transformational leadership is best conceived as a lack of a resource.

#### ***Transformational leadership and employee well-being***

In particular, transformational leadership theory is based on the premise of higher motivational value (Bass, 1985), an assumption which has received partial support in empirical studies (Bono and Judge, 2003; Judge and Piccolo, 2004; Piccolo and Colquitt, 2006). Although transformational leadership theory does not directly pertain to employee well-being, several if not all facets of transformational leadership can be seen to facilitate positive, particularly motivational, aspects of well-being. For example, particularly by adhering to a higher level purpose of the work, behaving in ways that prompt employees to identify themselves with the leader, and by conveying an attractive vision of the future, transformational leaders may elicit healthy experiences of meaningfulness among their employees (Arnold et al., 2007; Ghadi, Fernando and Caputi, 2013; Piccolo and Colquitt, 2006). Furthermore, by paying individualized attention to the developmental needs of followers, transformational leaders provide supportive actions more directly (Bass, 1985).

In the current study, we examine the motivational aspect of occupational well-being, work engagement and, on the other side, exhaustion as an indicator of employee ill-being. Work engagement refers to "a positive, fulfilling, work-related state of mind that is characterized by vigor,

dedication and absorption" (Schaufeli et al., 2002: 74). Regarding the key dimensions that are examined in the present study (González-Romá et al., 2006; Schaufeli and Bakker, 2004), vigour is depicted by high levels of energy and mental resilience while working, whereas dedication refers to identification with one's work, that is, experiencing a sense of significance, enthusiasm, inspiration, pride and challenge (Schaufeli et al., 2002). Exhaustion is characterized by feelings of being overextended and depleted of emotional and physical resources, that is, a lack of energy (Maslach, Schaufeli and Leiter 2001). Underscoring the significance of lack of energy, exhaustion is a key component of occupational burnout, a work-related psychological syndrome also consisting of cynicism and lowered professional efficacy beliefs (Maslach et al., 2001; Schaufeli and Buunk, 1996).

In earlier studies on transformational leadership and employee burnout, bivariate correlations have consistently shown that transformational leadership is associated with low levels of exhaustion. In multivariate models, however, other leadership or work attributes (e.g. laissez-faire leadership, transactional leadership and various work stressors) have explained more unique variance in exhaustion than transformational leadership (e.g. Hetland, Sandal and Johnsen, 2007; Kanste, Kyngäs and Nikkilä, 2007; Stordeur, D'Hoore and Vandenberghe, 2001). In sum, these findings indicate that while it may be true that transformational leadership promotes employee motivation and positive well-being, a lack of transformational leadership does not appear to increase employee ill-being to the same extent as psychosocial work stressors, such as workload and role ambiguity (Stordeur et al., 2001).

Drawing on the JD-R model, these findings can be understood through the differing roles of demands and resources in well-being and ill-being: a lack of resources is not as detrimental as are demands in terms of employee ill-being (Bakker and Demerouti, 2007). Specifically, in burnout research it has been suggested that exhaustion is particularly predicted by job demands, while disengagement (cynicism) develops in response to lack of resources (Demerouti et al., 2001). The dominating role of job demands in employee ill-being is also in accordance with the notion of the primacy of resource loss in the conservation of resources (COR) theory (Hobfoll, 1989). In fact, the JD-R model draws on the principles of the COR theory and applies these in work settings (Bakker and Demerouti, 2007). The COR theory posits that the essence of the stress process is either potential or actual loss of valued resources, and resource gain is subsidiary to resource loss in regard to well-being and health (Hobfoll, 2001). Accordingly, whereas transformational leadership may foster resource gain, aspects of work that demand energy and effort are more conducive to strain reactions than mere lack of transformational leadership.

Concerning the positive side of occupational well-being, research on transformational leadership and work engagement is still scarce. Nevertheless, the results thus far seem promising with respect to the assumptions of transformational leadership theory (Bass, 1985). Tims, Bakker and Xanthopoulou (2011) found in a diary study

that day-level transformational leadership was related to day-level work engagement among employees through day-level optimism. Similarly, employees' perceptions of meaning in work was found to partially mediate the relationship between transformational leadership and work engagement, providing further support for motivating effects (Ghadi et al., 2013).

#### ***Fair leadership in relation to employee health and well-being***

On a general level, the organizational justice literature has yielded a considerable amount of evidence on the effect of organizational fairness on a variety of employee health and well-being outcomes, both in terms of psychological strain and physical health problems (for a meta-analysis, see Robbins et al., 2012). Recent meta-analytic findings point to the particularly prominent role of the immediate supervisors in forming the experience of justice among employees (Colquitt et al., 2013). The results suggested that justice dimensions that were measured with reference to a supervisor as the source of justice were generally more strongly related to a variety of outcomes as compared to organization-focused justice perceptions, thereby providing strong support for the focus on supervisors as sources of justice in terms of various justice dimensions (Colquitt et al., 2013).

In accordance with this, the results on interactional justice emphasize the role of nearby-leaders, as often in organizational justice research only this dimension is inquired with reference to a supervisor. Of importance to the present study, the meta-analysis by Robbins et al. (2012) showed that burnout and stress were predicted by interactional injustice beyond procedural injustice (fair procedures in decision making) and distributive injustice (fair outcomes of those processes). Similarly, findings at the work-unit level support the predominant role of interactional injustice in burnout (Moliner et al., 2005).

It is important to note that the evidence in support of the relationship between fairness of immediate supervisors and employee health and well-being derives from robust longitudinal studies with objective outcome measures, such as medically certified sickness absences (Kivimäki et al., 2003), coronary heart disease (Kivimäki et al., 2005), and cardiovascular deaths (Elovainio et al., 2006). Moreover, there is some evidence from intervention studies (Greenberg, 1993; Skarlicki and Latham, 1997). Concerning health and well-being related outcomes, interactional justice training of supervisors was found to alleviate insomnia among nurses who suffered pay cuts (Greenberg, 2006). Furthermore, in a multilevel study, supervisor-referenced justice as a shared perception in a work group was related to sleep disturbances at the group level (Way, Jimmieson and Bordia, 2014).

The specific mechanisms whereby unfair treatment in organizations may lead to poor health and well-being have been elucidated by Ford and Huang (2014). Of interest to the present study, injustice engenders threat appraisals that are crucial in stress reactions and particularly decreases employees' trust that their supervisor and organization will not harm them. Supervisor-related

justice is indeed a strong predictor of trust in the supervisor (Colquitt et al., 2013). Moreover, the adverse effects of injustice may derive from a threat to one's self-worth, or, alternatively, from a threat to the basic need for morality. The resulting moral emotions (anger, disgust, and contempt) may have unhealthy consequences (Ford and Huang, 2014).

As justice has been most often investigated in relation to negative health and well-being outcomes, research on leader fairness in relation to employee work engagement is very limited. We could, however, locate two studies suggesting that justice is important for work engagement (Hansen, Byrne and Kiersch, 2014; Moliner et al., 2008). The psychological benefits of fairness can be understood through its fundamental value in organizational life (e.g. Kivimäki et al., 2005). Contrasting with the potential influence mechanisms of injustice outlined above (Ford and Huang, 2014), fair leadership certainly increases trust in the supervisor and can be seen to foster healthy self-worth among employees. Additionally, there is meta-analytic evidence that fairness relates not only to negative but also to positive affective states among employees (Colquitt et al., 2013).

In sum, despite both transformational and fair leadership displaying associations with employee health and well-being, there is a gap in the knowledge concerning the potentially different effects of transformational and fair leadership.

#### ***Are the effects of transformational and fair leadership different?***

Studies that have investigated transformational leadership together with justice (DeCremer, van Dijke and Bos, 2007; Hansen et al., 2014) have demonstrated that transformational leadership is closely related to justice perceptions of employees, especially interactional justice (DeCremer et al., 2007). High correlations reported in these studies (.35–.81) indicate that empirical overlap is evident and consequently emphasize the need to investigate whether transformational and fair leadership actually show incremental validity in relation to employee well-being.

