Processes through Which Transformational Leaders Affect Employee Psychological Health

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This study investigates the processes through which transformational leaders influence employee psychological health. The results indicate that employees' perceptions of justice of the organization and psychological empowerment mediate the positive relationship between transformational leadership and psychological health. This study supports the notion that transformational leadership influences individuals' perceptions of organizations, as well as individuals' perceptions of themselves, which ultimately has implications for individual well-being.

Key words: **transformational leadership, procedural justice, empowerment, psychological health, conservation of resources theory**
(JEL: I10, J24)

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[*]   Megan Walsh, Memorial University of Newfoundland, Faculty of Business Administration, St. John's, NL, Canada. E-mail: mmw281@mun.ca.

  Dr. Kathryne Dupré, Carleton University, Department of Psychology, Ottawa, ON, Canada. E.mail: kathryne.dupre@carleton.ca.

  Dr. Kara A. Arnold, Memorial University of Newfoundland, Faculty of Business Administration, St. John's, NL, Canada. E-mail: arnoldk@mun.ca.

Employee psychological health is of central importance for organizations, as promoting employee resilience and preventing stress-related illness ultimately reduces costs to organizations, such as turnover (Matteson & Ivancevich, 1987). Given the importance of employee psychological health, an extensive body of research has investigated its antecedents and outcomes (Sulsky & Smith, 2005). Over the past decade, it has been concluded that leadership is one of the most important factors to consider in relation to employees' psychological well-being (Kelloway & Barling, 2010). The style of transformational leadership, in particular, has been shown to have positive impacts on followers' psychological health in a variety of contexts (Bass & Riggio, 2006).

Less is known, however, about the specific processes through which transformational leadership influences employee well-being. Sivanathan, Arnold, Turner, and Barling (2004) have suggested that transformational leaders have an indirect impact on employees' psychological health, and research has begun to further uncover mediators of this relationship. We propose, using Conservation of Resources (COR) Theory (Hobfoll, 1989) as a theoretical framework, that transformational leaders impact employee well-being through enabling the creation of valued resources for followers (Clarke, Arnold, & Connelly, forthcoming). In the current study we examine the mediating roles of two positive resources: employees' perceptions of procedural justice of the organization and psychological empowerment. Van Knippenberg and Sitkin (2013) argue that there has been a lack of investigation into how transformational leadership has "a distinct influence on mediating processes and outcomes" (p.2), and our study contributes to filling this research gap. In the sections that follow we define transformational leadership and our theoretical framework in more detail, and will develop hypotheses based on COR theory and relevant empirical findings.

Transformational leadership

Transformational leadership involves the enactment of behaviours that inspire followers to perform "beyond expectations" (Bass, 1985). Four dimensions characterize it: idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration. Idealized influence takes place when leaders exhibit ethical behaviors, and develop trust and respect among those they lead. Inspirational motivation occurs when leaders communicate high expectations and inspire followers. Intellectual stimulation occurs when leaders encourage people to see issues from multiple perspectives, and to question commonly held assumptions. Lastly, individualized consideration occurs when leaders recognize and act on the individual needs and concerns of others (Bass, 1985; Bass & Riggio, 2006).

Recent studies provide evidence of a significant relationship between transformational leadership and employee health. Among the outcomes associated with transformational leadership, evidence indicates that transformational leadership is positively related to employee psychological health, including both negative (e.g., anxiety, stress) and positive (e.g., optimism, confidence) conceptualizations of health (see Kelloway & Barling, 2010). Recent research suggests that this is a mediated relationship. Arnold, Turner, Barling, Kelloway, and McKee (2007) found that the relationship between transformational leadership and psychological well-being was mediated by the meaning that individuals attribute to their work. Nielsen, Randall, Yarker, and Brenner

(2008) found that work characteristics (role clarity, meaningfulness, and opportunities for development) mediated this relationship. Similarly, Nielsen, Yarker, Randall, and Munir (2009) found that self-efficacy and team efficacy were mediators.

