



## Journal of Management Development

Transformational leadership and organizational commitment: mediating role of leader-member exchange  
Imen Keskes, Jose M Sallan, Pep Simo, vicenc fernandez,

### Article information:

To cite this document:

Imen Keskes, Jose M Sallan, Pep Simo, vicenc fernandez, "Transformational leadership and organizational commitment: mediating role of leader-member exchange", Journal of Management Development, <https://doi.org/10.1108/JMD-04-2017-0132>

Permanent link to this document:

<https://doi.org/10.1108/JMD-04-2017-0132>

Downloaded on: 08 March 2018, At: 00:19 (PT)

References: this document contains references to 0 other documents.

To copy this document: [permissions@emeraldinsight.com](mailto:permissions@emeraldinsight.com)

Access to this document was granted through an Emerald subscription provided by emerald-srm:178665 []

### For Authors

If you would like to write for this, or any other Emerald publication, then please use our Emerald for Authors service information about how to choose which publication to write for and submission guidelines are available for all. Please visit [www.emeraldinsight.com/authors](http://www.emeraldinsight.com/authors) for more information.

### About Emerald [www.emeraldinsight.com](http://www.emeraldinsight.com)

Emerald is a global publisher linking research and practice to the benefit of society. The company manages a portfolio of more than 290 journals and over 2,350 books and book series volumes, as well as providing an extensive range of online products and additional customer resources and services.

Emerald is both COUNTER 4 and TRANSFER compliant. The organization is a partner of the Committee on Publication Ethics (COPE) and also works with Portico and the LOCKSS initiative for digital archive preservation.

\*Related content and download information correct at time of download.

# Transformational leadership and organizational commitment: Mediating role of leader-member exchange

Abstract:

**Purpose**– *The aim of the present study is to propose and to test three models in order to examine the mechanisms through which dimensions of transformational leadership influence different forms of organizational commitment by testing the possible mediating role of leader-member-exchange (LMX) dimensions.*

**Design/methodology/approach**– *The participants in this study are represented by 427 senior executive French employees having a university degree and minimum 2 years of work experience in their current organization. The relationships between different variables were analyzed using structural equation modeling.*

**Findings**– *The results indicate that the dimensions of LMX mediated the relationships between the dimensions of transformational leadership and organizational commitment dimensions. – The contribution dimension of LMX acts as a consequence, rather than an antecedent of commitment. – These findings are important since they may serve as a bind between leadership dimensions and the kind of organizational commitment that each of these dimensions can generate in followers.*

**Originality/value**– *To the authors' knowledge, this is the first empirical study that tests the interaction of transformational leadership and LMX on Organizational commitment in a French context. The originality of this work leads on investigating these three concepts as multidimensional constructs and focusing on the mediating role of LMX in the relationship between dimensions of transformational leadership and different forms of organizational commitment which can be considered as a novelty in the field of research in this area. As a result, this study addresses concerns about that lack of academic research on the mechanisms by which transformational leaders influence the organizational commitment of their followers.*

**Keywords:** *Transformational leadership, Organizational commitment, Leader-member exchange, multidimensional constructs.*

## INTRODUCTION

Leadership is one of the key functions of organizational management, since a strong leadership can help organizations in their permanent struggle to be increasingly competitive, as it helps to align people, timing and resources to achieve organizational goals (Avolio, 1999). Leadership can be defined as the relationship established between an individual (the leader) and a group (the followers) such as group behavior is directed or determined by the leader (Shastri et al., 2010). Leaders can use different styles to exert influence on followers. The dominant approach in leadership literature has been to consider two distinct styles of leadership: transformational and transactional (Bass and Avolio, 1993). While the main tool of transactional leadership to motivate employees is tangible rewards (money and status), transformational leaders use also intangible rewards (personal development, recognition, self-esteem enhancement). Extant research (Yammarino et al., 1993; Wang et al., 2011) has shown that transformational

leadership styles are more effective than transactional to motivate employees and to enhance organizational performance.

One of the desired outcomes of leadership is a team of employees committed to the organization. Organizational commitment is defined as a psychological state that binds the individual to the organization (Allen and Meyer, 1990). Some of the beneficial outcomes of organizational commitment detected in the literature are, among others, turnover reduction (Mathieu and Zajac, 1990), organizational citizenship behaviors (Simo et al., 2014), job satisfaction (Currivan, 2000) and career development (Enache et al., 2013). As organizational commitment may be a desired outcome of transformational leadership, many attempts have been made to empirically establish a relationship between both constructs (e.g. Rafferty and Griffin, 2004; Avolio et al., 2004; Lee, 2005; Limsila and Ogunlana, 2008; Lo et al., 2010; Joo et al., 2012; Clinebell et al., 2013). This stream of research has two main drawbacks. On the one hand, while most of this research treats transformational leadership and organizational commitment as non-dimensional, both are dimensional constructs, which represent differences in leadership styles and different bonds of the individual with the organization, respectively. Models that take into account dimensionality of constructs can lead to a more precise understanding of the mechanisms of creation of commitment through leadership (Rafferty and Griffin, 2004). On the other hand, the mechanisms by which transformational leaders influence their followers have not been studied in a systematic manner (Avolio et al., 2004; Castro et al., 2008), and several authors have suggested that greater attention should be paid to understand how these influential processes operate in transformational leadership (e.g. Bass, 1998, Conger et al., 2000; Kark and Shamir, 2002; Keskes, 2014a). As organizational life can lead to the development of a specific relationship between the leader and each of the followers, social exchange theory (Cropanzano and Mitchell, 2005) can be a useful theoretical lens to examine the relationship between transformational leadership and organizational commitment. In particular, leader-member exchange (LMX) (Graen and Uhl-Bien, 1995, Liden and Maslyn, 1998) can be a mediator between leadership style and development of commitment to the organization (Wang et al., 2005, Shusha, 2013, Jyoti and Bhau, 2015). Therefore, the aim of this research is to develop a model of relationship between dimensions of transformational leadership and organizational commitment, in which the nature of the exchange between leaders and organizational members acts as a mediating variable.