Fairness can be considered as a base for the relationship between a leader and a follower, or "a psychological platform on which transformational leadership is built (at least partly)" (DeCremer et al., 2007: 1788). Transformational leaders are, by definition, expected to show high levels of integrity, acting consistently with the values they convey, though there has been much theoretical discussion on the ethicality and unethicity of transformational leaders (Brown and Treviño, 2006). In contrast, fair leaders are just but they are not expected to display, for example, inspirational or intellectually stimulating transformational leadership behaviours, nor are they assumed to be respected and admired the way transformational leaders are. In essence, there is more to transformational leadership than fairness. In terms of the JD-R model, followers of transformational leaders are provided with more work engagement stimulating resources inherent in leadership compared to followers of leaders that demonstrate only fair behaviours.

**Hypothesis 1.** Transformational leadership is positively related to work engagement after controlling for fair leadership.

The role of leadership with regard to employee ill-being may differ from its role in positive well-being. As stated, the JD-R model posits that job demands are dominant in comparison to a lack of resources in the health impairment process. In the present study, we propose that a lack of fair leadership implies a breach of expectations in a very basic leadership dimension, justice, constituting a job demand for the subordinates. More specifically, injustice from the supervisor is best conceived as a hindrance type of a demand. Hindrance demands hinder goal attainment and potentially thwart personal growth and development, and due to their frustrating character, they are expected to trigger negative emotions (Crawford, LePine and Rich, 2010). As opposed to challenge demands, hindrance demands provide no potential future gains, despite the effort invested in meeting the demand. Therefore, employees who perceive their leaders to show less than optimal levels of fairness should be more prone to develop exhaustion symptoms, above the effect of low level transformational leadership.

**Hypothesis 2.** Fair leadership is negatively related to exhaustion after controlling for transformational leadership.

#### ***The role of other job resources and demands in employee well-being***

Although a considerable number of studies have demonstrated the effect of various job demands and resources on employee burnout and work engagement (Bakker and Demerouti, 2007; for reviews, see Crawford et al., 2010; Halbesleben, 2010; Lee and Ashforth, 1996), studies on leadership and employee well-being have not typically focused on other job resources or demands. In statistical terms, this leads to the omitted variable bias (e.g. Kline, 2011) and, as a result, the unique role of leadership has remained unclear. In an attempt to set fair and transformational leadership in a broader context of central job demands and job resources, in the current study, we incorporate workload as a job demand, whereas autonomy and role clarity are included as job resources. These three work characteristics are all well-established as having an impact on employee well-being. For instance, research on burnout has shown that it is related to objectively and subjectively measured workload, role ambiguity and role conflict and a lack of autonomy (for reviews, see Schaufeli and Buunk, 1996; Lee and Ashforth, 1996).

Regarding job resources, autonomy, denoting the freedom to schedule one's work, make decisions and choose work methods, has had a central place in motivational work design approaches for several decades (Morgeson and Humphrey, 2006). Autonomy is one of the most important job-level aspects that fuel work engagement (Crawford et al., 2010; Halbesleben, 2010). Role clarity, in turn, refers to the extent to which employees are aware of their roles, responsibilities and related expectations

(Pejtersen et al., 2010). According to the JD-R model, these are important job resources that facilitate goal attainment and play a focal role especially in the motivational path by fostering work engagement.

Workload refers to the amount of work that has to be done in a certain time frame and its associated time pressure, constituting a job demand (Spector and Jex, 1998). This implies investment of energy on the part of the employee and sustained efforts to meet the job demands may deplete an individual's resources, especially when counterbalancing job resources are not present (Schaufeli and Bakker, 2004). Accordingly, the strong association between workload and exhaustion has been demonstrated by a meta-analysis (Lee and Ashforth, 1996). In terms of work engagement, however, a meta-analysis has indicated that workload (work overload) was not related to either vigour or dedication (Halbesleben, 2010).

In the present study, we expect that the impact of fair and transformational leadership on employee well-being is not redundant to work characteristics. Considering the constructs of transformational and fair leadership, the (assumed) impact leaders have on employee well-being should manifest itself above the constructs that aim to capture aspects of the work itself as perceived by the job incumbents. If the role of these leadership dimensions is redundant to well-established work characteristics, the relevance of specific leadership styles with respect to employee well-being could be questioned. For example, transformational leadership theory is essentially based on the idea that the leader conveys a higher purpose for the work and the followers adopt this commitment (Bass, 1985; Yukl, 1999). Consequently, if transformational leadership influences employee well-being, this should occur not only at the level of work characteristics, but also on a more psychological level, referring, for example, to enhanced meaningfulness (Arnold et al., 2007; Ghadi et al., 2013) and optimism (Tims et al., 2011) at work. Therefore, we expect that transformational leadership exerts a unique influence on work engagement. We do not present a hypothesis on the relationship between transformational leadership and exhaustion above job demands, as job demands are more influential in employee strain than are job resources (Bakker and Demerouti, 2007), including transformational leadership (Stordeur et al., 2001).

**Hypothesis 3.** Transformational leadership is positively related to work engagement after controlling for role clarity and autonomy.

Similarly, we expect that resources inherent in fair leadership that facilitate work engagement are not redundant to other resourceful aspects of work. Considering unfair leadership, it is conceived to be a very specific hindrance demand that decreases work engagement (Crawford et al., 2010) and contributes to employee ill-being independently of work characteristics.

**Hypothesis 4.** Fair leadership is positively related to work engagement after controlling for role clarity and autonomy.

**Hypothesis 5.** Fair leadership is negatively related to exhaustion after controlling for workload, role clarity, and autonomy.

## Methods

### *Participants and procedure*

This study is part of a larger research project entitled Rewarding and Sustainable Health-Promoting Leadership (Re-Su-Lead) that aims to shed new light on the link between leadership and employee well-being. The participants in the present cross-sectional study were public sector workers employed by four municipalities in Finland ( $N=333$ ). The data utilized in this study were collected in the late spring of 2012 at the second wave of longitudinal data collection in the larger project (see Perko, Kinnunen and Feldt, 2014; Perko, Kinnunen, Tolvanen and Feldt, 2016). Of the 333 participants in the second wave (T2), 262 had also participated in the first wave (T1) in the spring of 2011. Thus, 71 new participants entered the study at T2. The T2 sample was selected for the present study as the T1 sample did not include all the measures needed for the study purposes.

The data were collected through online or paper questionnaires that were accompanied by a cover letter stating that participation was voluntary and confidential. Thus, the respondents provided informed consent by participating in the study. The recipients were asked to assess work characteristics, a variety of leadership behaviours of their nearest superiors and their own well-being. Altogether, 922 questionnaires were sent to eligible employees and 333 properly completed questionnaires were returned, yielding an overall response rate of 33.1% (also non-respondents from T1 were re-invited to participate). The response rate was considerably higher (47.2%) among those who had participated in the study already at T1 (T1 response rate 62.5%). According to Baruch and Holtom (2008), the average response rate in organizational studies using individuals as the unit of analysis was 52.7 with a standard deviation of 20.4. Thus, the response rates of the current study are not uncommon. Attrition analyses reported previously (Perko et al., 2016) showed that those who continued participation at T2 did not markedly differ from those participants who dropped out from the study after T1. Compared to the eligible population in the organizational units at T2, women were overrepresented (76.8% vs. 87.1%) among the respondents in the sample used ( $\chi^2(1) = 19.53, p < .001$ ).

The participants worked in a variety of occupations, most often in child care (25.2%), teaching (18.9%), cleaning (16.5%), property maintenance (9.3%), catering (8.7%), nursing (7.5%) or other (13.9%). The mean age was 48.5 years ( $SD = 9.75$ ). With regard to level of attained education, half of the participants (50.8%) had upper secondary education (e.g. vocational school) or less, and the rest had either a bachelor's degree (22.8%) or equivalent, or at least a master's degree (21.1%). Average tenure under the current supervisor was 5.49 years ( $SD = 6.49$ ), ranging from 1 to 38 years (median = 3.0). Altogether, 65 identified leaders were rated by the employees and the average number of employees rating the same leader was 5.08. The majority of the leaders were in a supervisory position with only staff in a non-leading position reporting to them.

## Measures

### Leadership

*Transformational leadership* was assessed with the 7-item, one-dimensional Global Transformational Leadership Scale (e.g. “My immediate superior communicates a clear and positive vision of the future”) that was developed and validated by Carless et al. (2000). The responses were given on a scale from 1 (*to a very small extent*) to 5 (*to a very large extent*).