Recently, the argument has been made that Conservation of Resources (COR) theory (Hobfoll, 1989) is a useful framework to investigate and further explain these findings (Clarke, Arnold, & Connelly, forthcoming). The central tenet of COR theory is that individuals strive to protect valued resources (e.g., energies, environmental conditions etc.), and that what is most detrimental to employee well-being is resource loss (Hobfoll, 1989). It also suggests that those with a strong resource pool are most "resource secure" and are able to further develop their resource reservoir (Hobfoll, Freedy, Lane, & Geller, 1990, p. 466). Transformational leaders are likely to have an abundance of resources because their efforts have been associated with positive outcomes such as employee health (as discussed above) and job performance (Judge & Piccolo, 2004). Indeed, the leader role itself has been outlined as a resource (Hobfoll, 2001). Given their broad resource pool, transformational leaders are able to invest their own resources into the creation of resources for followers (e.g., to provide meaning, role clarity, etc.), in turn allowing followers to cultivate their own resources – a positive resource spiral.

Specifically, we suggest that transformational leadership creates personal resources such as empowerment, and social resources such as the perception of fairness regarding organizational policies and procedures for employees. These positive resource gains experienced by employees who work with transformational leaders can spiral to create resource caravans (Hobfoll, 2011). As COR theory describes, individuals strive to protect resources, and therefore the attraction that followers feel towards working with a supervisor who is a transformational leader may be explained. COR theory has underpinned much research on resource loss but "gain spirals have received considerably less attention than loss spirals" (Hobfoll, 2011, p. 118). In this study we take a positive resource gains approach, and investigate the notion that transformational leaders, "those with greater resources," are "capable of orchestrating resource gain" for their followers (Hobfoll, 2011, p. 117).

To our knowledge, many of the mediators that have been studied thus far have specifically focused on aspects of followers' individual work roles (e.g., role clarity; Nielsen et al., 2008). Our aim is to further the understanding of transformational leadership's indirect impact on followers' psychological health by investigating resources that leaders may influence beyond individual tasks. Given that leadership is a social process whereby employees are influenced by leaders (Avolio, Sosik, Jung, & Berson, 2003), leaders often convey information related to organizational policies, and the scope and impact of followers' work to employees. As a result, perceptions of justice within an organization, and overall feelings of empowerment in the workplace, are likely influenced by employees' interactions with their leaders – particularly those of a transformational nature that tend to inspire, nurture trust and respect, and act on individual needs (Bass & Riggio, 2006).

Procedural justice

Organizational justice refers to employees' perceptions of fairness within the organization (Greenberg, 1987). Justice research has generally focused most heavily on procedural and distributive justice (Pillai, Schriesheim, & Williams, 1999). Procedural justice concerns the processes and systems through which decisions are made within an organization (Colquitt, 2001); individuals perceive fairness if they believe the process and systems used by their leaders or employers to distribute outcomes are fair. Procedural justice is of relevance to transformational leadership, as it promotes trust in one's leader (Korsgaard, Schweiger, & Sapienza, 1995). Distributive justice, in contrast, refers to the fairness of organizational outcomes, such as compensation (Colquitt, 2001). Distributive justice is most strongly related to transactional forms of leadership, where followers are concerned with the outcomes they receive in exchange for effort (Pillai et al., 1999).

Procedural justice is related to positive organizational and individual outcomes such as organizational commitment (Folger & Konovsky, 1989), and physical health (Elovainio, Kivimäki, Puttonen, Lindholm, Phojonen, & Sinervo, 2006). From a COR perspective, this suggests that procedural justice is potentially a social resource which allows employees to thrive in the workplace. With knowledge of fair procedures within the organization, employees are able to worry less about injustice and can more fully invest their current resources into productive behaviours. This will ultimately lead to further resource gain and high levels of psychological health for followers.