The structure of the paper is as follows. In the following section, we present the dimensions of transformational leadership, leader-member exchange and organizational commitment, followed by a model of leadership antecedents of each dimension of organizational commitment. Then the results of the empirical testing of the models are presented, followed by the discussion of the results and the conclusions.

## **THEORY AND HYPOTHESIS**

### *DIMENSIONS OF TRANSFORMATIONAL LEADERSHIP*

Recent developments of leadership theory have presented a large number of conceptualizations of leadership styles (Anderson and Sun, 2017). Theoretical and empirical studies have presented ideological (Strange and Mumford, 2002) and pragmatic (Mumford and van Doorn, 2001) leadership, servant leadership (Stone et al., 2004), authentic leadership (Walumbwa et al. 2008), ethical leadership (Brown et al., 2008) and spiritual leadership Fry. 2003), among others. Nevertheless, in spite of recent critical approaches (van Knippenberg and Sitkin, 2013), the charismatic/transformational leadership keeps being the most popular contemporary theory of leadership (Anderson and Sun, 2017), and previous research has found that transformational

leadership is related with organizational commitment (Wang et al., 2011; van Dierendonck et al., 2014). Transformational leadership was originally introduced by Burns (1978) and Bass (1985) to describe the impact that exceptional leaders have on subordinates' reactions and to describe the process by which leaders create a connection with followers, attend to their individual needs, and help followers reach their potential. In these early definitions, transformational leadership is a leadership style where "leaders and followers make each other to advance to a higher level of moral and motivation" (Burns, 1978). In Bass (1985) transformational leadership is conceptualized as comprising four factors: charisma, inspiration, individualized consideration and intellectual stimulation. Transformational leadership is defined as opposed to transactional leadership, which includes contingent reward, management by exception and laissez-faire leadership (Avolio et al., 1999). This dimensional model was later re-examined by Rafferty and Griffin (2004), who defined five dimensions of transformational leadership:

- In a leadership style based on *vision*, the leader defines an idealized picture of the future based around organizational values. Defining an aspirational future, leaders hope to encourage followers to adopt desired behaviors (McClelland, 1975).
- A leadership style based on *inspirational communication* uses appeals and emotion laden statements to arouse follower's emotions and motivation.
- A leader with a *supportive leadership* style expresses concern for followers and takes into account their individual needs. They display concern for subordinates' welfare, and create a friendly and supportive working environment (House, 1996).
- When leading using *intellectual stimulation*, leaders enhance follower's ability to think about problems in new ways (Bass, 1985), so they increase their ability to conceptualize problems and to improve quality of the solutions they provide (Bass and Avolio, 1990).
- Finally, leaders with a *personal recognition* style explicitly value and praise followers' efforts and achievements.

#### *DIMENSIONS OF ORGANIZATIONAL COMMITMENT*

Organizational commitment has also been frequently conceptualized as a dimensional construct. The most widely used conceptualization of organizational commitment is the three-component model (Allen and Meyer, 1990; Meyer and Allen, 1991) of affective, continuance and normative commitment:

- *Affective commitment* implies an affective attachment to the organization. Individuals with high levels of affective commitment have a partisan, emotional attachment to the organization.
- *Normative commitment* consists in the perceived obligation to remain in the organization. Although it is sometimes overlapped with affective commitment (Meyer and Parfyonova, 2010), the difference between both resides that individuals with affective commitment want to stay in the organization, and individuals with normative commitment feel that they ought to.
- *Continuance commitment* is related with the recognition of the costs associated with leaving the organization. Individuals with high affective commitment feel that it is too costly to leave the organization.

Posterior elaborations of continuance commitment have recognized two sub-dimensions of continuance commitment (Meyer et al., 1993): a continuance commitment due to a *lack of employment alternatives*, and a continuance commitment related with the *perceived sacrifice* of investments lost with leaving the organization.

### *LEADER-MEMBER EXCHANGE*

The concept of leader-member exchange (sometimes labelled LMX) recognizes the fact that leaders do not have the same relationship with each of the followers, but they rather develop a specific relationship with each subordinate (Graen and Uhl-Bien, 1995). These relationships can vary from “out-group” relationships (based strictly on a contractual basis) from “in-group” relationships that can lead to a relationship based on trust, liking, reciprocity or friendship (Liden and Mayslin, 1998). Social exchange theory predicts that these reciprocal relationships can predict many organizational outcomes, such as organizational citizenship behavior, job performance or turnover intentions (Cropanzano and Mitchell, 2005).

Although many conceptualizations of leader-member exchange are non-dimensional, leaders and followers can take multiple roles, and therefore different types of leader-member exchanges can arise. Liden and Maslyn (1998) defined a four-dimensional model of leader-member exchange, defining the following types of exchanges between leaders and followers:

- *Contribution*: subordinates can accept a leader’s invitation to superior performance, and in exchange leaders reciprocate providing valued resources to subordinates (budget, equipment or materials).
- *Loyalty*: leaders and followers can develop a relationship of mutual loyalty. In exchange to the loyalty offered by the subordinate, the leader may reciprocate offering her tasks that require higher judgment or responsibility.
- *Affect*: some relationships between leader and follower may be dominated by affect, as they simply like each other and build a relationship of mutual friendship.
- *Professional respect*: organizational members can be interested in developing mutual relationships with individual of high expert power, as they can acquire relevant professional skills and gain access to influential individuals in and out of the organization.

### *ENHANCING AFFECTIVE COMMITMENT THROUGH LEADERSHIP*

A positive and significant relationship between transformational leadership and affective commitment has been found in several studies (e.g. Wiza and Hlanganipai, 2014; Clinebell et al, 2013; Felfe et al, 2010; Castro et al, 2008), which suggest that leadership can foster the development of an emotional attachment to the organization on followers. This attachment can be undertaken conveying a motivational vision, as an expression of an idealized picture based on organizational values and culture (Bass and Avolio, 1993). This attachment can also be achieved through intellectual stimulation (Emery and Barker, 2007) as fostering of knowledge-sharing practices by leadership can increase affective commitment (Camelo-Ordaz et al., 2011). Therefore, we can posit that styles of leadership based on vision and intellectual stimulation can be antecedents of affective commitment:

H1a: There is a positive relationship between intellectual stimulation and affective commitment.

