

# TRUST: A PRECURSOR TO THE POTENTIAL MEDIATING EFFECT OF TRANSFORMATIONAL LEADERSHIP?

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## ABSTRACT

Whereas traditional transformational leadership studies tend to test the concept as an independent variable, this paper tests it as a mediator of the effects of management/peer trust, perceived organisational support and procedural justice. The study was undertaken within a large New South Wales (NSW) public sector organisation. In 2000, the organisation's annual staff survey indicated that levels of trust in management were very low and, as a result, the authors were asked to investigate the possible causes of this outcome. Focus group results and survey questionnaires indicated that trust in management and trust in peers had a significant influence on transformational leadership and that transformational leadership was a significant predictor of turnover intention, OCB conscientiousness and affective commitment. Quantitative results did not support the proposed mediating effects of transformational leadership.

**Keywords:** workplace trust; transformational leadership; perceived organisational support.

## INTRODUCTION

A staff survey within a large NSW public sector organisation resulted in employees reporting low levels of trust in management. Consequently, the researchers attempted to establish factors that led employees to experience trust in their workplace. First, a number of focus groups were conducted to determine the major themes relating to trust. Next, a survey questionnaire was developed in order to discover the prevalence of the focus group themes. As the quality of management-subordinate relationships was of major concern, transformational leadership was included as a construct due to its frequent association with trust (Sashkin 1988; Bryman 1992; Fairholm 1994; Podsakoff, MacKenzie & Bommer 1996; Butler, Cantrell & Flick 1999; Gillespie & Mann 2000). Whereas the majority of these studies posit transformational leadership as an antecedent to trust, the current study took a different perspective by testing transformational leadership as mediator of management/peer trust and other organisational variables. This approach was taken because focus group data identified that trust and certain conditions, such as perceived organisational support and procedural justice, influenced perceptions of leaders (Connell, Ferres & Travaglione 2002).

## THE INFLUENCE OF TRANSFORMATIONAL LEADERSHIP

The concept of transformational leadership has been touted as the most validated leadership construct in scholarly use today (Parry 1998, p. 85). Descriptions of this leadership construct capture much of what is referred to in the literature as 'desirable' leader behaviour. In

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particular, Bass and Avolio's (1985; 1997) transformational factors of charisma, idealised influence, individualised consideration and intellectual stimulation have been implicated as factors that broaden and elevate the interests of employees, generate trust and acceptance of an organisation's mission, in addition to motivating employees to go beyond self-interest (Yammarino & Bass 1990).

Research findings have consistently highlighted the positive influence of transformational leadership on organisational outcomes. For example, transformational leadership was found to result in lowered intention to leave an organisation, increased organisational citizenship behaviour (Bycio, Hackett & Allen 1995; Pillai, Shriessheim & Williams 1999) and lead to stronger organisational commitment (Bycio et al. 1995; Podsakoff et al. 1996). It is also said to inspire employees to develop their full potential and exceed performance expectations both at an individual level (Hartog, Van Muijen & Koopman 1997) and at the group level (Sosik, Avilio & Kahai 1997).

Bass (1997; 1998) cites an extensive range of studies from almost every sector and every continent to support the effectiveness of transformational leadership and also the validity of the multi-factor leadership (MLQ) questionnaire that measures the transformational leadership approach. He states that the paradigm involving transformational leadership is universal and has transcended organisational and intercultural boundaries. Likewise, Hartog, House, Hanges, Ruiz-Quintanilla and Dorfman (1999) found that aspects of transformational leadership were universally endorsed as contributing to outstanding leadership across 62 cultures. Nevertheless, Bass (1997) also noted that exceptions could occur as a consequence of unusual attributes of the organisation or its culture. Specifically, cultural attributes of the organisation could mitigate the effects of transformational leadership. Such factors may help to explain contradictory findings similar to Basu and Green's (1997) findings which reported that transformational leadership was negatively related to innovative behaviour. Also, Yammarino, Spangler and Dubinsky (1998) found that relationships between transformational leadership and positive organisational consequences were based on individual differences, rather than the transformational characteristics of the leader. The failure of transformational leadership to moderate the relationship between a number of determinates and organisational outcomes also led Whittington (1998) to conclude that it would be best to think of transformational leadership as a situational, rather than a universal, phenomenon. Although this literature is atypical compared to the myriad of results communicating the benefits of transformational leadership, it does question the 'blanket effect' of transformational leadership within an organisational context.

