

Social and Motivational Antecedents of Perceptions of Transformational Leadership: A Self-Determination Theory Perspective

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The purpose of the study was to gain a better understanding of the social and motivational antecedents of transformational leadership perceptions. Drawing on self-determination theory, a model was proposed in which perceptions of quality of relationships predict perceptions of transformational leadership behaviour through autonomous motivation and self-efficacy. Data were collected from 568 school principals. Results from SEM analyses provide support for the proposed model. Specifically, results indicate that the more principals perceive their workplace relationships as positive, the greater are their autonomous motivation and self-efficacy in managerial abilities, which in turn contribute to self-reported transformational leadership behaviour. Implications for theories of leadership and management practice are discussed.

Keywords: transformational leadership, autonomous motivation, self-efficacy, quality of relationships, self-determination theory

Transformational leadership—a key factor in understanding effective workplace management (Piccolo & Colquitt, 2006)—is characterised by four dimensions: charisma, inspirational motivation, intellectual stimulation, and individualized consideration (Bass, 1985, 1998). Over the years, transformational leadership has received much attention because it has been linked to important outcomes such as employee job satisfaction and organisational performance (Judge & Piccolo, 2004). So far, the literature on transformational leadership has focused more on its outcomes than on its antecedents (Avolio, Walumbwa, & Weber, 2009). Consequently, little is known about the social and motivational factors that influence transformational leadership behaviour (Bommer, Rubin, & Baldwin, 2004). For instance, how do one's perceptions of workplace relationships affect one's perceptions of transformational leadership behaviour? What are the motivational mechanisms that drive individuals to perceive themselves as displaying transformational leadership behaviour? A useful theoretical framework for understanding these questions is self-determination theory (Deci & Ryan, 1985).

Self-Determination Theory (SDT)

Central to SDT are the concepts of autonomous motivation and perceived competence (Deci & Ryan, 1985; Williams, McGregor,

Zeldman, Freedman, & Deci, 2004). Autonomous motivation refers to the sense of volition and self-endorsement of one's own behaviour. It involves engaging freely in an action for its inherent satisfaction (intrinsic motivation) or because one identifies with its value or meaning (identified regulation). Perceived competence refers to the perception of being efficient in one's social interactions and being able to control important outcomes (White, 1959). It is closely related to the self-efficacy concept (Deci, 1992), which is more specific in nature because it constitutes a socially acquired expectancy to successfully perform a given action (Bandura, 1997). In this study, self-efficacy was used to refer to managers' perceived competence.

According to SDT, individuals are more likely to experience a wide range of positive psychological outcomes when they are autonomously motivated and feel competent. In the workplace, autonomous motivation has been linked to employee performance (Kuvaas, 2009) and commitment (Gagné, Chemolli, Forest, & Koestner, 2008), while self-efficacy has been associated with organisational commitment (Neves, 2009), job satisfaction, and performance (Judge & Bono, 2001). Furthermore, SDT posits that interpersonal relationships are essential to the development of optimal functioning (Deci & Ryan, 2000). Relationships characterised by meaningful interactions are the bases for well-being and adaptive functioning (Baumeister & Leary, 1995) and as such, are central to the concept of leadership. Based on trust, respect, and mutual support, high-quality relationships are the necessary foundation on which efficient leadership develops (Graen & Uhl-Bien, 1995). Managers must feel trusted and supported in order to instill pride and respect in followers as well as communicate a captivating vision of the future (Bass, 1985). Indeed, in high-quality relationships, managers appear more likely to believe that they will succeed in promoting positive changes and attaining organisational objectives because they feel that their subordinates will trust them and adhere to their vision (Gerstner & Day, 1997).

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Drawing on SDT, we propose that managers' perceptions of the quality of interpersonal relationships with superiors and subordinates predict their perceptions of transformational behaviour through autonomous motivation and self-efficacy.