H1b: There is positive relationship between vision and affective commitment.

Social exchange theory predicts that the relationship between leadership style and attitudes and behaviors of followers is mediated by the nature of the relationship between leader and follower. Previous research shows that followers that assess the exchange with their leaders to be highly professional tend to express greater affective commitment with the organization (Lee, 2005). Thus, we can state that:

H1c: Professional respect mediates the positive relationship between intellectual stimulation, vision and affective commitment.

*CONTRIBUTION AS A CONSEQUENCE OF AFFECTIVE COMMITMENT*

Employees who feel more affectively attached to the organization are part of the organization because they want to be; hence, one would expect them to be present at work and motivated to perform their best (Meyer and Allen, 1997). So, organizational members having increased level of commitment will be more voluntary and display extra-role behavior (Leung, 2008; Kane et al., 2012). Therefore, an employee with high affective commitment to the organization will be more likely to perform work beyond what is specified in the job description, developing a leader-member relationship based on contribution. Thus, we propose that:

H1d: There is a positive relationship between affective commitment and contribution.

*IMPACT OF TRANSFORMATIONAL LEADERSHIP ON CONTINUANCE COMMITMENT*

Personal recognition as a dimension of transformational leadership is defined as the provision of rewards such as praise and acknowledgement of effort for achievement of specified goals. Rafferty and Griffin (2004) proposed that when people received recognition for their work then they would feel an increased sense of investment in an organization. Contrary to their expectations, personal recognition was significantly negatively associated with continuance commitment. We believe that this counterintuitive finding can be attributed to assessing globally continuance commitment, rather than considering explicitly continuance commitment related with perceived sacrifice of investments lost when leaving the organization. Previous research (Simo et al., 2014) has shown that the continuance commitment coming from lack of employment alternatives develops attitudes opposed to other dimensions of commitment (e.g., it is positively related with turnover intentions). Thus we propose that:

H2a: There is a positive relationship between personal recognition and continuance commitment coming from perceived sacrifice of investments on the organization.

Loyalty as a dimension of LMX is the expression of public support by the leader to his followers. It is essential to a stable relationship between a leader and an organizational member (Leow and Khong, 2009). We suggest that when the leader values individuals' efforts and rewards the achievement of outcomes consistent with the vision through praise and acknowledgment of followers' efforts (Rafferty and Griffin, 2004), the subordinate's loyalty to his or her leader may increase. This relationship of mutual loyalty can be perceived by the follower as a valuable capital, which may be lost when leaving the organization. Then, we propose that the relationships between personal recognition and continuance commitment will hold in organizational members that have developed a relationship of loyalty with his or her leader:

H2b: Loyalty mediates the positive relationship between personal recognition and continuance commitment coming from perceived sacrifice of investments on the organization.

### *NORMATIVE COMMITMENT AND TRANSFORMATIONAL LEADERSHIP*

Supportive leadership involves showing concern for followers and take account of their individual needs. The person who received some benefits from others may indirectly have the tendency to return or feel obligated to return the favor (Judeh, 2012, Aquino and Bommer, 2003) and this interaction is known as positive reciprocity (Caliendo et al., 2012).

When leaders express concern for followers, take account of their individual needs, direct their behavior toward the satisfaction of subordinates' needs and preferences and create a friendly and psychologically supportive work environment, the employee may feel compelled to reciprocate with commitment to the organization. This emotional displacement from the leader to the organization derives from morality and value-driven principles based on reciprocity norms and socialization practices (Meyer and Herscovitch, 2001; Johnson et al., 2010). This reasoning allows formulating the following hypothesis:

H 3a: There is a positive relationship between supportive leadership and normative commitment.

A supportive style of transformational leadership implies individualized consideration by the leader, as these leaders spent time with followers coaching them to develop their capabilities. These leader-follower interactions not only reduce physical distance (Avolio et al., 2004) but also the barrier of status between leader and followers, creating a warmer and friendlier atmosphere in the workplace (Lee, 2005). Thus, it can be argued that supportive leadership can generate a leader-member exchange relationship based on affect. On the other hand, affect between leader and follower can be related with normative commitment (Lee, 2005). Based in this reasoning, the following hypothesis is proposed:

H 3b: Affect mediates the relationship between Supportive leadership and normative commitment.

## **METHOD**

### *SAMPLE AND DATA COLLECTION*

The participants in this study are represented by 427 senior executive French employees having a university degree and minimum 2 years of experience in their current organization. Participants were contacted through a service company specialized in data collection, which administered them an online questionnaire, including measures of leadership, leader-member exchange and organizational commitment. Items were measured on a seven-point Likert-type scale on which respondents were asked to indicate the extent of their agreement with each item (1 = strongly disagree, 7 = strongly agree). The original scales were translated into French, and were cross-validated using back translation. The questionnaire also included questions regarding demographic variables. Statistics about these variables are presented in table 1. The sample included a balanced amount of men and women (220 and 207, respectively, and the 58,6 % of the sample had more than 40 years. Most of them (74,2%) worked on companies with 50 or more employees. To assess the effect of control variables, we looked for differences across average scores of the variables for gender, age, number of employees and education level, without finding significant differences.

=====  
INSERT TABLE 1 ROUND HERE

---



---

## *MEASURES*

### *TRANSFORMATIONAL LEADERSHIP*

Transformational leadership dimensions were assessed using the Rafferty and Griffin (2004) scale, translated into French by the authors of this study. The considered dimensions were vision, intellectual stimulation, supportive leadership and personal recognition. We have measured only the four dimensions of transformational leadership considered as antecedents of organizational commitment in the theoretical model. Each dimension scale comprised three items. The obtained Cronbach's alphas were of 0.94, 0.89, 0.93 and 0.95 respectively.