In the UK, Alimo-Metcalfe and Alban-Metcalfe (2001) extended the MLQ further with qualitative and quantitative research to develop the TLQ-LGC (transformational leadership questionnaire-local government version). However, negligible empirical research has been undertaken on transformational leadership within the Australian public sector. Given the significant changes in government organisations that have occurred over the past decade, together with the impact that managerial decisions can have on the physical and psychological conditions for employees (Gilmore, Shea & Useem 1997; Nelson, Cooper & Jackson 1995; O'Neill & Lenn 1995; Schweiger & De Nisi 1991), transformational leadership may well be critical to ensuring effective public sector management. This paper aims to further understanding concerning transformational leadership within the Australian public sector.

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## TRANSFORMATIONAL LEADERSHIP AND TRUST

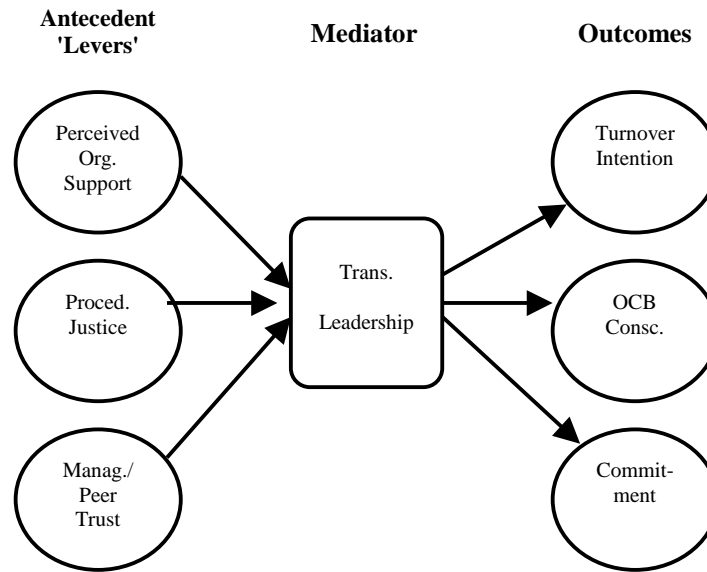
The influence of trust in organisational settings has attracted increasing interest in recent years (Mayer & Davis 1999; Clark & Payne 1997; Kramer & Tyler 1996; Hosmer 1995; Mayer, Davis & Schoorman 1995). This interest indicates that researchers and practitioners continue to recognise trust as an important factor in determining organisational success, organisational stability and the well-being of employees (Cook & Wall 1980; Tyler & Kramer 1996; Shaw 1997). The management literature tends to emphasise the importance of employees trusting their managers as it is believed that this promotes influence and greater productivity. However, it has been noted that trust within peer groups at work is also a highly important ingredient in organisational solidity and effectiveness (Cook & Wall 1980; Clarkson 1998; Velez 2001). As such, the present study measured both trust in management and trust in peers.

The growth of the trust literature has generated much debate and divergent opinion revolving around what trust is, what it is not, and how trusting relationships might be created. Although a commonly accepted definition of trust remains problematic, a frequently cited conceptualisation emphasises interpersonal relationships and a willingness to be vulnerable (Mayer et al. 1995). Thus, when trust declines, a reversal occurs and people become reluctant to take risks, demanding greater protections against the possibility of betrayal and increasingly insist on costly sanctioning mechanisms to defend their interests (Tyler & Kramer 1996, p. 4). For example, Robinson (1996) provided evidence that if workplace trust is established and maintained organisations might in some ways be immune to the negative consequences of psychological contract breach (such as low job satisfaction, poor performance and high staff turnover). Specifically, where employers earn the trust of employees, perceptions of contract breach are less likely to occur.