Motivational Factors and Leadership

Results from recent research suggest that managers motivated internally at work (i.e., acting out of a sense of enjoyment, trust, and self-worth) are more likely to use transformational leadership behaviours (Barbuto, 2005). Furthermore, studies stemming from the SDT perspective have provided results linking autonomous motivation and certain leadership actions (e.g., Pelletier, Séguin-Lévesque, & Legault, 2002; Taylor, Ntoumanis, & Standage, 2008). For instance, Taylor et al. (2008) found that autonomously motivated teachers used more leadership-like strategies in the classroom such as providing autonomy support (e.g., offering choices and significant responsibilities to students), more quality information, instrumental help, and structure, as well as more involvement with students. As for the relationship between self-efficacy and leadership, research suggests that leaders' self-efficacy is closely related to leaders' self-perceptions and subordinates' leadership performance evaluations. In an experimental study, Fitzgerald and Schutte (2010) found that managers who took part in an intervention aiming to increase self-efficacy (experimental group), reported higher transformational leadership scores than managers in the control group at post test. Furthermore, leaders' self-efficacy has been found to strongly correlate with leadership ratings by peers and superiors (Chemers, Watson, & May, 2000). In light of these findings, we predict the following:

Hypothesis 1a: Managers' autonomous motivation is positively related to their transformational leadership perceptions.

Hypothesis 1b: Managers' self-efficacy is positively related to their transformational leadership perceptions.

Interpersonal Relationships and Motivational Factors

Active support from significant others in the workplace seems central to employees' motivational factors (see Gagné & Deci, 2005). Growing evidence shows that the quality of workplace relationships is associated with one's autonomous motivation (Fernet, Gagné, & Austin, 2010; Richer, Blanchard, & Vallerand, 2002) and self-efficacy beliefs (Bandura, 1997). For instance, the support-efficacy model (Antonucci & Jackson, 1987) proposes that it is through interpersonal support (i.e., warmth, affection, and nurturance) that individuals develop the beliefs in their own abilities to meet demands and to successfully master challenges (Antonucci & Akiyama, 1997; Fiori, McIlvane, Brown, & Antonucci, 2006; Saltzman & Holahan, 2002).

Given these findings we predict the following:

Hypothesis 2a: Managers' perceptions of the quality of relationships with subordinates and superiors are positively related to their autonomous motivation.

Hypothesis 2b: Managers' perceptions of the quality of relationships with subordinates and superiors are positively related to their self-efficacy.

On the basis of SDT assumptions (e.g., Fernet, Guay, Sénécal, & Austin, 2012; Williams et al., 2004), we also expect that autonomous motivation and self-efficacy mediate the relationship between perceived interpersonal relationships and perceptions of transformational leadership.

Hypothesis 3a: Managers' autonomous motivation mediates the link between perceived quality of relationships with their subordinates and superiors and their transformational leadership perceptions.

Hypothesis 3b: Managers' self-efficacy mediates the link between perceived quality of relationships with their subordinates and superiors and their transformational leadership perceptions.

Method

Participants and Procedure

The sample was composed of French-Canadian principals and vice-principals, members of the *Fédération Québécoise des Directions d'Établissement Scolaire* (FQDE; Federation of Quebec school principals) in the province of Québec. In May 2008, all 2154 FQDE members were contacted by mail to complete an online questionnaire addressing school management issues. A total of 568 principals participated in the study (26% response rate). Of the participants, 59% were women (mean age = 44.94, $SD = 5.57$), 63% held the position of principals and 37% of vice-principals, 59% worked in elementary schools and 41% in high schools. Participants had, on average, 6.27 years ($SD = 5.51$) of experience.

Measures

All measures were administered in French. Properties of all measures are presented in Table 1.

Quality of relationships with superiors and subordinates. The five-item Acceptance subscale of the Relatedness Feeling scale (Richer & Vallerand, 1998) was used to assess managers' perceptions of the quality of relationships with superiors (e.g., "Currently, I feel understood in my relationships with the school administrators.") and subordinates (e.g., "Currently, I feel understood in my relationships with the school personnel."), respectively. Items were scored on a 5-point scale ranging from 1 (*not at all*) to 5 (*extremely*). Single items were used as indicators of the latent constructs of quality relationships with superiors and subordinates.

Autonomous motivation. The Intrinsic Motivation and Identified Regulation subscales of the Work Role Motivation Scale for School Principals (WRMS-SP; Fernet, 2011) were used to evaluate autonomous motivation related to three work roles (administrative, instructional leadership, and informational). Participants rated on a 7-point scale, ranging from 1 (*does not correspond at all*) to 7 (*corresponds completely*), the degree to which the reasons listed for occupying the position of school administrator corresponded to their personal situation ("Why do you perform your work roles?"). For each role, two items evaluated intrinsic motivation (e.g., "For the pleasure that I get from performing this role.") and identified regulation (e.g., "Because this role enables me to achieve my own

work objectives.”). For each role, an autonomous motivation composite score was created by averaging intrinsic motivation and identified regulation (see Vansteenkiste, Simons, Lens, Sheldon, & Deci, 2004).