### *ORGANIZATIONAL COMMITMENT*

Organizational commitment was measured using the scales proposed by Meyer et al. (1993), taking into account the modifications proposed by Powell and Meyer (2004). Affective and normative commitments were assessed by six items each, and continuance commitment coming from perceived sacrifices was assessed using the six items from Powell and Meyer (2004). These scales had an alpha of 0.95, 0.92 and 0.90, respectively.

### *LEADER-MEMBER EXCHANGE*

Liden and Maslyn (1998) multi-dimensional model of LMX scale, comprising 12 items, was used to measure the quality of relationship between respondents and their superiors. The scale incorporates the dimensions of affect, loyalty, contribution and professional respect, with each dimension consisting of three items. These scales had an alpha of 0.95, 0.92, 0.87, and 0.92 respectively.

### *PROCEDURES*

Statistical computing was performed using several R statistical packages, mainly psych (Revelle, 2015) and lavaan (Rosseel, 2012). Reliability tests have been carried out with functions of psych (Revelle, 2014), and structural equation models analysis with lavaan (Rosseel, 2012). The fitness of structural equation models was evaluated considering fitness functions of M-Plus software.

## **RESULTS**

### *DIRECT RELATIONSHIPS*

To test the hypothesis implying direct relationship between transformational leadership and organizational commitment dimensions, the significance of the beta parameters in the structural models is used. Intellectual stimulation and vision displayed a positive relationship with affective commitment ( $\beta=0.669$ ,  $p < 0.001$  and  $\beta =0.215$ ,  $p < 0.05$ ). It is found a significant positive relationship between affective commitment and contribution ( $\beta =1.134$ ,  $p < 0.001$ ). These results support hypothesis H1a, H1b and H1d, respectively. Personal recognition displayed a positive relationship with continuance commitment ( $\beta =0.351$ ,  $p < 0.001$ ), and supportive leadership displayed a positive relationship with normative commitment ( $\beta=0.676$ ,  $p < 0.001$ ). These results give support to hypothesis H2a and H3a, respectively.



The mediation hypotheses have been tested through a series of nested models. The results of mediation analysis for the models of affective, continuance and normative commitment are presented in table 2.

=====

INSERT TABLE 2 ROUND HERE

=====

#### *MEDIATED MODELS FOR AFFECTIVE COMMITMENT*

Model 1 of table 2, which is the baseline model for affective commitment, represents a fully mediating model, including also the relationship with contribution. This model does not have direct paths from transformational leadership dimensions to affective commitment. All fit indexes for this model showed a good fit ( $\chi^2= 331.92$ ,  $df= 128$ ;  $RMSEA =0 .06$ ;  $CFI=0.97$ ;  $TLI= 0.97$ ). Against our baseline model, we tested three nested models, adding direct paths from intellectual stimulation and vision to affective commitment. Then, model 1 is therefore nested within models 2, 3, and 4. As Table 2 shows, the differences between chi-squares were significant for models 2, 3, or 4 compared with model 1 ( $\Delta\chi^2 = 6.72$ ,  $p<0.01$ ;  $\Delta\chi^2=4.31$ ,  $p <0.01$  and  $\Delta\chi^2= 7.29$ ,  $p < 0.05$  respectively). However in model 2, the differences between chi-squares is the more significant ( $\Delta\chi^2 = 6.72$ ,  $p<0.01$ ). These results suggest that model 2 best fitted the data. We concluded then, that there is full mediation of professional respect between vision and affective commitment, and partial mediation of professional respect of the relationship between intellectual stimulation and affective commitment. These results are a partial confirmation of hypothesis H1c.

#### *MEDIATED MODELS FOR CONTINUANCE COMMITMENT*

For continuance commitment coming from perceived sacrifices, model 1 is again a fully mediated model, which acts as baseline model. As table 2 shows, all fit indexes showed a good fit for the baseline model ( $\chi^2=114.219$   $df=49$ ;  $RMSEA=0.056$ ;  $CFI=0.98$ ;  $TLI=0.98$ ). Against our baseline model, we tested a nested model, adding a direct path to a direct path from personal recognition (PER) to continuance commitment. Differences between chi-squares were not significant for model 2 compared with model 1 ( $\Delta\chi^2=0.45$ ,  $df=1$ ). These results suggest that model 1 best fitted our data. Therefore, we concluded that loyalty fully mediates the relationship between personal recognition and continuance commitment, supporting hypothesis H2b.

#### *MEDIATED MODELS FOR NORMATIVE COMMITMENT*

Model 1 for normative commitment is again the fully mediated model. As indicated in table 2, all fit indexes showed a good fit ( $\chi^2=126.495$ ;  $df=46$ ;  $RMSEA=0.064$ ;  $CFI=0.98$ ;  $TLI=0.98$ ). Against the baseline model, we tested a nested model, adding a direct path from supportive leadership (SUP) to normative commitment. The difference of chi-squares between models 1 and 2 was not significant ( $\Delta\chi^2=0.25$ ,  $df=1$ ). These results suggested that model 1 best fitted our data. Therefore, we concluded that affect fully mediates the relationship between supportive leadership and normative commitment, supporting hypothesis H3b.

## DISCUSSION

We have tested empirically models of transformational leadership antecedents of organizational commitment. Drawing of social exchange theory, we have considered that the nature of the relationship between leader and follower was a mediating variable. Three specific explanatory models were defined for each of the three dimensions of organizational commitment (affective, continuance and normative commitment). All three models were confirmed empirically, although the relationship between intellectual stimulation and affective commitment was only partially mediated by professional respect. The resulting models are depicted in figures 1 to 3.