It is held that workplace trust is established and developed primarily through an organisation's leaders (Creed & Miles 1996; Fairholm 1994; Shaw 1997). Hence, as Gillespie and Mann (2000) point out, although different models of transformational leadership identify different specific behaviours, all theories posit trust as a central feature of the relationship that transformational leaders have with their followers (for example, Butler, Cantrell & Flick 1999; Podsakoff et al. 1990; 1996; Simon 1995). Specifically, Pillai, Shriessheim and Williams (1999) found that transformational leadership indirectly influenced OCB through procedural justice and trust, whereas it did not influence either job satisfaction or organisational commitment. Conversely, Podsakoff et al. (1990) found that transformational leadership was significantly linked to both employees' trust and satisfaction, but not to OCB.

To further clarify the role of transformational leadership and trust, it is advocated that a model of its various determinants and outcomes be formed to enable management and human resource professionals to frame strategies and interventions that consider complex relationships between organisational factors. Figure 1 illustrates a possible mediating model of transformational leadership. Perceived organisational support, procedural justice and management/peer trust are designated as the antecedent variables that impact on transformational leadership and the outcome variables of turnover intention, OCB (conscientiousness) and commitment. Findings from the focus groups conducted within the same organisation prior to this study indicated both the importance and relevance of perceived organisational support, procedural justice and management/peer trust in relation to leadership (Connell, Ferres & Travaglione 2002).

**Figure 1: A Proposed Mediating Model Of Transformational Leadership.**



In Figure 1, transformational leadership mediates the relationship between the antecedents and outcomes. Table 1 presents a summation of the antecedents and outcomes and an overview of the literature related to the rationale for including each factor in the proposed model. As transformational leadership and trust were discussed previously in this paper, they are not included in Table 1.

**Table 1:  
Constructs and Relationships with other Variables**

<b>Construct and description</b>	<b>Relationships with other variables</b>
<b>Perceived Organisational Support:</b> the extent to which employees perceive that they are valued by their organisation and that the organisation cares about their well-being (Eisenberger, Fasolo & Davis-LaMastro 1990).	Positively correlated with affective commitment, (Allen & Meyer 1990; Mowday, Steers & Porter 1979; Shore & Wayne 1993; Wayne, Shore & Liden 1997) and negatively related to turnover intention (Allen, Freeman, Russell, Reizenstein & Rentz 2001; Wayne, Shore & Liden. 1997). Potential antecedent of trust in management (Tan & Tan 2000).
<b>Procedural Justice:</b> a component of perceived justice, procedural justice describes the fairness of the <i>procedures</i> used to determine organisational outcomes (Folger & Greenberg 1985; Alexander & Ruderman 1987; Folger & Konovsky 1989; Moorman 1991).	Impacts on most of other variables investigated in the present survey. Previous research indicates that its impact is greater on commitment and organisational citizenship behaviour. When employers are perceived to treat employees fairly, the norm of reciprocity dictates that employees in turn treat the employer fairly, and organisational citizenship behaviour increases substantially (Folger & Greenberg 1985; Alexander & Ruderman 1987; Folger & Konovsky 1989).