Self-efficacy. The 12-item School Principals Self-Efficacy scale (Fernet, Austin, & Dussault, 2009) was used to measure three dimensions of school principals’ role domains: administrative self-efficacy (3 items; e.g., “I believe I can be very creative in my administrative tasks.”), instructional leadership self-efficacy (6 items; e.g., “I believe I can ensure that the staff achieves its work objectives.”), and informational self-efficacy (3 items; e.g., “I believe I can play an important role in promoting my school in the community.”). Items were rated on a 5-point scale ranging from 1 (*do not agree at all*) to 5 (*completely agree*). Using the mean score obtained on each role domain, three indicators were created to assess the latent factor of self-efficacy.

Transformational leadership. Perceived transformational leadership was measured using the 12-item Self-Reported Transformational Leadership scale (Dussault et al., 2010), which is based on the Multifactor Leadership Questionnaire (MLQ; Bass & Avolio, 1989) and the Transformational Leadership Questionnaire (Alimo-Metcalfe & Alban-Metcalfe, 2001), two widely used scales in the leadership field (Bass & Riggio, 2006). Three dimensions were evaluated, namely, intellectual stimulation (e.g., “I get staff involved in the problem-solving process.”), individualized consideration (e.g., “I listen attentively to others.”), and charisma/inspirational motivation (e.g., “I communicate my vision of the future.”). Note that in contrast to Bass’ (1985) conceptualisation, charisma and inspirational motivation are collapsed in this scale rather than taken as distinct dimensions. This was done because current research suggests that these concepts are empirically indistinguishable (see Avolio, Bass, & Jung, 1999; Bass, 1985, 1988). Items were rated on a 4-point scale ranging from 1 (*completely disagree*) to 4 (*completely agree*). The mean score of each subscale was used to create an indicator of the latent construct of transformational leadership. Evidence supports the scale’s factor structure and its reliability (Dussault et al., 2010).

Statistical Analyses

The adequacy of the proposed model was assessed by structural equation modelling using EQS (Bentler & Wu, 2004). All models were tested with standardized coefficients obtained by maximum likelihood estimation. The goodness-of-fit of the model was evaluated using three fit indices: the comparative fit index (CFI), the non-normed fit index (NNFI), and the root-mean-square error of

approximation (RMSEA). For CFI and NNFI, values greater than .90 represent an acceptable fit (Schumacker & Lomax, 1996). For the RMSEA, values below .05 indicate a close fit, whereas values up to .08 represent acceptable errors of approximation (Browne & Cudeck, 1992). In this study, we calculated Hancock’s coefficients (also called coefficient H) to determine the reliability of the measures (Hancock & Mueller, 2001). Computed from standardized factor loadings, this coefficient estimates the stability of the latent construct across multiple observed variables. As presented in Table 1, coefficient H values ranged from .85 to .94, satisfying the .70 cut-off value (Hancock & Mueller, 2001).

Results

Preliminary Analysis

A measurement model was tested and provided a satisfactory fit to the data, $\chi^2(137) = 333.297$, CFI = .975, NNFI = .968, RMSEA = .051. All factor loadings were significant, ranging from .42 to .93. Because all data were self-reported, we ran a single-factor model to test for common method variance (CMV). This model provided a poor fit to the data, $\chi^2(147) = 5546.580$, CFI = .638, NNFI = .579, RMSEA = .260. Although this does not unequivocally rule out the possibility of CMV, the results suggest that it would be unlikely to confound the interpretation of relationships among variables. Finally, a multivariate analysis of variance (MANOVA) was performed to verify whether the model variables differed according to background variables (gender, age, school level, job position, and years of experience). Because no significant differences were found, these variables were excluded from further analysis.