=====

INSERT FIGURES 1, 2 AND 3 ROUND HERE

=====

Results of the affective commitment model show that a leadership style based on conveying an inspiring vision to followers, or provide them with intellectual stimulation lead to an increase of affective commitment. This relationship is mediated with the professional respect dimension of leader-exchange relationship, suggesting that the mentioned leadership styles are more credible if the leader has professional credibility, adding expert power to the formal authority of leadership (French and Raven, 1959). This is reinforced by the larger magnitude of the relationship between intellectual stimulation (more related with expert power) and professional respect, when compared with the relationship between vision and professional respect. This exercise of leadership can be especially effective in encouraging followers to engage in the organization (Rafferty and Griffin, 2004; Joo et al., 2012). This result is of importance to management, as affective commitment is the dimension of commitment with stronger bonds to turnover reduction and pro-social behaviors (Solinger et al., 2008; Simo et al., 2014). A distinctive feature of this model is that a dimension of leader-member exchange (professional respect) is an antecedent of affective commitment, while another (contribution) is a consequence of the same construct. As the action of leadership can foster commitment to the organization, the later also can have beneficial efforts for leadership, as committed organizational members will be more prone to accept an invitation to superior performance from leaders (Meyer and Allen, 1997; Chughtai, 2008). This reasoning, though, raises a question about the contribution dimension of leader-member exchange. Further research on dimensionality of leader-member exchange should clarify if contribution is a facet of the exchange between leader and follower, or rather a construct of its own.

As for continuance commitment coming from perceived sacrifice of investments on the organization, we have found that it can be enhanced with a personal recognition leadership style. As transformational leadership is strongly related with leader-member exchange, the relationship between personal recognition and loyalty is stronger than the one between loyalty and continuance commitment. Leaders that explicitly value and praise follower achievements are prone to develop a relationship of mutual loyalty with followers. This relationship is perceived by followers as an asset which they may lost if leaving the organization, enhancing then continuance commitment. It is to note that this reasoning is not valid to the continuance commitment coming from lack of alternatives outside the organization, which may explain the lack of association between this dimension of leadership and a global measure of continuance commitment found by Rafferty and Griffin (2004).

Finally, normative commitment of organizational members is enhanced by a supportive leadership style from leaders. Similarly as in the continuance commitment model, a strong relationship exists between leadership style and leader-member exchange dimensions /supportive leadership and affect, respectively). A leader displaying a supportive leadership style expresses concern for followers and takes into account their individual needs. This style may lead to a leader-follower relationship based on affect. This affective relationship may lead to organizational members to return the favor (Caliendo et al., 2012) with a feeling of obligation towards the organization (Aquino and Bommer, 2003).

Continuance and normative commitment have a weaker relationship than affective commitment with desired outcomes and behaviors (Solinger et al., 2008). It can be deduced, then, that effective styles of transformational leaderships are based on conveying a strong and inspirational vision on followers, and to intellectually stimulate them. The kind of commitment generated by these leadership styles is stronger than the one generated by personal recognition and supportive leadership.

## CONCLUSIONS AND FUTURE RESEARCH

This study, which adopts a social exchange theory perspective to examine the relationship between transformational leadership and organizational commitment, has three major noticeable results. First, as affective commitment has a broader impact on employee retention, job satisfaction and prosocial behaviors larger than other dimensions of commitment (Mathieu and Zajac, 1990), makes more effective styles of transformational leadership that foster affective commitment. A managerial implication coming from the results of this study is that leadership styles centered on vision and stimulating intellectually organizational members foster professional respect on leaders. While these styles inspire an affective bond with the organization, the leadership styles based on personal recognition and supportive leadership make followers to create a relational capital with leaders that makes too costly for organizational members to leave the organization, or develop an emotional relationship with leaders that creates in organizational members a perceived obligation with the organization (Meyer and Allen, 1990; Meyer et al., 1993). A second result is that there are two distinct sets of antecedents for affective and normative commitment. This result can be a relevant insight in the debate on differences between affective and normative commitment, as these two dimensions are sometimes hard to distinguish empirically and theoretically (Meyer et al., 2002; Meyer and Parfyonova, 2010). Finally, empirical results challenge the nature of leader-member exchange dimensions defined in Liden and Maslyn (1998). According with predictions of social exchange theory, loyalty, affect and professional respect act as mediators between transformational leadership styles and organizational commitment, but contribution is a consequence of affective commitment. We suggest that contribution, rather than being a dimension of leader-member exchange, can be considered similar to the altruism dimension of organizational citizenship behavior (Smith, Organ and Near, 1983).

Like all studies of this type, the present work may have some limitations. The same respondents rated transformational leadership, LMX and organizational commitment which may yield possible common source bias in the results. Future studies on the relationship between leadership and commitment should take into account recommendations to reduce common source bias (Richardson et al., 2009). As the dyadic relationship between leaders and followers was the main interest, managers may also be asked to respond the questionnaire in future works. Longitudinal designs are needed in future research to extend our findings. Future research may also include heterogeneous and larger samples that allow broader generalization of the results.

## REFERENCES

Allen, N. J. and Meyer, J. P. (1990), "The measurement and antecedents of affective, continuance and normative commitment to the organization", *Journal of occupational psychology*, Vol. 63 No.1, pp. 1-18.

Anderson, M. H. and Sun, P. Y. (2017), "Reviewing leadership styles: Overlaps and the need for a new 'full-range' theory", *International Journal of Management Reviews*, Vol. 19 No. 1, pp. 76-96.

Aquino, K. and Bommer, W. H. (2003), "Preferential mistreatment: How victim status moderates the relationship between organizational citizenship behavior and workplace victimization", *Organization Science*, Vol. 14 No. 4, pp. 374-385.

Avolio, B. J. (1999), *Full leadership development: Building the vital forces in organizations*, Sage Publications, Thousand Oaks, CA.

Avolio, B. J., Bass, B. M. and Jung, D. I. (1999), "Re-examining the components of transformational and transactional leadership using the Multifactor Leadership", *Journal of occupational and organizational psychology*, Vol. 72 No. 4, pp. 441-462.

Avolio, B. J., Zhu, W., Koh, W. and Bhatia, P. (2004), "Transformational leadership and organizational commitment: Mediating role of psychological empowerment and moderating role of structural distance", *Journal of organizational behavior*, Vol. 25 No. 8, pp. 951-968.