Recent research demonstrates that leader fairness results in improved follower behaviors and attitudes, and that transformational leadership does have a positive impact on followers' perceptions of justice (Van Knippenberg & De Cremer, 2008). Cho and Dansereau (2010), for instance, found that transformational leaders influence perceptions of procedural and interpersonal justice. Procedural justice has also been found to mediate the relationship between transformational leadership and organizational citizenship behaviours (Pillai et al., 1999), which further demonstrates that perceived procedural justice is a key mechanism through which transformational leaders influence follower resources. Given the strong linkage of procedural justice to followers' resource gain, and transformational leadership's influence on this resource in previous research, we hypothesize the following:

Hypothesis 1:   Perceptions of transformational leadership are positively related to employee psychological health, and this relationship is mediated by followers' perceptions of procedural justice.

Psychological empowerment

Empowerment is encompassed by four cognitions: meaning, self-determination, impact, and competence (Spreitzer, 1995, p. 1444). While empowerment relates to specific work tasks, its definition suggests that it also influenced by external resources, as determination and feelings of competence in one's work are likely to be influenced by the way a leader positions followers' work roles and the level of encouragement they provide. Psychological empowerment at work is associated with outcomes such as organizational citizenship behavior (Wat & Shaffer, 2005) and increased job satisfaction

(Carless, 2004). From a resource-based perspective, these findings suggest that empowerment influences well-being by increasing one's ability to develop and protect resources. For instance, empowerment's influence on organizational citizenship behaviour suggests that empowered employees go above and beyond their work roles. By enacting such positive behaviours, an empowered employee is likely to experience further resource gain through factors such as mutual respect from colleagues. This spiralling of resource gain would lead to improved follower health.

Transformational leaders are likely to foster follower empowerment, which subsequently acts as a resource for employees. As discussed earlier, transformational leaders nurture meaningful work, which contributes significantly to empowerment (Spreitzer, 1995). Furthermore, transformational leaders have been shown to increase follower performance through the use of emotions (McColl-Kennedy & Anderson, 2002). Higher performance likely makes employees feel more confident in their roles, which also contributes to the self-esteem component of empowerment. Transformational leadership has also been found to influence other outcomes through the mediating process of psychological empowerment, such as organizational commitment (Avolio, Zhu, Koh, & Bhatia, 2004). Given the evidence on empowerment's positive effects on followers, and transformational leadership's conceptual and empirical linkage to empowerment, we hypothesize the following:

Hypothesis 2:   Perceptions of transformational leadership are positively related to employee psychological health, and this relationship is mediated by followers' psychological empowerment.

Method

Participants and procedure

Participants were recruited through StudyResponse (www.studyresponse.com), a non-profit academic research service that recruits participants to complete online questionnaires for researchers based on the sampling criteria dictated by the researcher, and 254 usable surveys were received. Fifty-eight percent of the participants were male, the average age of participants was 40.3 years (range 18-72), and the average length of time worked at current job was 7.61 years (range less than one year-36 years). Participants were employed in various sectors: 19% healthcare, 19% financial, 19% education, 23% manufacturing, and 20% retail. All participants received a $5 dollar gift certificate for taking part in this research.

Measures

Transformational leadership

Ten items from the MLQ Form 5x – Short Instrument (Avolio & Bass, 2004) were used to assess transformational leadership. These items reflect the two highest loading items from each of the five dimensions (idealized influence attributes, idealized influence behaviours, inspirational motivation, intellectual stimulation and individual consideration) according to normed data (Avolio & Bass, 2004). This approach is consistent with other work using fewer than the full 20 items for this measure (Arnold et al., 2007; Barling, Loughlin, & Kelloway, 2002; Detert & Burris, 2007; Inness,

Turner, Barling, & Stride, 2010). This instrument asks participants to rate the frequency on a 5 point scale (0 = *not at all,* 4 = *frequently if not always*) with which their leaders demonstrate behaviors associated with transformational leadership. We do not list the items in the paper due to copyright.