Testing of the Proposed Model

To determine model adequacy, we tested two contrasting models: (a) a full mediation model, including indirect paths between perceptions of relationships with superiors and subordinates to perceived transformational leadership through autonomous motivation and self-efficacy, and (b) a partial mediation model consisting of the proposed model with the addition of two direct paths between each perceived workplace relationship and transformational leadership perceptions. The full mediation model provides a satisfactory fit to the data, $\chi^2(139) = 336.431$, CFI = .975, NNFI = .969, RMSEA = .051. Although the fit of the partially mediated model is almost identical, $\chi^2(137) = 333.276$, CFI = .975, NNFI = .968, RMSEA = .051, adding direct paths does not

Table 1
Means, Standard Deviations, Scale Score Reliabilities, and Correlations Between All Variables

Variable	Range	<i>M</i>	<i>SD</i>	1	2	3	4	5
1. Transformational Leadership	1–4	3.54	0.40	(.87)				
2. Relationships with superiors	1–5	3.59	0.84	.19*	(.94)			
3. Relationships with subordinates	1–5	2.78	0.62	.46*	.21*	(.86)		
4. Autonomous motivation	1–7	5.33	0.75	.54*	.22*	.40*	(.88)	
5. Self-efficacy	1–5	4.16	0.43	.29*	.15*	.16*	.30*	(.85)

Note. Reliabilities (coefficient H values) are shown on the diagonal.

* $p < .01$.

significantly improve the model fit, $\Delta\chi^2(2) = 3.16, ns$. Moreover, the direct paths were nonsignificant: perceived quality of relationships with superior to transformational leadership perceptions ($\beta = .03, ns$) and perceived quality of relationships with subordinates and transformational leadership perceptions ($\beta = .11, ns$). Thus, in terms of parsimony, the fully mediated model offers the best-fitting solution. Figure 1 presents the standardized solutions. All hypothesised path coefficients were found to be significant. Autonomous motivation and self-efficacy are positively associated with transformational leadership perceptions, confirming Hypotheses 1a and 1b. Perceived quality of relationships with superiors is positively associated with autonomous motivation and self-efficacy. Perceived quality of relationships with subordinates is significantly and positively related to autonomous motivation and self-efficacy. Hypotheses 2a and 2b are, thus, also confirmed. More importantly, autonomous motivation and self-efficacy fully mediate the relationship between perceived quality of relationships with superiors and subordinates and perceived transformational leadership, thereby providing support for Hypotheses 3a and 3b. The proposed model explains 71% of the variance in transformational leadership. To further test the mediating role (i.e., indirect effect) of the motivational factors, bias-corrected bootstrap 95% confidence intervals were computed from 100 samples (Mackinnon, Lockwood, & Williams, 2004; Preacher & Hayes, 2008). Results reveal that all mediating (i.e., indirect) effects are significant (i.e., all confidence intervals exclude zero; the table can be obtained from Sarah-Geneviève Trépanier upon request).

Supplementary Analysis

In order to rule out alternative explanations, we compared the final model with an alternative model. On the basis of SDT, perceived competence can act as an antecedent of autonomous motivation. We thus tested an alternative model including indirect paths from perceived quality of relationship and self-efficacy to perceived transformational leadership through autonomous motivation. Results indicate that the full mediation model provides a better data fit, $\Delta\chi^2(1) = 34.86, p < .01$, than this alternative model, $\chi^2(140) = 371.291, CFI = .960, NNFI = .962, RMSEA = .055$.

Discussion

Our study contributes to the transformational leadership literature in several ways. First, by exploring the link between

interpersonal relationships and perceptions of transformational leadership, this study contributes to the sparse knowledge of transformational leadership social antecedents. The results reveal that managers who believe that they participate in meaningful relationships at work tend to view themselves as leaders who can inspire and impart a sense of mission to others. These results are in line with the leader-member exchange theory (Dansereau, Graen, & Haga, 1975), which underscores the importance of interpersonal relationships in successful organisation management. Our findings contribute to this theory by revealing the importance of motivational factors in the association between perceived quality of relationships and perceived transformational leadership behaviour.

In addition, this study sheds light on two specific motivational factors involved in transformational leadership perceptions: self-efficacy and autonomous motivation. Managers who feel efficient in their management skills are more likely to believe that they display actions that promote the best interests of the organisation and its members. These results are in line with past research that has positively linked self-efficacy and leadership (Chemers et al., 2000; Fitzgerald & Schutte, 2010). Furthermore, by identifying autonomous motivation as a key factor in transformational leadership perceptions, this study offers an additional explanation as to why certain managers view themselves as effective leaders. Managers who engage in their job out of pleasure or from a sense of personal significance perceive themselves as leaders who can inspire others and stimulate interest.

This study also makes an interesting contribution to the SDT literature. Indeed, SDT research most commonly utilizes psychological well-being outcomes when evaluating the importance of autonomous motivation in the workplace. By showing that autonomous motivation contributes to perceptions of transformational leadership, this study underscores that valuing and enjoying one’s work is also important in professional functioning.