Construct and description	Relationships with other variables
<p><b>Commitment:</b> the degree to which a person identifies with, or feels connected to an organisation (Jaros, Jermier, Kohler &amp; Sincich 1993; Bennett &amp; Durkin 2000). Affectively committed employees remain at an organisation because they want to and those with a strong continuance commitment remain because they <i>need</i> to (Allen &amp; Meyer 1990).</p>	<p>Affective commitment has been shown to be an outcome of transformational leadership, but a relationship has also been found between transformational leadership and continuance commitment (Freund 1995). Shown to positively influence the variable of perceived organisational support (Eisenberger Armeli, Rexwinkel, Lynch &amp; Rhoades. 2001). A negative relationship has been shown for turnover intention (Schnake &amp; Dumler 2000).</p>
<p><b>Turnover intention:</b> “a conscious and deliberate wilfulness to leave the organisation” (Tett &amp; Meyer 1993, p. 262).</p>	<p>Negative relationship with transformational leadership (Bycio et al. 1995). Evidence shows that high commitment is related to low levels of intention to turnover. Labour market conditions, expectations regarding alternative job opportunities and job tenure all act as intervening variables with regard to turnover intention (Carsten &amp; Spector 1987; Hulin, Reznowski &amp; Hackiya 1985; Schnake &amp; Dumler 2000).</p>
<p><b>OCB Conscientiousness:</b> is one dimension of the Organisational Citizenship Behaviour (OCB) construct and relates to an employee going beyond normal job requirements (Organ 1988).</p>	<p>OCB conscientiousness has positive relationship with transformational leadership (Whittington 1998). Strong patterns relate general OCB to leadership (supporting behaviour and transformational leadership particularly) (Podsakoff, MacKenzie, Paine &amp; Bachrach 2000). Job satisfaction, trust, perception of fairness and organisational commitment positively related to general OCB (Organ &amp; Konovsky 1989).</p>

### Aims and Research Hypotheses

The researchers set out to measure the influence of transformational leadership as a mediator of trust and other ‘levers’ managers can pull in order to increase positive organisational outcomes. Consistent with this model and the extant literature, three hypotheses are posited. Results of the research need to satisfy each of these hypotheses to confirm the moderating effect of transformational leadership (James & Brett 1984):

- Hypothesis 1:* The levers of trust in management/peers, perceived organisational support, and procedural justice will have a significant and positive influence on levels of transformational leadership.
- Hypothesis 2:* Higher levels of transformational leadership, considered independently from the antecedent levers, will predict higher commitment and conscientiousness and lower turnover intention.
- Hypothesis 3:* The antecedents of trust in management/peers, perceived organisational support, and procedural justice will not impact as strongly on the organisational outcomes when the influence of transformational leadership is considered concurrently with the antecedents.

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## METHOD

### Participants

Two hundred and seventy-five respondents were included in the study. While 291 questionnaires were returned, listwise deletion was implemented to exclude incomplete responses from analysis; 86.9 percent of respondents were female and 13.1 percent were male; 10.9 percent of participants were in management or senior management positions, while 89.1 percent labeled their position as non-management or 'other'; 32.2 percent of respondents were aged less than 36 years, 45.2 percent were aged between 37 years and 47 years and 22.6 percent were aged over 48 years; 16.2 percent of respondents had been with the organisation for up to two years, 31.8 percent had a tenure between two years and 10 years; and 52 percent of respondents had been with the organisation for over ten years.

The distribution of gender, position level, age and tenure in the sample was representative of the demographics of the public health authority where the study was conducted. Within this organisation, the sample was drawn from four facilities, each with a similar number of employees. 1300 questionnaires were sent to all employees within these facilities, yielding a response rate of 22.4 percent.

### Questionnaire Measures

Forty-five questions captured the seven variables under investigation, with five single questions utilised to obtain demographic information on gender, organisational tenure, position level, work facility and age. A 7-point Likert response format (ranging from 1= Strongly Disagree to 7= Strongly Agree) was used to measure the following constructs:

**Transformational Leadership.** Eight items measured the transformational leadership levels of respondent's immediate managers/supervisors. These questions were adapted from Hartog, Van Muijen & Koopman's (1997) scale of inspirational leadership. Hartog et al. (1997) devised the inspirational leadership questions by factor analysing the transformational leadership subscale within Bass and Avolio's Multi-Factor Leadership Questionnaire-8Y (MLQ-8Y) (1995). The inspirational leadership items had an alpha reliability of .95, identical to the alpha of the transformational scale, but the inspirational leadership scale had fewer items. The average inter-item correlation for the inspirational scale was higher than the average inter-item correlation of transformational leadership (Hartog et al. 1997). The internal reliability coefficient for the items used in the current study was .98. An example item was: 'my immediate supervisor/manager articulates a vision of future opportunities'.