Perceived procedural justice of the organization

We assessed perceived procedural justice of the organization using 8 items; 7 from Moorman's (1991) scale, and one additional item related to privacy added at the request of the organization. Moorman's scale examines the extent to which a participant perceives that his or her organization would respond in a procedurally fair manner if a complaint were laid. This scale asks participants to rate the degree to which they agree or disagree with each statement on a 7-point scale (1= *strongly disagree*, 7 = *strongly agree*). An example item is "If I laid a complaint, my organization would collect accurate information necessary for decision making."

Psychological empowerment

Psychological empowerment was measured using Spreitzer's (1995) 12-item scale. This scale asks participants to rate, on a 7-point scale, the degree to which they very strongly disagree or very strongly agree with self-orientations that people may associate with their work roles (e.g., "I am confident about my ability to do my job").

Psychological health

The General Health Questionnaire (GHQ-12; Goldberg & Hillier, 1979) measured participants' overall psychological health. Although alternative factor structures have been suggested (Shevlin & Adamson, 2005), previous research frequently uses this overall measure to assess psychological health (Hardy, Shapiro, Haynes, & Rick, 1999). Participants are asked to rate how they have felt over the past month (e.g., "over the last 30 days, how often have you…felt constantly under strain") on a 7-point scale (1 = *not at all* to 7= *all of the time*).

Analysis

Our hypotheses proposed that the relationship between transformational leadership and employee psychological health is mediated by followers' perceptions of procedural justice of the organization and by followers' psychological empowerment. To test our hypotheses, we use the strategy outlined by (Preacher & Hayes, 2004, 2008), utilizing their SPSS macro (http://www.afhayes.com/introduction-to-mediation-moderation-and-conditional-process-analysis.html). This macro estimates path coefficients, and provides bootstrap confidence intervals for the proposed indirect effects.

Results

Descriptive statistics, intercorrelations, and reliabilities for all study variables appear in Table 1. Taken together, the results suggest that procedural justice and empowerment do mediate the effect of transformational leadership on health (see Table 2). The total indirect effect of transformational leadership on health is significant (b = .32, p < .01), and the specific indirect effects are also significant (b = .19, p < .01 and b = .13, p < .01, for procedural justice and empowerment, respectively). Moreover, the bias cor-

rected 95% confidence intervals for both procedural justice and empowerment do not contain zero, suggesting that they are mediators of the relationship between transformational leadership and health, and thus providing support for hypotheses 1 and 2. Because the confidence interval for the pairwise contrast of procedural justice and empowerment did include zero, we are unable to distinguish between the two indirect effects in terms of magnitude.

Table 1: Descriptive statistics and intercorrelations for all study sariables

Variable	M	SD	1	2	3	4
1. Transformational leadership	1.95	0.97	(.95)			
2. Procedural justice	4.68	1.51	.61**	(.96)		
3. Empowerment	3.85	0.71	.29**	.39**	(.91)	
4. Psychological health	4.90	1.06	.30**	.44**	.52**	(.92)

Note. N = 254; * p < .05; ** p < .001; reliabilities are presented on the diagonal in brackets.

Table 2: Tests for mediation for the indirect effect of transformational leadership on psychological health through procedural justice and empowerment

	Bootstrapping					
					BC 95% CI	
	Point Estimate	SE	Z	p-value	Lower Limit	Upper Limit
Procedural Justice	.19	.05	4.11	.01	.10	.30
Empowerment	.13	.03	4.13	.01	.07	.21
Procedural Justice vs. Empowerment	.06	.06	1.06	.29	-.07	.19

Note: BC=bias corrected; CI=confidence interval; n=254

Discussion

The purpose of this study was to examine the relationship between transformational leadership and employee psychological health by testing followers' perceptions of procedural justice of the organization and empowerment as mediators of this relationship. We found that perceptions of procedural justice and empowerment mediate the relationship between transformational leadership and followers' psychological health. Specifically, these results suggest that transformational leaders assist followers to attain valued resources which subsequently impact their psychological health. Specifically, transformational leaders foster followers' resource gain by enhancing a sense of fair procedures within the organization (social resource) and by empowering (personal resource) followers on an individual level.