Although this study offers important information on the antecedents of transformational leadership, it has certain limitations. First, the use of self-reported measures may have caused common method bias (CMB), particularly regarding self-reported leadership, which has been shown to sometimes differ from assessments of others (Fleenor, Smither, Atwater, Braddy, & Sturm, 2010). However, the primary aim of this study was to evaluate self-evaluations of transformational leadership behaviour. Nonetheless, we tried to reduce CMB by employing certain procedural strategies related to the questionnaire design (e.g., using different scale formats and anchors) and reducing evaluation apprehension by

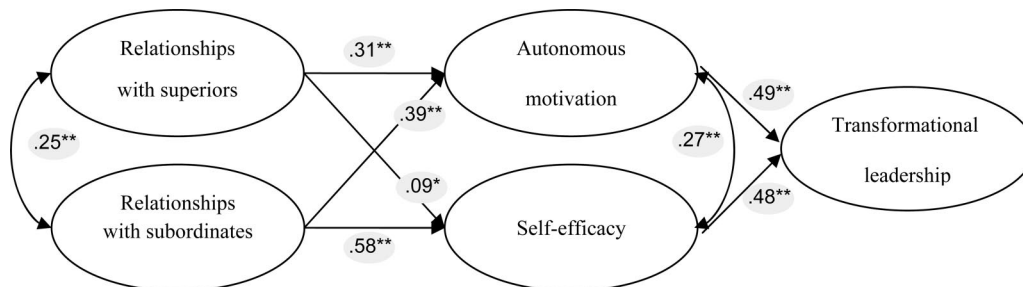


Figure 1. Results of the proposed model (standardized path coefficients). ** $p < .01$.

protecting respondents' anonymity (Podsakoff, Mackenzie, Lee, & Podsakoff, 2003). Results of the single-factor measurement model provided some evidence that our findings were not overly affected by CMB. Nonetheless, future research should evaluate leadership using other sources besides managers. Second, because the research design is cross-sectional, causal direction cannot be determined. Future research using experimental or longitudinal panel designs should attempt to replicate the present results. Third, transformational leadership behaviour is complex, and factors other than social ones (e.g., organisational factors) might also influence leadership perceptions. Future studies should pay attention to such variables (e.g., job design, stress factors). Finally, given the fairly low participation rate (26%), future research is need to confirm that the present results generalise to the overall school management staff.

Notwithstanding these limitations, our results provide useful guidelines to organisations wishing to enhance managers' transformational leadership perceptions. First, changes could be made to managers' social context. Our findings suggest that creating an environment that nurtures and reinforces quality relationships between managers and their work unit as well as with their superiors would effectively facilitate perceptions of transformational leadership. By valuing teamwork and respect for others, organisations can create social conditions that foster high-quality relationships among members. Another way to promote transformational leadership perceptions would be to place emphasis on managers' motivational factors (i.e., autonomous motivation and self-efficacy). This could be achieved by providing managers with a supportive and informative work context (i.e., providing managers with choices, acknowledging and accepting their point of views, offering positive feedback). Past research in SDT has demonstrated successful interventions on self-motivation in different social contexts, including the workplace (e.g., Deci, Connell, & Ryan, 1989).

By revealing the mediating role of autonomous motivation and self-efficacy in the link between perceptions of high-quality work relationships and transformational leadership, this study offers valuable insights into what may make efficient leaders and, more importantly, how social factors are likely to act upon transformational leadership behaviour.

Resumé

Le but de cette étude était d'en arriver à une meilleure compréhension des antécédents sociaux et motivationnels des perceptions du leadership transformationnel. Inspiré de la théorie de l'autodétermination, un modèle a été proposé selon lequel les perceptions de la qualité des relations prédisent les perceptions des comportements de leadership transformationnel au moyen de la motivation autonome et de l'autoefficacité. Des données ont été recueillies auprès de 568 directeurs d'école. Des résultats d'analyses de modélisation ont permis d'appuyer le modèle proposé. Les résultats ont révélé que plus les directeurs perçoivent comme positives les relations dans leur milieu de travail, plus ils témoignent de motivation autonome et d'autoefficacité dans leurs capacités de gestion, ce qui en retour contribue à un comportement de leadership transformationnel autorapporté. Les auteurs discutent des répercussions des résultats sur les théories relatives au leadership et à la gestion.

Mots-clés : leadership transformationnel, motivation autonome, autoefficacité, qualité des relations, théorie de l'autodétermination.

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