**Trust in Management/Trust in Peers.** The ten questions used to measure trust in management and peers were adapted from Cook and Wall's (1980) trust measure. Five items were chosen from two six-item subscales: trust in management and trust in peers. Two negative items were omitted from each subscale because strong arguments have been forwarded suggesting that it may be unwise to think of distrust as the real opposite of trust (Kramer 1996). The use of reverse coded trust items, being framed in terms of distrust, may not be tapping into trust. Reliability scores on two different facets of the original subscale were .69 and .78 (Cook & Wall 1980). The reliability scores for the trust scales for this study were .86 and .87 for trust in management and trust in peers respectively. Example items were: 'Management is sincere in its attempts to meet workers' points of view' (from the trust in management subscale) and 'I can trust the people I work with to lend a hand if I need it' (from the trust in peers subscale).

**Dispositional Trust.** Five self-rating items were used to measure trust as a personality trait. These questions were taken from the trust subscale in the Revised NEO Personality Inventory (Costa & McCrae 1985). Three negatively worded items from the original scale were not included. The alpha reliability of the original subscale was .90 (Costa & McCrae 1985). The reliability coefficient of the scale employed in this study was .85. An example item was: 'My first reaction is to trust people'.

**Perceived Organisational Support.** The three questions that measured perceived organisational support were extracted from the short version of the Survey of Perceived Organisational Support (SPOS) instrument devised by Eisenberger et al. (1986). The reliability of the SPOS has been reported as .93 (Eisenberger et al. 1986). The internal reliability of the 3-item construct used for the current study was .92. An example item was: 'This organisation is willing to help me when I need a special favour'.

**Procedural Justice.** Procedural justice within the workplace was measured using three items adapted from an instrument developed by Sweeney and McFarlin (1997). Reliability for the original scale ranged from .70 to .90. The internal reliability of the three-items used in this study was .69. An example item included: 'In general, disciplinary actions taken in this organisation are fair'.

**Turnover Intention.** The three questions that measured the turnover intention of the respondent were adapted from the Intention to Turn Over Scale contained in the Michigan Organisational Assessment Questionnaire (Cammann, Fichman, Jenkins & Klesh 1979). The internal reliability of this scale was reported by these researchers as .83. The internal reliability of this scale in the present study was .66. An example item was: 'I often think about quitting'.

**Commitment.** The six questions on commitment were extracted from the three-dimensional Allen and Meyer (1990) commitment instrument. Meyer and Allen (1997) have reported the internal consistency estimates (alpha coefficients) of the affective, normative, and continuance scale items. Median reliabilities for affective, normative and continuance commitment scales respectively are .85, .73, .79. This study made use of only the affective scale and the continuance scale. Affective and continuance commitment were measured by three items each, with internal reliabilities of .80 and .72 respectively. Example items were: 'I would be very happy to spend the rest of my career with this organisation' (from the affective scale) and 'It would be hard to leave this organisation, even if I wanted to' from the continuance scale.

**Organisational Citizenship Behaviour (OCB) Conscientiousness.** Three items were used to measure the organisational citizenship behaviour (OCB) dimension of conscientiousness. The three items constitute Jordon and Sevestos' (2001) shortened version of the conscientiousness subscale that was derived from Podsakoff, MacKenzie, Moorman and Fetter's (1990) OCB questionnaire. Jordon and Sevestos (2001) reported that the alpha reliability of the shortened subscale was .76. The alpha reliability of the three items in the current study was .82. An example item was 'I never abuse my rights and privileges'.

## Procedure

Following the development of the survey questionnaire, copies were distributed to the organisation's payroll service, each with a cover letter and return envelope. Staff attached the questionnaire to the pay slips of employees within the four facilities of the organisation where

the focus groups had been conducted. Participant anonymity and confidentiality was assured by having the completed questionnaires directed to the researchers.