*Fair leadership* was assessed with five items that capture essential aspects of fairness in daily supervisory work (e.g., Elovainio et al., 2006; Kivimäki et al., 2005). Two of the items (“Does your immediate superior treat the workers fairly and equally?” and “Does your immediate superior distribute the work fairly and impartially?”) were derived from the QPS Nordic questionnaire (Dallner et al., 2000). These items were rated on a scale from 1 (*very seldom or never*) to 5 (*very often or always*). In addition, three statements from the four-item fairness subscale of the health-promoting leadership scale (Vincent, 2012) were used, two of which explicitly inquired unfair behaviours: “My immediate superior criticizes in an unfair way”, “. . . favours certain workers” and “. . . judges my performance justly and fairly”. The fourth item of the subscale concerned fair distribution of work, similar to the one we took from the QPS Nordic. The rating scale ranged from 1 (*strongly disagree*) to 5 (*strongly disagree*).

### Work characteristics

*Workload* was measured with the 5-item Quantitative Workload Inventory (Spector and Jex, 1998) that assesses the amount of work in terms of pace and volume (e.g. “How often does your job require you to work very fast?”). The items were scored from 1 (*very seldom or never*) to 5 (*very often or always*). *Autonomy* was assessed with four items on decision latitude (e.g. “I can plan my own work”) with respect to planning work, ways of doing work and choosing job assignments (Guest, Isaksson and De Witte, 2010). The rating scale ranged from 1 (*very seldom or never*) to 5 (*very often or always*). *Role clarity* was measured with the 3-item scale (e.g. “Does your work have clear objectives?”) from the Copenhagen Psychosocial Questionnaire (COPSOQ II, Pejtersen et al., 2010). The items were rated from 1 (*to a very small extent*) to 5 (*to a very large extent*).

### Employee well-being

*Work engagement* was assessed with six items from the abridged Utrecht Work Engagement Scale (UWES-9; Schaufeli, Bakker and Salanova, 2006), validated in Finland by Seppälä et al. (2009). Three of the items measured vigour (e.g. “At my work, I feel that I am bursting with energy”) and three measured dedication (e.g. “I am proud of the work that I do”). The items were rated on a scale from 0 (*never*) to 6 (*every day*). *Exhaustion* was measured by three items (e.g. “I feel burned out from my work”) from the Finnish version of the Maslach Burnout Inventory (Kalimo, Hakanen and Toppinen-Tanner, 2006; Maslach, Jackson and Leiter, 1996). The rating scale ranged from 0 (*never*) to 6 (*every day*).

## Statistical analyses

The analyses were performed utilizing structural equation modelling (SEM) with latent variables. We used Mplus software version 7.3 (Muthén and Muthén, 1998–2012) with MLR (maximum likelihood estimation with robust standard errors). Overall, consistent with the hypotheses, the constructed regression models aimed to indicate whether a certain leadership variable predicted employee well-being when the contribution of other variable(s) was taken into account. In order to differentiate the unique contribution of highly correlating latent factors, particularly those concerning transformational and fair leadership, we employed the Cholesky decomposition (see, de Jong, 1999, for details). In SEM context using latent variables, it is possible to overcome the problem of multicollinearity through the Cholesky approach and conduct an analysis similar to fixed-order regression analysis, i.e. enter the predictors in a pre-specified order (de Jong, 1999). For example, when investigating the unique role of fair leadership while controlling for transformational leadership, well-being was regressed on the two Cholesky factors that partitioned the variance of the latent leadership variables. The Cholesky factor, which was introduced last into the regression model, indicated the remaining unique contribution of fair leadership. To separate the unique contribution of transformational leadership, the leadership variables were entered into the regression model in an opposite order. The models involving work characteristics were constructed in a similar way. The approach of initially analysing only leadership variables (without other job demands and job resources) allowed us to ascertain the largest possible effect of the leadership dimension on well-being.

Due to the clustered data (employees were nested in work units rating a shared leader), the analysis option in Mplus for a complex sample was used. While modelling variables on a single level, this analytical approach corrects standard errors and the chi-square test of model fit that are affected by non-independence of observations (Muthén and Muthén, 1998–2012). Consequently, it yields more reliable *p*-values for statistical significance. We used one-tailed tests for *p*-values in the regression analyses.

Multiple criteria were used to assess model fit: the  $\chi^2$ -test of model fit, RMSEA (root mean square error of approximation), standardized root mean square residual (SRMR), comparative fit index (CFI) and Tucker Lewis index (TLI). Generally, a non-significant  $\chi^2$ -test result indicates good model fit. However, the  $\chi^2$ -test has some limitations, such as the influence of sample size, which often make significant *p*-values less informative (e.g. West, Taylor and Wu, 2012). However, the ratio of  $\chi^2$ /df should be as small as possible and as a rule of thumb, it is  $< 2$  for the model to be considered good. Although universal cut-off values are debatable, the following guidelines were used as indicative of good model fit: values of RMSEA  $< .06$ , SRMR  $< .08$ , CFI and TLI  $> .95$  (Hu and Bentler, 1999).

## Results

### Preliminary analyses

**Measurement model.** We started the analysis with a measurement model comprising all seven study variables (leadership, work characteristics and well-being). The observed variables (scale items) were set to load only on their respective factors and the factors were allowed to correlate (Anderson and Gerbing, 1988). Considering the criteria for model fit provided above, the overall measurement model provided acceptable fit with the data [ $\chi^2 = 927.28$  (472),  $p < .001$ , RMSEA = .054, CFI = .922, TLI = .913, SRMR = .059]. In this model, two pairs of error covariances were released to attain acceptable model fit, these being between two work engagement (dedication) items (“My job inspires me” and “I am enthusiastic about my job”) and two workload items (“How often does your job require you to work very hard?” and “How often do you have to do more work than you can do well?”). A discrepancy between the measurement model and the data was observed for which the modification indices indicated remedy by allowing the fair leadership item, “My immediate superior judges my performance justly and fairly” to load on the transformational leadership factor. However, allowing the cross-loading conflicted with our study aims and the item loaded reasonably strongly on the fair leadership factor (standardized loading of .76  $p < .001$ ). Therefore, the item was kept loading only on the fair leadership factor. In order to adequately fulfil the purpose of the study in spite of the variance of transformational leadership related to this item, this problem was taken into account in the subsequent regression analyses.

Standardized loadings of the leadership factors, well-being factors and factors of work characteristics ranged from .69 to .91, from .63 to .90 and from .63 to .82, respectively ( $p < .001$  for all). An exception was the transformational leadership item “My immediate superior is clear about his/her values and practices what he/she preaches”, which showed a lower loading of .36 ( $p < .001$ ). However, we decided not to modify the previously validated measure of transformational leadership (Carless et al., 2000). Correlations of latent factors, mean values of corresponding sum scores and Cronbach alphas are presented in **Table 1**.

	M	SD	1	2	3	4	5	6	7
1 Transform. leadership	3.36	0.78	.90						
2 Fair leadership	3.77	0.90	.81***	.88					
3 Work engagement	4.87	1.00	.30***	.27**	.92				
4 Exhaustion	2.11	1.33	-.29***	-.32***	-.35***	.82			
5 Workload	3.63	0.62	-.09	-.07	.00	.42***	.83		
6 Autonomy	3.72	0.77	.19**	.10	.36***	-.12	.07	.81	
7 Role clarity	4.11	0.63	.37***	.29***	.48***	-.10	.19	.47***	.78

**Table 1:** Mean values and standard deviations of study variables (sum scores) and correlations of latent factors. Cronbach’s alphas are presented on the diagonal.

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

**Discriminant validity.** Next, we tested whether the highly correlating constructs of transformational and fair leadership ( $r = .81$ ,  $p < .001$  for latent variables) could be considered as separate from each other. The chi-square difference between the one-factor model (the observed variables of the two leadership constructs were set to load on the same factor) and the two-factor model (they were set to load on two separate factors which were allowed to correlate) was tested with the scaled chi-square difference test. The two-factor model was significantly better in fit than the one-factor model thereby supporting for the distinct nature of the constructs [ $\Delta \chi^2(1) = 33.87$ ,  $p < .001$ ].