This study extends previous research and offers key contributions to the literature. This is the first empirical study to our knowledge that investigates how transformational leadership influences the perceived procedural justice of organizations. While

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Cho and Dansereau (2010) found that transformational leadership was related to both interpersonal and procedural justice at the group level, our study shows that transformational leadership can influence individual followers' perceptions of fairness of the organization as well, which subsequently influences follower well-being. This highlights the broad range of transformational leadership's potential impacts on health; transformational leaders inspire and motivate followers through charismatic elements, and additionally they influence perceptions of the fairness of the organization as a whole (perhaps through elements such as building individual, transparent relationships with followers). Overall, this suggests that they create a wealth of health-promoting resources for followers.

Our results, however, do not allow us to conclude whether procedural justice of the organization or empowerment has a stronger impact on the relationship between transformational leadership and psychological health. COR theory, however, suggests that there are multiple potential mediators that are operative in explaining this relationship. Individuals can potentially gain or lose resources in a multitude of ways. As discussed above, it is likely that a transformational leader behaves in ways that enable followers to gain both personal and social resources. These multiple opportunities for resource gain may create a positive spiral or resource caravan consisting of various resources (Hobfoll, 2001). A transformational leader "walks the talk" and consistently acts as a positive role model, so the number of resources they provide may have a strong aggregate effect on followers' psychological health. Conversely, the impact of a single resource may not have such a strong impact as to be significantly influential beyond others. Thus, future research should aim to extend this study by focusing on the mediators of interest in this study, in addition to other known mediators of the transformational leadership and psychological health relationship. Since interpersonal justice has been found to be impacted by transformational leadership in previous work (Cho & Dansereau, 2010), future research should test its effects at the individual follower level in relation to other potential mediating factors.

There is also a need for future research investigating the link between leadership and psychological health to consider how to incorporate the recent critique of Van Kippenberg and Sitkin (2013). One aspect that we have suggested in this paper is that the mediators of the relationship between transformational leadership and employee health could be reasonably grouped using COR. This theoretical approach may help to distil the number of mediators into a more parsimonious model. It might also be useful to investigate specific leadership components that are similar across leadership theories (see Van Kippenberg & Sitkin, 2013, p. 7) and how these relate to various resources that mediate the relationship between leadership and employee health. An integrated approach might also consider moderators of these relationships and build related theory.

This study is not without limitations. One limitation to this work is that all data were collected from the same source, so it is possible that common method bias influenced our results. However, we followed suggestions from Podsakoff, Mackenzie, Lee, and Podsakoff (2003) to mitigate this potential effect through questionnaire design, such as ensuring questionnaire anonymity and reducing the ambiguity of items by using well-validated measures of our constructs. A principle components analysis (not

shown) did indicate that the items comprising the independent variables in this study did load as expected on three factors. We emphasize that collecting data from other sources would be useful in future research, but add that individuals' perceptions do influence behaviours, attitudes and well-being (Frese & Zapf, 1988). Finally, because we used a cross-sectional methodology to measure all variables in this study, caution must be taken in drawing any conclusions about causality, and it is important that to fully support the hypotheses proposed in this study, future studies use a longitudinal design to examine these mediating processes more closely.

Conclusion

Given the importance of employee psychological health, and the centrality of transformational leadership in impacting follower well-being, we sought to empirically test specific processes through which this relationship manifests. Drawing on COR theory, this study demonstrated that two key resources through which transformational leadership impacts employee health are empowerment and perceived procedural justice. Future research would benefit from further examination of these relationships.

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