Bass, B. M. and Avolio, B. J. (1993), "Transformational leadership and organizational culture", *Public administration quarterly*, Vol. 17 No. 1, pp. 112-121.

Bass, B. M. (1998), *Transformational leadership: Industry, Military, and Educational Impact*, Lawrence Erlbaum Associates, Mahwah, NJ.

Bass, B. M. (1985), *Leadership and performance beyond expectations*, Free Press, New York.

Bass, B. M. and Avolio, B. J. (1990), *Transformational leadership development: Manual for the multifactor leadership questionnaire*, Consulting Psychologists Press, Palo Alto, CA.

Brown, M. E., Treviño, L. K. and Harrison, D. A. (2005), "Ethical leadership: A social learning perspective for construct development and testing", *Organizational behavior and human decision processes*, Vol. 97 No. 2, pp.117-134.

Burns, J. M. (1978), *Leadership*, Harper and Row, New York.

Caliendo, M., Fossen, F. and Kritikos, A. (2012), "Trust, positive reciprocity, and negative reciprocity: Do these traits impact entrepreneurial dynamics?", *Journal of Economic Psychology, Personality and Entrepreneurship*, Vol. 33 No. 2, pp. 394-409.

Camelo-Ordaz, C., García-Cruz, J., Sousa-Ginel, E. and Valle-Cabrera, R. (2011), "The influence of human resource management on knowledge sharing and innovation in Spain: the mediating role of affective commitment", *The International Journal of Human Resource Management*, Vol. 22 No. 7, pp. 1442-1463.

Castro, C. B., Periñan, M. M. V. and Bueno J. C. C. (2008), "Transformational leadership and followers' attitudes: the mediating role of psychological empowerment", *The International Journal of Human Resource Management*, Vol. 19 No. 10, pp. 1842-1863.

Chughtai, A. A. (2008), "Impact of Job Involvement on In-Role Job Performance and Organizational Citizenship Behaviour", *Journal of Behavioral and Applied Management*, Vol. 9 No. 2, pp. 169-183.

Clinebell, S., Skudiene, V., Trijonyte, R. and Reardon, J. (2013), "Impact of Leadership Styles on Employee Organizational Commitment", *Journal of Service Science*, Vol. 6 No. 1, pp. 139-152.

Conger, J. A., Kanungo, R. N. and Menon, S. T. (2000), "Charismatic leadership and follower effects", *Journal of Organizational Behavior*, Vol. 21 No. 7, pp. 747-767.

Cropanzano, R. and Mitchell, M. S. (2005), "Social exchange theory: An interdisciplinary review", *Journal of management*, Vol. 31 No. 6, pp. 874-900.

Currivan, D. B. (2000), "The causal order of job satisfaction and organizational commitment in models of employee turnover", *Human resource management review*, Vol. 9 No. 4, pp. 495-524.

Emery, C. R. and Barker, K. J. (2007), "The effect of transactional and transformational leadership styles on the organizational commitment and job satisfaction of customer contact personnel", *Journal of organizational culture, communications and conflict*, Vol. 11 No. 1, pp. 77-90.

Enache, M., Sallán, J. M, Simo, P. and Fernandez, V. (2013), "Organizational commitment within a contemporary career context", *International Journal of Manpower*, Vol. 34 No. 8, pp. 880-898.

Felfe, J., Yan, W. and Six, B. (2008), "The impact of individual collectivism on commitment and its influence on organizational citizenship behaviour and turnover in three countries", *International Journal of Cross Cultural Management*, Vol. 8 No. 2, pp. 211-237.

French, J. R. P., Jr. and Raven, B. (1959). "The bases of social power", in Cartwright, D. (Ed.), *Studies in Social Power*, Research Center For Group Dynamics, University of Michigan, Ann Arbor MI, pp. 150-167.

Fry, L. W. (2003), "Toward a theory of spiritual leadership", *The leadership quarterly*, Vol. 14 No. 6, pp. 693-727.

Graen, G. B. and Uhl-Bien, M. (1995), "Relationship-based approach to leadership: Development of leader-member exchange (LMX) theory of leadership over 25 years: Applying a multi-level multi-domain perspective", *The leadership quarterly*, Vol. 6 No. 2, pp. 219-247.

House, R. J. (1996), "Path-goal theory of leadership: Lessons, legacy, and a reformulated theory", *The Leadership Quarterly*, Vol. 7 No. 3, pp. 323-352.

Johnson, R. E., Chang, C. and Yang, L. (2010), "Commitment and motivation at work: the relevance of employee identity and regulatory focus", *Academy of Management Review*, Vol. 35 No. 2, pp. 226-245.

Joo, B. K., Yoon, H. J. and Jeung, C. W. (2012), "The effects of core self-evaluations and transformational leadership on organizational commitment", *Leadership & Organization Development Journal*, Vol. 33 No. 6, pp. 564-582.

Judeh, M. (2012), "Mediating effects of organizational commitment on the relationship between perceived organizational support and job satisfaction", *Advances in Business-Related Scientific Research Conference*, Venice, Italy.

Jyoti, J and Bhau, S. (2016), "Empirical investigation of moderating and mediating variables in between transformational leadership and related outcomes: A study of higher education sector in North India ", *International Journal of Educational Management*, Vol. 30 No. 6, pp. 1123-1149.

Kane, R. E., Magnusen, M. J. and Perrewe, P. L. (2012), "Differential effects of identification on extra-role behavior", *Career Development International*, Vol. 17 No. 1, pp. 25-42.

Kark, R. and Shamir, B. (2002), "The dual effect of transformational leadership: Priming relational and collective selves and further effects on followers". In Avolio B. J. and Yammarino F.J. (Eds.), *Transformational and charismatic leadership: The road ahead*, Elsevier Science, Oxford, pp.67-91.

Keskes, I. (2014a), "Relationship between leadership styles and dimensions of employee organizational commitment: A critical review and discussion of future directions", *Intangible capital*, Vol. 10 No.1, pp. 26-51.