**Assessing the implications of shared leaders.** As the employees were clustered around the leaders, we examined the extent that the focal constructs of leadership and well-being should be conceived as referring to group-level phenomena. Concerning leadership, this pertains to the question on agreement, that is, to what extent the perceptions of leadership are shared within groups of employees that rate the same target leader. For this purpose, we calculated intraclass correlations (ICC) for the latent variables. The ICCs were .32,  $p < .001$ , for transformational leadership and .21,  $p < .001$ , for fair leadership, indicating that group membership explains 32% and 21% of the variance in transformational and fair leadership, respectively. These values reveal that a shared leader indeed unifies the ratings to a considerable extent. Regarding well-being, the ICCs for work engagement and exhaustion were .12,  $p = .092$  and .06,  $p = .125$ , respectively. Concerning both well-being constructs, estimates for group-level variance were also found to be non-significant. On this basis, we concluded that well-being was mainly an individual level phenomenon, while group-level perspective was more relevant with regard to leadership. To sum up, the intraclass correlations demonstrated non-independence in the data and, thereby, the need for the corrections (complex sample approach in Mplus).

### Comparing the effects of transformational and fair leadership

The results of the four Cholesky regression models that tested the study hypotheses with latent variables are presented in **Table 2**. **Table 2** also shows the goodness-of-fit statistics for all the models. In general, the models



Independent variables	Work engagement			Exhaustion			$\chi^2$ (df)	p	RMSEA	CFI	TLI	SRMR
	$\beta$	p	$\Delta R^2$	$\beta$	p	$\Delta R^2$						
<i>Model 1</i>												
1 Fair leadership	.25	<.001	.06	-.31	<.001	.10	356.23 (179)	<.001	.055	.954	.946	.050
2 Item: Fair performance evaluation	.16	.006	.03	-.07	.206	.00						
3 Transformational leadership	.12	.064	.01	-.04	.288	.00						
<i>Model 2</i>												
1 Transformational leadership	.31	<.001	.09	-.29	<.001	.09	338.72 (179)	<.001	.052	.958	.951	.052
2 Fair leadership	.03	.363	.00	-.15	.038	.02						
<i>Model 3</i>												
1 Role clarity	.48	<.001	.23	-.10	.110	.01	633.99 (334)	<.001	.052	.934	.925	.060
2 Autonomy	.16	.019	.02	-.09	.165	.01						
3 Workload	–	–	–	.42	<.001	.17						
4 Transformational leadership	.12	.038	.02	-.19	<.001	.04						
<i>Model 4</i>												
1 Role clarity	.48	<.001	.23	-.10	.099	.01	574.07 (283)	<.001	.056	.930	.919	.063
2 Autonomy	.16	.021	.02	-.09	.173	.01						
3 Workload	–	–	–	.42	<.001	.18						
4 Fair leadership	.13	.019	.02	-.25	<.001	.06						

**Table 2:** Standardized regression coefficients and model fit statistics from a Cholesky regression analysis using latent variables: work engagement and exhaustion explained by leadership and work characteristics.

*Note.* The numbers preceding the independent variables indicate the order in which the independent variables were entered into the regression analysis. One-tailed tests were used for p-values.

provided a good fit with the data, although the models without work characteristics were somewhat better in fit than the models including work characteristics. For all the models, the ratio of  $\chi^2/df$  remained < 2 and RMSEA < .06.

The *first* regression model investigated the unique contribution of transformational leadership on work engagement and exhaustion while controlling for fair leadership. In order to appropriately address the hypothesis with the presence of the problematic fair leadership item on performance evaluation that was mentioned in connection with the measurement model, we formed an additional Cholesky component just for this item. This approach allowed us to analyse the unique variance of transformational leadership that is independent of the fair leadership factor and also of the information contained in that specific fair leadership item. Conceptually, this means that we considered fair performance evaluation to reflect only fair leadership. As seen in **Table 2**, fair leadership alone significantly predicted both work engagement ( $\beta = .25, p < .001$ ) and exhaustion ( $\beta = .31, p < .001$ ). Regarding the unique effects, transformational leadership did not account for additional variance either in work engagement or exhaustion when fair leadership was controlled for. Thus, Hypothesis 1 was not supported.

The *second* model addressed the unique contribution of fair leadership while controlling for transformational leadership. In order to control for all variance related to transformational leadership, consistent with the study aims, the cross-loading problem of the fair performance evaluation item was resolved by setting all the fair leadership items to load directly on the first Cholesky component. The results from the regression analysis showed that transformational leadership alone predicted both work engagement ( $\beta = .31, p < .001$ ) and exhaustion ( $\beta = -.29, p < .001$ ). In addition, fair leadership accounted for unique variance in exhaustion while transformational leadership was controlled for ( $\beta = -.15, p = .038$ ) and contributed to an increase of 2% in the explanation rate. Hence, Hypothesis 2 gained support. It can be seen from **Table 2** that without other predictors, leadership explained 9–10% of the variance in well-being.

***The role of transformational and fair leadership in the presence of work characteristics***

The subsequent regression models investigated whether transformational leadership (*third* model) and fair leadership (*fourth* model) related significantly to work engagement and exhaustion beyond the effect of role clarity,

autonomy and (only for exhaustion) workload (Table 2). Accordingly, four Cholesky components were specified and the one that was entered last into the analysis comprised the unique variance of the leadership variable in question.

The results showed, first, that transformational leadership retained a unique relationship to work engagement over and above the effect of role clarity and autonomy ( $\beta = .12, p = .038$ ), supporting Hypothesis 3. An additional 2% of variance in work engagement was explained by transformational leadership. Second, concerning fair leadership independent from work characteristics, the results revealed a significant relationship between fair leadership and work engagement ( $\beta = .13, p = .019$ ), yielding a 2% increase in the explanation rate. Thus, Hypothesis 4 was supported. Third, fair leadership accounted for additional variance in exhaustion ( $\beta = -.25, p < .001$ ), consistent with Hypothesis 5. Fair leadership contributed to a 6% improvement in the explained variance of exhaustion after workload. Unexpectedly, role clarity and autonomy were not significantly related to exhaustion. In general, however, the role of work characteristics was considerably more prominent than that of leadership, as, for example, role clarity explained 23% of the variance in work engagement and workload explained 17–18% of the variance in exhaustion. Despite this, the results suggest that the impact of leadership on well-being is not redundant to other job resources and demands. Taken together, the unique (i.e. independent from the analysed work characteristics) contribution of leadership appears to be 2–6% of the variance in well-being.

## Discussion

During the past ten to fifteen years, occupational health psychology has shown a growing interest in transformational leadership (Arnold and Connelly, 2013; Skakon et al., 2010), potentially the most influential theory in leadership research to date (Judge and Piccolo, 2004). While in leadership research the added value of transformational leadership has been contrasted with that of other leadership concepts (Judge and Piccolo, 2004), in occupational health psychology this task has remained unexplored. Consequently, the overarching aim of the current study was to investigate the *unique* relevance of transformational and fair leadership for employee well-being. The results revealed, first, that contrary to our expectations, transformational leadership did not show incremental validity over fair leadership in relation to work engagement (vigour and dedication). In other words, our results demonstrated that fair leadership enhanced work engagement to the same degree as did transformational leadership. Second, consistent with the hypothesis, (un)fair leadership accounted for incremental variance in exhaustion, beyond the effect of transformational leadership. Third, both transformational and fair leadership showed relationships with well-being that were independent of work characteristics, thereby supporting the hypotheses. The results are discussed in more detail in the following.

## Theoretical implications

Taken together, the results of this study suggest that transformational leadership is redundant to fair leadership when employee well-being is the criterion. Concerning positive well-being, fair leadership explained work engagement equally well, thereby leaving no additional variance for transformational leadership to explain. Thus, our results concur with the findings of Hansen et al. (2014) and show that fair leadership also facilitates energy and dedication at work. From the point of view of subordinates, being able to trust that the organizational authorities treat employees respectfully and in an unbiased way is essential in order to feel engaged at work (e.g. Kivimäki et al., 2005). Justice behaviours can be seen to foster trust (Colquitt et al., 2013) and potentially also a healthy feeling of self-worth among employees (Ford and Huang, 2014).

However, fair leadership appears more important than transformational leadership in terms of leadership behaviours that help to impede employee well-being from deteriorating. The finding that fair leadership demonstrated incremental validity in relation to exhaustion corroborates the notion of an important difference between low levels of transformational and low levels of fair leadership. Lack of fairness implies unfairness, which can be conceived to drain employees' energy reserves and contribute to health impairment in a way that is characteristic for hindrance demands: strain results, with no gains in sight (Crawford et al., 2010). Coping with unfair leadership requires additional effort and consumes energy, but no amount of effort will result in a rewarding situation, which is characteristic of hindrance demands. This is likely to evoke negative affect, frustration, decreased internal motivation, and potentially withdrawal behaviour on the part of the employee (Crawford et al., 2010), all consequences that conceivably contribute to exhaustion.

In regard to the JD-R model, the result on the unique contribution of (un)fair leadership to employee exhaustion supports the dominant role of job demands, in comparison to the lack of resources, in the health-impairment process as outlined in the JD-R model (Bakker and Demerouti, 2007; Demerouti et al., 2001; Schaufeli and Bakker, 2004). On a more general level, this is consistent with the COR theory's statement that resource loss is the primary factor in stress reactions (Hobfoll, 2001). Hindrance demands, in particular, are compatible with the notion of resource loss, because hindrance demands, by definition, require sustained effort and drain energy without engendering experiences of resource gain, as challenge demands do.

Concerning the unique role of leadership when controlling for work characteristics, both transformational and fair leadership were found to fuel work engagement, independent of the job resources of autonomy and role clarity. The relationships were of similar strength for both leadership behaviours, yielding a conclusion that leadership explains about 2% incremental variance in work engagement. Moreover, (un)fair leadership retained a significant relationship with exhaustion when work characteristics were controlled for, consistent with our hypothesis (we did not present a hypothesis on an independent relationship

between transformational leadership and exhaustion). In support of the complementary unique role of (un)fair leadership in exhaustion, (un)fair leadership explained an additional 6% of variance in exhaustion after the share of workload (18%) had been partialled out. Thus, the unique explanatory role of leadership was found to be 2–6% of the variance in well-being, being highest in the relationship between (un)fair leadership and exhaustion.

Given that transformational and fair leadership explained work engagement equally well, our results seem to lend support to a more general role of supervisors that is independent from other job resources. The independent role of leadership was expected as there are many facets in supervisory leadership that are certainly not redundant to work characteristics but relate to the social exchange in the relationship between a leader and a follower, such as trust and support in many forms (e.g., Colquitt et al., 2013). While the practical relevance of the 2% explanation rate may appear negligible, we do not posit that the whole significance of leadership would be redundant to this explanation rate. Part of the influence leaders exert on employee well-being is likely to reside in work characteristics such as role clarity, as supervisors are in key positions to clarify the main tasks and related expectations to their employees. Accordingly, psychologically modifiable work characteristics that may be seen as job resources have been investigated as mediators between transformational leadership and employee motivation (Piccolo and Colquitt, 2006) and well-being (e.g., Nielsen et al., 2008).

A large overlap between the constructs of transformational and fair leadership was expected and ascertained in this study. Although the theoretical distinction between transformational and fair leadership is obvious, and the confirmatory factor analysis indicated a conceptual difference, their empirical overlap ( $r = .81$ ) was so high that it can be seen to threaten the practical meaning of the constructs. This relative discrepancy between theoretical and empirical distinctiveness inevitably draws attention to the measurement of the constructs. One possible explanation for the empirical overlap relates to affective issues in leadership ratings (Rowold and Borgman, 2014). In particular, the transformational leadership items are rather affective, clearly desirable, and to some extent abstract in content. Instead of engaging in detailed analysis of the behavioural characteristics of the leader, affect experienced towards the leader may be used as a heuristic base for the evaluation (Rowold and Borgman, 2014; Schwarz, 1990). Consistent with that, interpersonal affect (liking) has indeed been shown to play a considerable role in ratings of transformational leadership (Brown and Keeping, 2005). If interpersonal affect is the key to employee ratings of leadership, as the results of a recent study indicate (Rowold and Bergman, 2014), specific leadership styles in relation to employee well-being become empirically less salient, consistent with the findings of the current study.

Whereas one might argue that ratings of fair leadership are also susceptible to the influence of interpersonal affect, the fairness paradigm has, however, important strengths. First, it presents a fewer amount of theoretical propositions than the transformational leadership framework

in explaining the impact on employee health and well-being, that is, it is more parsimonious. Second, the effects of fairness on employee health have been supported by findings from stronger study designs than the effects of transformational leadership. The evidence for fairness effects derives from longitudinal epidemiological studies measuring objective health outcomes (e.g. Elovainio et al., 2006; Kivimäki et al., 2003, Kivimäki et al., 2005), intervention studies (Greenberg, 1993; Skarlicki and Latham, 1997) and there are also studies demonstrating group-level effects on well-being (Moliner et al., 2005; Way et al., 2014). In contrast, the impact of transformational leadership on employee well-being has thus far been supported in cross-sectional questionnaire studies conducted at the individual level of analysis.

The literature to date suggests that transformational leadership should be conceived as an especially influential tool to promote employee well-being. The results of the present study cast some doubt on the specific effects transformational leadership is supposed to exert on employee well-being. In this study, no additive effects on well-being were found when transformational leadership was compared with fair leadership. Consequently, research on leadership and employee well-being would benefit from rethinking the position of transformational leadership in the context of other resourceful, potentially more primary aspects of leadership, such as fairness.

It is worth noting that in leadership-employee well-being studies, immediate supervisors who are typically low in the organizational hierarchy are rated. Transformational leadership theory was developed largely based on top-level executives, yet uncritically adopted in research on immediate, nearby-leaders (Alimo-Metcalfe, 2013; Bryman, 1992). Obviously, the supervisors next to employees, particularly if they are supervisors in the lower levels of organizational hierarchy, are not in a position to create visions for the future of the organization and exert influence through strategic work (e.g., Bryman, 1992). Fair behaviours, instead, can be plausibly conducted in any level of the organization and the values displayed by fair leadership become evident in the questionnaire items inquired from employees. As the present study focused on employee well-being as the sole criterion for the impact of leadership, it is beyond the aims of this study to evaluate the overall validity of the transformational leadership construct, which has also received harsh critique (van Knippenberg and Sitkin, 2013; Yukl, 1999).

Our findings contribute to the research on leadership and employee well-being in several respects. First, in our investigation on the role of immediate supervisors in employee well-being, we integrated organizational justice literature and research on transformational leadership, both of which have addressed employee well-being issues. Second, we determined that about 20–30% of the variation in the leadership variables is explained by the fact that employees within the work units rate the same leader. Thus, who is being rated matters to leadership perceptions. Accordingly, we took statistically into account the clustering effects in our sample. It is important to note that if employees rate the same leader and the resulting

non-independence of observations is ignored, the results are likely to overestimate the leadership effects due to underestimation of standard errors (e.g. Julian, 2001).

### ***Study limitations and recommendations for future studies***

Aside from its strengths, this study also has limitations that should be noted when assessing the results. First, we used shortened scales. Exhaustion was only included as the core dimension of burnout in the study and the one-dimensional Global Transformational Leadership measure was used instead of the longer Multifactor Leadership Questionnaire. It is in principle possible that a multidimensional measure of transformational leadership would show stronger relationships with work engagement than the one-dimensional measure used in this study. However, concerning ill-being, the correlations between transformational leadership and exhaustion seem to be similar across the facets of transformational leadership (Stordeur et al., 2001). Moreover, it should be noted that three of the five fair leadership items used in this study were positively formulated, so we measured fair leadership more than unfair leadership. It would be useful for future studies to develop measures on unfair leadership and ascertain the implications and differences in inquiring fair or unfair leadership.

Second, a limited number of work characteristics were examined in this study and, as a result, the omitted variable problem can be considered only partially solved. Third, generalizability of our results is restricted by sample characteristics, particularly by the fact that the sample consisted mainly of women. In addition, due to different occupations and working contexts, large variation in the tenure with the leader was observed in our sample. Similarly, considerable variation is likely in regards to the frequency of interaction and other formal characteristics of the relationship between the supervisors and subordinates. Our results need to be replicated in samples involving more men and more homogenous contact modalities between leaders and employees.