Knippenberg, D.V. and Sitkin, S. B. (2013), "A critical assessment of charismatic-Transformational leadership research: Back to the drawing board?" *Academy of Management Annals*, Vol. 7 No. 1, pp. 1-60.

Lee, J. (2005), "Effects of leadership and leader-member exchange on commitment", *Leadership & Organization Development Journal*, Vol. 26 No. 8, pp. 655-672.

Leow, K. L. and Khong, K. W. (2009), "The Study of Mentoring and Leader-Member Exchange (LMX) on Organizational Commitment among Auditors in Malaysia", *International Journal of Business and Information*", Vol. 4 No. 2, pp. 161-198.

Leung A. S. M. (2008), "Matching Ethical Work Climate to In-role and Extra-role Behaviors in a Collectivist Work Setting", *Journal of Business Ethics*, Vol. 79 No. 1-2, pp. 43-55.

Liden, R. C. and Maslyn, J. M. (1998), "Multidimensionality of leader-member exchange: an empirical assessment through scale development", *Journal of management*, Vol. 24 No. 1, pp. 43-72.

Limsila, K. and Ogunlana, S. O. (2008), "Performance and leadership outcome correlates of leadership styles and subordinate commitment", *Engineering, Construction and Architectural Management*, Vol. 15 No. 2, pp. 164-184.

Lo, M. C., Ramayah, T., Min, H. and Songan, P. (2010), "The relationship between leadership styles and organizational commitment in malaysia: role of leader-member exchange", *Asia Pacific business review*, Vol. 16 No. 1-2, pp. 79-103.

Mathieu, J. E. and Zajac, D. M. (1990), "A review and meta-analysis of the antecedents, correlates, and consequences of organizational commitment", *Psychological bulletin*, Vol. 108 No. 2, pp. 171-194.

McClelland, D. C. (1975), *Power: the inner experience*, Irvington Publishers, New York.

Meyer, J. P. and Allen, N. J. (1991), "A three-component conceptualization of organizational commitment". *Human resource management review*, Vol. 1 No. 1, pp. 61-89.

Meyer, J. P. and Allen N. J. (1997), *Commitment in the workplace: Theory, research and application*. Sage, Thousand Oaks, CA.

Meyer, J. P., Allen, N. J. and Smith C. A. (1993), "Commitment to organizations and occupations: Extension and test of a three-component conceptualization", *Journal of Applied Psychology*, Vol. 78 No. 4, pp. 538-551.

Meyer, J. P. and Herscovitch, L. (2001), "Commitment in the workplace: Toward a general model", *Human resource management review*, Vol. 11 No. 3, pp. 299-326.

Meyer, J. P. and Parfyonova, N. M. (2010), "Normative commitment in the workplace: A theoretical analysis and re-conceptualization". *Human resource management review*, Vol. 20 No. 4, pp. 283-294.

Meyer, J. P., Stanley, D. J., Herscovitch, L. and Topolnytsky, L. (2002), "Affective, continuance, and normative commitment to the organization: A meta-analysis of antecedents, correlates, and consequences", *Journal of vocational behavior*, Vol. 61 No. 1, pp. 20-52.

Mumford, M. D. and Van Doorn, J. R. (2001), "The leadership of pragmatism: Reconsidering Franklin in the age of charisma", *The Leadership Quarterly*, Vol. 12 No. 3, pp. 279-309.

Powell, D. M. and Meyer, J. P. (2004), "Side-bet theory and the three component model of organizational commitment", *Journal of vocational behavior*, Vol. 65 No. 1, pp. 157-177.

Rafferty, A. E. and Griffin, M. A. (2004), "Dimensions of transformational leadership: Conceptual and empirical extensions", *The Leadership Quarterly*, Vol. 15 No. 3, pp. 329-354.

Revelle, W. (2015), *psych: Procedures for Psychological, Psychometric, and Personality Research*, Northwestern University, Evanston, Illinois, available at <http://CRAN.R-project.org/package=psych>. R package version 1.5.4.

Richardson, H. A., Simmering, M. J. and Sturman, M. C. (2009), "A tale of three perspectives: Examining post hoc statistical techniques for detection and correction of common method variance", *Organizational Research Methods*, Vol. 12 No. 4, pp. 762-800.

Rosseel, Y. (2012), "lavaan: An R package for structural equation modeling", *Journal of Statistical Software*, Vol. 48 No. 2, pp. 1-36.

Shastri, R. K., Mishra, K. S. and Sinha, A. (2010), "Charismatic leadership and organizational commitment: An Indian perspective", *African journal of business management*, Vol. 4 No. 10, pp. 1946-1953.

Shusha, A. (2013), "The Mediating Role of Leader-Member Exchange in the Relationship between Transformational Leadership and Job performance", *European Journal of Business and Management*, Vol. 5 No. 8, pp. 157-164.

Simo, P., Enache, M., Sallan, J. M. and Fernandez, V. (2014), "Relations between organizational commitment and focal and discretionary behaviours", *The Service Industries Journal*, Vol. 34 No. 5, pp. 422-438.

Smith, C.A., Organ, D. W. and Near, J. P. (1983), "Organizational citizenship behavior: Its nature and antecedents", *Journal of applied psychology*, Vol. 68 No. 4, pp. 653-663.

Solinger, O. N., van Olffen, W. and Roe, R. A. (2008), "Beyond the three-component model of organizational commitment", *The Journal of Applied Psychology*, Vol. 93 No. 1, pp. 70-83.

Stone, A. G., Russell, R. F. and Patterson, K. (2004), "Transformational versus servant leadership: A difference in leader focus", *Leadership & Organization Development Journal*, Vol. 25 No. 4, pp. 349-361.

Strange, J. M. and Mumford, M. D. (2002), "The origins of vision: Charismatic versus ideological leadership", *The Leadership Quarterly*, Vol. 13 No. 4, pp. 343-377.

Van Dierendonck, D., Stam, D., Boersma, P., De Windt, N. and Alkema, J. (2014), "Same difference? Exploring the differential mechanisms linking servant leadership and transformational leadership to follower outcomes", *The Leadership Quarterly*, Vol. 25 No. 3, pp. 544-562.