Finally, we acknowledge the limitations of a cross-sectional self-report study with respect to causality: The relationships may be inflated because of the same source bias (Podsakoff, MacKenzie, Lee and Podsakoff, 2003). However, obtaining measures of leadership and employee well-being from different sources is not feasible when the study objective relates to subjective experiences: it is ultimately the subjective experience an employee has of the leadership behaviours that matters for well-being. Moreover, three points that partially mitigate this limitation can be discerned. First, several of the recommendations for this type of study by Podsakoff et al. (2003) were applied: different scale endpoints and verbal anchors were used for predictor and criterion measures; the items were carefully constructed as they were either parts of well-established measures or had been repeatedly used in previous studies; the participants were assured that there are no right or wrong answers and that their answers are confidential. Second, we were able to demonstrate the implications of shared leaders for employee ratings on leadership and well-being. Paradoxically, as there was no

group-level variance in well-being while there was in leadership ratings, it can be concluded that leadership ratings are not directly a function of well-being.

Third, and most importantly, the current data is compatible with the purpose of this study, that is, to disentangle the unique variance explained by each leadership construct. With this specific objective, a longitudinal study would have provided little additional value. This is particularly so because currently there is no appropriate knowledge concerning the time frame in which the effect of leadership on employee well-being should occur. However, this knowledge would be crucial for correct inferences from a longitudinal study (Kelloway and Francis, 2013; Mitchell and James, 2001; Podsakoff et al., 2003). Worth noting is that the time frame should be measured from the point in time when the employee begins to work with a certain leader, which therefore should coincide with the start of a study period. In this state of affairs, with this particular study objective, we contend that it is justifiable to examine cross-sectional data and thereby the maximum proportion of variance explained by leadership.

Concerning future studies, further comparisons between various aspects of leadership and their unique relationships with employee health and well-being would be beneficial. In this regard, future studies may further elucidate the role of interpersonal affect, affective consequences of injustice, and other affective experiences in relationships between leaders and employees (Colquitt et al., 2013; Ford and Huang, 2014; Rowold and Borgmann, 2014). For this purpose, experience sampling methodology would be one useful but thus far underutilized alternative (Sonnentag, Binnewies and Ohly, 2013). Researches may focus on interactions and affective events between leaders and followers to better understand the sequences of reactions, and to illuminate how the supervisor–subordinate relationships evolve (see Meier and Gross, 2015, for an interaction record study).

### ***Conclusions and practical implications***

The results of this study demonstrated that the effects of transformational leadership are redundant to fair leadership in relation to employee well-being. On this basis, the added value of transformational leadership to employee well-being can be questioned. (Un)fair leadership, however, showed an independent relationship with exhaustion, beyond the effect of low level transformational leadership. Both fair and transformational leadership showed independent relationships with work engagement and exhaustion beyond work characteristics, thereby supporting the specific role of supervisors in employee well-being. Based on these results, we encourage leaders to pay attention to fair, equal, and respectful treatment of employees, especially with regard to performance evaluation and distribution of work tasks. Leaders do not need to be concerned if they experience difficulty in adopting transformational leadership behaviours as long as they are fair. In addition, to facilitate work engagement, it is crucial for employees to be aware of the expectations and areas of responsibility regarding their work. Exhaustion among employees, in turn, is best prevented by restricting workload and being fair towards employees.

## Funding Statement

The research project “Rewarding and Sustainable Health-Promoting Leadership (Re-Su-Lead)” was financially supported by the Finnish Work Environment Fund under Grant 109398. Work by the first author was supported by the Finnish Work Environment Fund and the Emil Aaltonen Foundation.

## Competing Interests

UK is a member of the editorial board for the Scandinavian Journal of Work and Organizational Psychology, which is on a voluntary basis. All other authors have no competing interests.

## References

- Alimo-Metcalfe, B.** (2013). A critical review of leadership theory. In Leonard, H. S., Lewis, R., Freedman, A. M., & Passmore, J. (Eds.), *The Wiley-Blackwell handbook of the psychology of leadership, change, and organizational development*. Chichester, UK: John Wiley and Sons, Ltd., pp. 15–47. DOI: <http://dx.doi.org/10.1002/9781118326404.ch2>
- Arnold, K. A., & Connelly, C. E.** (2013). Transformational leadership and psychological well-being: Effects on followers and leaders. In Leonard, H. S., Lewis, R., Freedman, A. M., & Passmore, J. (Eds.), *The Wiley-Blackwell handbook of the psychology of leadership, change, and organizational development*. Chichester, UK: John Wiley and Sons, Ltd., pp. 175–194. DOI: <http://dx.doi.org/10.1002/9781118326404.ch9>
- 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. DOI: <http://dx.doi.org/10.1037/1076-8998.12.3.193>
- Bakker, A. B., & Demerouti, E.** (2007). The Job Demands-Resources Model: State of the art. *Journal of Managerial Psychology, 22*(3), 309–328. DOI: <http://dx.doi.org/10.1108/02683940710733115>
- Baruch, Y., & Holtom, B.** (2008). Survey response rate levels and trends in organizational research. *Human Relations, 61*(8), 1139–1160. DOI: <http://dx.doi.org/10.1177/0018726708094863>
- Bass, B. M.** (1985). *Leadership and performance beyond expectations*. New York, NY: Free Press.
- Bono, J. E., & Judge, T. A.** (2003). Self-concordance at work: Toward understanding the motivational effects of transformational leaders. *The Academy of Management Journal, 46*(5), 554–571. DOI: <http://dx.doi.org/10.2307/30040649>
- Brown, D. J., & Keeping, L. M.** (2005). Elaborating the construct of transformational leadership: The role of affect. *The Leadership Quarterly, 16*(2), 245–272. DOI: <http://dx.doi.org/10.1016/j.leaqua.2005.01.003>
- Brown, M. E., & Treviño, L. K.** (2006). Ethical leadership: A review and future directions. *The Leadership Quarterly, 17*(6), 595–616. DOI: <http://dx.doi.org/10.1016/j.leaqua.2006.10.004>
- Bryman, A.** (1992). *Charisma and leadership in organizations*. London: Sage.
- Carless, S. A., Wearing, A. J., & Mann, L.** (2000). A short measure of transformational leadership. *Journal of Business and Psychology, 14*(3), 389–405. DOI: <http://dx.doi.org/10.1023/A:1022991115523>
- Colquitt, J. A., Scott, B. A., Rodell, J. B., Long, D. M., Zapata, C. P., Conlon, D. E., & Wesson, M. J.** (2013). Justice at the millennium, a decade later: A meta-analytic test of social exchange and affect-based perspectives. *Journal of Applied Psychology, 98*(2), 199–236. DOI: <http://dx.doi.org/10.1037/a0031757>
- Crawford, E. R., Lepine, J. A., & Rich, B. L.** (2010). Linking job demands and resources to employee engagement and burnout: A theoretical extension and meta-analytic test. *Journal of Applied Psychology, 95*(5), 834–848. DOI: <http://dx.doi.org/10.1037/a0019364>
- Dallner, M., Elo, A., Gamberale, F., Hottinen, V., Knardahl, S., Lindström, K., Skogstad, A., & Ørhede, E.** (2000). *Validation of the General Nordic Questionnaire (QPSNordic) for psychological and social factors at work*. Copenhagen: Nordic Council of Ministers. Nord 2000: 12.
- De Cremer, D., van Dijke, M., & Bos, A. E. R.** (2007). When leaders are seen as transformational: The effects of organizational justice. *Journal of Applied Social Psychology, 37*(8), 1797–1816. DOI: <http://dx.doi.org/10.1111/j.1559-1816.2007.00238.x>
- de Jong, P. F.** (1999). Hierarchical regression analysis in structural equation modeling. *Structural Equation Modeling: A Multidisciplinary Journal, 6*(2), 198–211. DOI: <http://dx.doi.org/10.1080/10705519909540128>
- Demerouti, E., Bakker, A. B., Nachreiner, F., & Schaufeli, W. B.** (2001). The job demands-resources model of burnout. *Journal of Applied Psychology, 86*(3), 499–512. DOI: <http://dx.doi.org/10.1037/0021-9010.86.3.499>
- Elovainio, M., Leino-Arjas, P., Vahtera, J., & Kivimäki, M.** (2006). Justice at work and cardiovascular mortality: A prospective cohort study. *Journal of Psychosomatic Research, 61*(2), 271–274. DOI: <http://dx.doi.org/10.1016/j.jpsychores.2006.02.018>
- Ford, M. T., & Huang, J.** (2014). The health consequences of organizational injustice: Why do they exist and what can be done? In Leka, S., & Sinclair, R. R. (Eds.), *Contemporary Occupational Health Psychology*, Vol. 3. Chichester, UK: John Wiley and Sons, Ltd., pp. 35–50. DOI: <http://dx.doi.org/10.1002/9781118713860.ch3>
- Ghadi, M. Y., Fernando, M., & Caputi, P.** (2013). Transformational leadership and work engagement: The mediating effect of meaning in work. *Leadership and Organization Development Journal, 34*(6), 532–550. DOI: <http://dx.doi.org/10.1108/LODJ-10-2011-0110>
- González-Romá, V., Schaufeli, W. B., Bakker, A. B., & Lloret, S.** (2006). Burnout and work engagement: Independent factors or opposite poles? *Journal of*

- Vocational Behavior*, 68(1), 165–174. DOI: <http://dx.doi.org/10.1016/j.jvb.2005.01.003>
- Greenberg, J.** (1993). The social side of fairness: Interpersonal and informational classes of organizational justice. In Cropanzano, R. (Ed.), *Justice in the workplace: Approaching fairness in human resource management*. Hillsdale, NJ: Erlbaum, pp. 79–103.
- Greenberg, J.** (2006). Losing sleep over organizational injustice: Attenuating insomniac reactions to underpayment inequity with supervisory training in interactional justice. *Journal of Applied Psychology*, 91(1), 58–69. DOI: <http://dx.doi.org/10.1037/0021-9010.91.1.58>
- Guest, D., Isaksson, K., & De Witte, H.** (2010). *Employment contracts, psychological contracts and worker well-being: An international study*. Oxford: Oxford University Press. DOI: <http://dx.doi.org/10.1093/acprof:oso/9780199542697.001.0001>
- Halbesleben, J. R. B.** (2010). A meta-analysis of work engagement: Relationships with burnout, demands, resources, and consequences. In Bakker, A. B., & Leiter, M. P. (Eds.), *Work engagement: A handbook of essential theory and research*. New York, NY: Psychology Press, pp. 102–117.
- Hansen, A., Byrne, Z., & Kiersch, C.** (2014). How interpersonal leadership relates to employee engagement. *Journal of Managerial Psychology*, 29(8), 953–972. DOI: <http://dx.doi.org/10.1108/JMP-11-2012-0343>
- Hetland, H., Sandal, G. M., & Johnsen, T. B.** (2007). Burnout in the information technology sector: Does leadership matter? *European Journal of Work and Organizational Psychology*, 16(1), 58–75. DOI: <http://dx.doi.org/10.1080/13594320601084558>
- Hobfoll, S. E.** (1989). Conservation of resources: A new attempt at conceptualizing stress. *American Psychologist*, 44(3), 513–524. DOI: <http://dx.doi.org/10.1037/0003-066X.44.3.513>
- Hobfoll, S. E.** (2001). The influence of culture, community, and the nested-self in the stress process: Advancing conservation of resources theory. *Applied Psychology: An International Review*, 50(3), 337–421. DOI: <http://dx.doi.org/10.1111/1464-0597.00062>
- Hu, L., & Bentler, P. M.** (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling: A Multidisciplinary Journal*, 6(1), 1–55. DOI: <http://dx.doi.org/10.1080/10705519909540118>
- Judge, T. A., & Piccolo, R. F.** (2004). Transformational and transactional leadership: A meta-analytic test of their relative validity. *Journal of Applied Psychology*, 89(5), 755–768. DOI: <http://dx.doi.org/10.1037/0021-9010.89.5.755>
- Julian, M. W.** (2001). The consequences of ignoring multilevel data structures in nonhierarchical covariance modeling. *Structural Equation Modeling: A Multidisciplinary Journal*, 8(3), 325–352. DOI: [http://dx.doi.org/10.1207/S15328007SEM0803\\_1](http://dx.doi.org/10.1207/S15328007SEM0803_1)
- Kalimo, R., Hakanen, J., & Toppinen-Tanner, S.** (2006). *Maslachin yleinen työuupumuksen arviointin menetelmä MBI-GS* [Finnish test manual for Maslach Burnout Inventory General Survey]. Helsinki: Finnish Institute of Occupational Health.
- Kanste, O., Kyngäs, H., & Nikkilä, J.** (2007). The relationship between multidimensional leadership and burnout among nursing staff. *Journal of Nursing Management*, 15(7), 731–739. DOI: <http://dx.doi.org/10.1111/j.1365-2934.2006.00741.x>
- Kelloway, E. K., & Francis, L.** (2013). Longitudinal research and data analysis. In Tetrick, L. E., Wang, M., & Sinclair, R. R. (Eds.), *Research methods in occupational health psychology: Measurement, design and data analysis*. New York, NY: Routledge, pp. 374–393.
- Kivimäki, M., Elovainio, M., Vahtera, J., & Ferrie, J. E.** (2003). Organisational justice and health of employees: Prospective cohort study. *Occupational and Environmental Medicine*, 60(1), 27–34. DOI: <http://dx.doi.org/10.1136/oem.60.1.27>
- Kivimäki, M., Ferrie, J.E., Brunner, E., Head, J., Shipley, M. J., Vahtera, J., & Marmot, M. G.** (2005). Justice at work decreases risk of coronary heart disease among employees: the Whitehall II Study. *Archives of Internal Medicine*, 165, 2245–2251. DOI: <http://dx.doi.org/10.1001/archinte.165.19.2245>
- Kline, R. B.** (2011). *Principles and practice of structural equation modeling* (3rd ed.). New York, NY: Guilford Press.
- Lee, R. T., & Ashforth, B. E.** (1996). A meta-analytic examination of the correlates of the three dimensions of job burnout. *Journal of Applied Psychology*, 81(2), 123–133. DOI: <http://dx.doi.org/10.1037/0021-9010.81.2.123>
- Liao, H., & Rupp, D. E.** (2005). Impact of justice climate and justice orientation on work outcomes: A cross-level multifoci framework. *Journal of Applied Psychology*, 90(2), 242–256. DOI: <http://dx.doi.org/10.1037/0021-9010.90.2.242>
- Lusa, S., Punakallio, A., Luukkonen, R., & Louhevaara, V.** (2006). Factors associated with changes in perceived strain at work among firefighters: a 3-year follow-up study. *International Archives of Occupational and Environmental Health*, 79(5), 419–426. DOI: <http://dx.doi.org/10.1007/s00420-005-0059-2>
- Maslach, C., Jackson, S. E., & Leiter, M. P.** (1996). *Maslach Burnout Inventory manual* (3rd ed.). Palo Alto, CA: Consulting Psychologists Press.
- Maslach, C., Schaufeli, W. B., & Leiter, M. P.** (2001). Job burnout. *Annual Review of Psychology*, 52(1), 397–422. DOI: <http://dx.doi.org/10.1146/annurev.psych.52.1.397>
- Meier, L. L., & Gross, S.** (2015). Episodes of incivility between subordinates and supervisors: Examining the role of self-control and time with an interaction-record diary study. *Journal of Organizational Behavior*, 36(8), 1096–1113. DOI: <http://dx.doi.org/10.1002/job.2013>
- Mitchell, T. R., & James, L. R.** (2001). Building better theory: Time and the specification of when things happen. *Academy of Management Review*, 26(4), 530–547. DOI: <http://dx.doi.org/10.5465/AMR.2001.5393889>