Walumbwa, F. O., Avolio, B. J., Gardner, W. L., Wernsing, T. S., and Peterson, S. J. (2008), "Authentic leadership: Development and validation of a theory-based measure", *Journal of management*, Vol. 34 No. 1, pp. 89-126.

Wang, G., Oh, I. S., Courtright, S. H. and Colbert, A. E. (2011), "Transformational leadership and performance across criteria and levels: A meta-analytic review of 25 years of research", *Group & Organization Management*, Vol. 36 No. 2, pp. 223-270.

Wang, H., Law, K. S., Hackett, R. D., Wang, D. and Chen, Z. X. (2005), "Leader-member exchange as a mediator of the relationship between transformational leadership and followers' performance and organizational citizenship behavior", *Academy of management Journal*, Vol. 48 No. 3, pp. 420-432.

Wiza, M., Hlanganipai, N. (2014), "The Impact of Leadership Styles on Employee Organisational Commitment in Higher Learning Institutions", *Mediterranean Journal of Social Sciences*. Vol. 5 No. 4, pp. 135-143.

Yammarino, F. J., Spangler, W. D. and Bass, B. M. (1993), "Transformational leadership and performance: A longitudinal investigation", *The Leadership Quarterly*, Vol. 4 No. 1, pp. 81-102.



Table 1: Statistics about demographic variables of the sample.

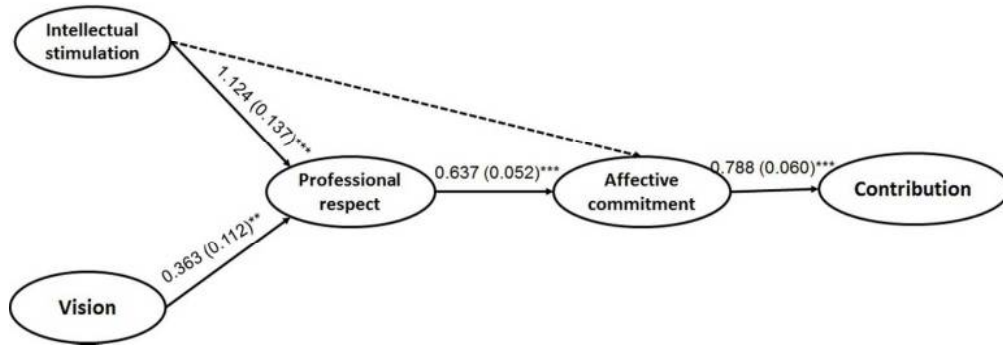
Demographic variables	Categories	Frequency	Percentage
Gender	Male	220	51.5
	Female	207	48.5
Age	21-30 years old	48	11.2
	31-40 years old	129	30.2
	41-50 years old	134	31.4
	≥ 51 years old	116	27.2
Educational level	Licence	202	47.3
	Master	86	20.1
	Engineer	113	26.5
	Doctorate	26	6.1
Labor sector	Industry, Energy and Construction	52	12.2
	Computers and telecommunications	51	11.9
	Services and Education	153	35.8
	Trade and artisans	34	8.0
	Agriculture, hunting, forestry and fishing	6	1.4
	Others labor sector	131	30.7
Number of employees in the company	Less than 50	110	25.8
	Between 50 and 150	58	13.6
	More than 50	259	60.6
Number of years in the current company	02-05	128	30.0
	06-10	95	22.2
	11-15	71	16.6
	16-20	49	11.5
	> 21	84	19.7

Table 2: Comparison of Structural Equation Models.

	$\chi^2$	df	$\Delta\chi^2$	RMSEA	CFI	TLI
<b>Model of AC</b>						
1. INT+VIS→PROF→AC→CONT	331.92	128		0.06	0.97	0.97
2. INT+VIS→PROF→AC→CONT and INT→AC	325.19	127	6.72	0.06	0.97	0.97
3. INT+VIS→PROF→AC→CONT and VIS→AC	327.60	127	4.31	0.06	0.97	0.97
4. INT+VIS→PROF→AC→CONT and INT+VIS→AC	324.62	126	7.29	0.06	0.97	0.97
<b>Model of CCHiSac</b>						
1. PER→LOY→CCHiSac	114.22	49		0.05	0.98	0.98
2. PER→LOY→CCHiSac and PER→CCHiSac	113.77	48	0.45	0.05	0.98	0.98
<b>Model of NC</b>						
1. SUP→AFF→NC	126.49	46		0.06	0.98	0.98
2. SUP→AFF→NC and SUP→NC	126.24	45	0.25	0.06	0.98	0.98

INT=intellectual stimulation, VIS= vision, PROF=professional respect, AC= affective commitment, CONT=contribution, PER=personal recognition, LOY=Loyalty, CCHiSac=continuance commitment related with perceived sacrifice of investments, SUP=supportive leadership, AFF=affect, NC=normative commitment

Figure 1: Results of Structural Equation Modeling on the Mediating effect of Professional respect



320x129mm (96 x 96 DPI)

Figure 2: Results of Structural Equation Modeling on the Mediating effect of Loyalty

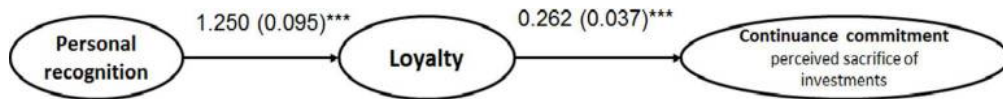
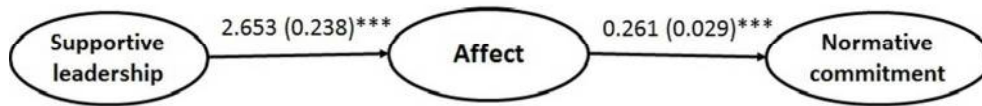


Figure 3: Results of Structural Equation Modeling on the Mediating effect of Affect



253x61mm (96 x 96 DPI)