- Moliner, C., Martínez-Tur, V., Peiró, J. M., Ramos, J., & Cropanzano, R.** (2005). Relationships between organizational justice and burnout at the work-unit level. *International Journal of Stress Management*, *12*(2), 99–116. DOI: <http://dx.doi.org/10.1037/1072-5245.12.2.99>
- Moliner, C., Martínez-Tur, V., Ramos, J., Peiró, J. M., & Cropanzano, R.** (2008). Organizational justice and extrarole customer service: The mediating role of well-being at work. *European Journal of Work and Organizational Psychology*, *17*(3), 327–348. DOI: <http://dx.doi.org/10.1080/13594320701743616>
- Morgeson, F. P., & Humphrey, S. E.** (2006). The Work Design Questionnaire (WDQ): Developing and validating a comprehensive measure for assessing job design and the nature of work. *Journal of Applied Psychology*, *91*(6), 1321–1339. DOI: <http://dx.doi.org/10.1037/0021-9010.91.6.1321>
- Muthén, L. K., & Muthén, B. O.** (1998–2012). *Mplus user's guide* (7th ed.). Los Angeles, CA: Muthén and Muthén.
- Nielsen, K., Randall, R., Yarker, J., & Brenner, S.** (2008). The effects of transformational leadership on followers' perceived work characteristics and psychological well-being: A longitudinal study. *Work and Stress*, *22*(1), 16–32. DOI: <http://dx.doi.org/10.1080/02678370801979430>
- Pejtersen, J. H., Søndergård Kristensen, T., Borg, V., & Bjorner, J. B.** (2010). The second version of the Copenhagen Psychosocial Questionnaire. *Scandinavian Journal of Public Health*, *38*(3), 8–24. DOI: <http://dx.doi.org/10.1177/1403494809349858>
- Perko, K., Kinnunen, U., & Feldt, T.** (2014). Transformational leadership and depressive symptoms among employees: Mediating factors. *Leadership & Organization Development Journal*, *35*(4), 286–304. DOI: <http://dx.doi.org/10.1108/LODJ-07-2012-0082>
- Perko, K., Kinnunen, U., Tolvanen, A., & Feldt, T.** (2016). Investigating occupational well-being and leadership from a person-centred longitudinal approach: Congruence of well-being and perceived leadership. *European Journal of Work and Organizational Psychology*, *25*(1), 105–119. DOI: <http://dx.doi.org/10.1080/1359432X.2015.1011136>
- Piccolo, R. F., & Colquitt, J. A.** (2006). Transformational leadership and job behaviors: The mediating role of core job characteristics. *Academy of Management Journal*, *49*(2), 327–340. DOI: <http://dx.doi.org/10.5465/AMJ.2006.20786079>
- Podsakoff, P. M., MacKenzie, S. B., Lee, J., & 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. DOI: <http://dx.doi.org/10.1037/0021-9010.88.5.879>
- Robbins, J. M., Ford, M. T., & Tetrick, L. E.** (2012). Perceived unfairness and employee health: A meta-analytic integration. *Journal of Applied Psychology*, *97*(2), 235–272. DOI: <http://dx.doi.org/10.1037/a0025408>
- Rowold, J., & Borgmann, L.** (2014). Interpersonal affect and the assessment of and interrelationship between leadership constructs. *Leadership*, *10*(3), 308–325. DOI: <http://dx.doi.org/10.1177/1742715013486046>
- Schaufeli, W. B., & Bakker, A. B.** (2004). Job demands, job resources, and their relationship with burnout and engagement: A multi-sample study. *Journal of Organizational Behavior*, *25*(3), 293–315. DOI: <http://dx.doi.org/10.1002/job.248>
- Schaufeli, W. B., Bakker, A. B., & Salanova, M.** (2006). The measurement of work engagement with a short questionnaire. A cross-national study. *Educational and Psychological Measurement*, *66*(4), 701–716. DOI: <http://dx.doi.org/10.1177/0013164405282471>
- Schaufeli, W. B., & Buunk, B. P.** (1996). Professional burnout. In Schabracq, M. J., Winnubst, J. A. M., & Cooper, C. L. (Eds.). *Handbook of work and health psychology*. Chichester: John Wiley and Sons, Ltd., pp. 311–346.
- Schaufeli, W. B., Salanova, M., González-Romá, V., & Bakker, A. B.** (2002). The measurement of engagement and burnout: A two sample confirmatory factor analytic approach. *Journal of Happiness Studies*, *3*(1), 71–92. DOI: <http://dx.doi.org/10.1023/A:1015630930326>
- Schwarz, N.** (1990). Feelings as information: Informational and motivational functions of affective states. In Higgins, E. T., & Sorrentino, R. (Eds.). *Handbook of motivation and cognition: Foundations of social behavior*. New York, NY: Guilford Press, Vol. 2, pp. 527–561.
- Seppälä, P., Mauno, S., Feldt, T., Hakanen, J., Kinnunen, U., Tolvanen, A., & Schaufeli, W.** (2009). The construct validity of the Utrecht Work Engagement Scale: Multi-sample and longitudinal evidence. *Journal of Happiness Studies*, *10*(4), 459–481. DOI: <http://dx.doi.org/10.1007/s10902-008-9100-y>
- Skakon, J., Nielsen, K., Borg, V., & Guzman, J.** (2010). Are leaders' well-being, behaviours and style associated with the affective well-being of their employees? A systematic review of three decades of research. *Work and Stress*, *24*(2), 107–139. DOI: <http://dx.doi.org/10.1080/02678373.2010.495262>
- Skarlicki, D. P., & Latham, G. P.** (1997). Leadership training in organizational justice to increase citizenship behavior within a labor union: A replication. *Personnel Psychology*, *50*(3), 617–633. DOI: <http://dx.doi.org/10.1111/j.1744-6570.1997.tb00707.x>
- Sonnentag, S., Binnewies, C., & Ohly, S.** (2013). Event-sampling methods in occupational health psychology. In Tetrick, L. E., Wang, M., & Sinclair, R. R. (Eds.), *Research methods in occupational health psychology: Measurement, design and data analysis*. New York, NY: Routledge, pp. 208–228.
- Spector, P. E., & Jex, S. M.** (1998). Development of four self-report measures of job stressors and strain: Interpersonal Conflict at Work Scale, Organizational Constraints Scale, Quantitative Workload Inventory, and Physical Symptoms Inventory. *Journal of*

- Occupational Health Psychology*, 3(4), 356–367. DOI: <http://dx.doi.org/10.1037/1076-8998.3.4.356>
- Stordeur, S., D'Hoore, W., & Vandenberghe, C.** (2001). Leadership, organizational stress, and emotional exhaustion among hospital nursing staff. *Journal of Advanced Nursing*, 35(4), 533–542. DOI: <http://dx.doi.org/10.1046/j.1365-2648.2001.01885.x>
- Tims, M., Bakker, A. B., & Xanthopoulou, D.** (2011). Do transformational leaders enhance their followers' daily work engagement? *The Leadership Quarterly*, 22, 121–131. DOI: <http://dx.doi.org/10.1016/j.leaqua.2010.12.011>
- van Knippenberg, D., & Sitkin, S. B.** (2013). A critical assessment of charismatic—transformational leadership research: Back to the drawing board? *The Academy of Management Annals*, 7(1), 1–60. DOI: <http://dx.doi.org/10.1080/19416520.2013.759433>
- Vincent, S.** (2012). Analyseinstrument für gesundheits- und entwicklungsförderliches Führungsverhalten: Eine Validierungsstudie. [An instrument for the measurement of health and development promoting leadership behavior: A validation study.] *Zeitschrift für Arbeitswissenschaft*, 66(1), 38–57.
- Way, K. A., Jimmieson, N. L., & Bordia, P.** (2014). Supervisor conflict management, justice, and strain: Multilevel relationships. *Journal of Managerial Psychology*, 29(8), 1044–1063. DOI: <http://dx.doi.org/10.1108/JMP-04-2012-0120>
- West, S. G., Taylor, A. B., & Wu, W.** (2012). Model fit and model selection in structural equation modeling. In Hoyle, R. H. (Ed.), *Handbook of structural equation modeling*. New York, NY: Guilford Press, pp. 209–231.
- Yukl, G.** (1999). An evaluation of conceptual weaknesses in transformational and charismatic leadership theories. *The Leadership Quarterly*, 10(2), 285–305. DOI: [http://dx.doi.org/10.1016/S1048-9843\(99\)00013-2](http://dx.doi.org/10.1016/S1048-9843(99)00013-2)

**How to cite this article:** Perko, K., Kinnunen, U., Tolvanen, A., and Feldt, T. (2016). Back to Basics: The Relative Importance of Transformational and Fair Leadership for Employee Work Engagement and Exhaustion. *Scandinavian Journal of Work and Organizational Psychology*, 1(1): 6, 1–15, DOI: <http://dx.doi.org/10.16993/sjwop.8>

**Submitted:** 13 January 2016 **Accepted:** 26 May 2016 **Published:** 08 July 2016

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*Scandinavian Journal of Work and Organizational Psychology* is a peer-reviewed open access journal published by Stockholm University Press.

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