## RESULTS

### Analysis

All organisational variables were screened for normality, homogeneity of variance and outliers. One outlier was detected and subsequently deleted from the analysis. Dispositional trust and OCB conscientiousness were positively skewed, and various logarithmic transformations did not correct this violation. As normality and equal variance assumptions can be violated somewhat with the type of statistical procedures employed in this study (Howell 1997), these variables were included in the analysis. Where relevant, residuals from each analysis were monitored and they discounted significant assumption violations.

### Levels of Transformational Leadership, Antecedents and Outcomes

The descriptive statistics contained in Table 2 reflect several interesting findings. Of note, reported levels of five variables were relatively low, or below the scale midpoint of four: transformational leadership ( $M = 3.88$ ,  $SD = 1.96$ ), perceived organisational support ( $M = 3.12$ ,  $SD = 1.69$ ), perceived procedural ( $M = 3.4$ ,  $SD = 1.35$ ), trust in management ( $M = 3.63$ ,  $SD = 1.7$ ), and affective commitment ( $M = 3.55$ ,  $SD = 1.65$ ). Despite these slightly negative results, turnover intention was also low ( $M = 3.37$ ,  $SD = 1.72$ ) and the scores for continuance commitment were moderate ( $M = 4.5$ ,  $SD = 1.75$ ). Where the three remaining variables were concerned: dispositional trust ( $M = 5.62$ ,  $SD = 1.05$ ), trust in peers ( $M = 5.43$ ,  $SD = 1.7$ ) and OCB conscientiousness ( $M = 6.27$ ,  $SD = .97$ ) results were relatively high.

**Table 2: Means, Standard Deviations and Ranges for Organisational Variables**

Variable	M <sup>ab</sup>	SD	Scale Range
Dispositional Trust	5.62	1.05	1 - 7
Transformational Leadership	3.88	1.96	1 - 7
Perceived Organisational Support	3.12	1.69	1 - 7
Procedural Justice	3.4	1.35	1 - 7
Trust in Peers	5.43	1.7	1 - 7
Trust in Management	3.63	1.7	1 - 7
Affective Commitment	3.55	1.65	1 - 7
Continuance Commitment	4.5	1.75	1 - 7
Turnover Intention	3.37	1.72	1 - 7
OCB Conscientiousness	6.27	.91	1 - 7

<sup>a</sup> Higher scores indicate higher levels for each variable

<sup>b</sup>  $n = 275$  for each variable

### Relationships between the Variables

Correlations, showing the strength and direction of the linear relationships between transformational leadership and relevant organisational variables, are presented in Table 3. Age, gender, tenure and disposition towards trust were included in the analysis as control variables.

**Table 3: Intercorrelations between Demographic and Organisational Variables**

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13
1. Age	1.0												
2. Gender	-.04	1.0											
3. Tenure	.47**	.09	1.0										
4. Disp. Trust	.11	.11	.13*	1.0									
5. Trans. Leadership	-.03	.12*	.13*	.18**	1.0								
6. POS	-.07	.13*	-.19**	.26**	.58**	1.0							
7. Procedural Justice	-.1	.14*	.21**	.24**	.55**	.63**	1.0						
8. Trust / Peers	-.05	.08*	-.13**	.37**	.5**	.38**	.41**	1.0					
9. Trust/ Manag.	-.07	.15*	-.19**	.36**	.69**	.74**	.71**	.48**	1.0				
10. Affect. Commit.	.14*	.02	.02	.23**	.49**	.61**	.41**	.38**	.52**	1.0			
11. Contin. Commit	.15*	.05	-.26**	.1	.05	.19**	.12*	.04**	.12	-.49**	1.0		
12. Turnover Intention	-.14*	-.09	.01	-.1	-.35**	-.37**	-.26**	-.39**	-.37**	-.49**	-.2**	1.0	
13. Conscientiousness	.05	.29**	.03	.18**	.19**	.08	.2**	.15*	.13*	.19**	.16**	-.16*	1.0

\* Correlation is significant at the .01 level (2-tailed)

\*\*Correlation is significant at the .01 level (2-tailed)

Excluding continuance commitment, the correlations between transformational leadership and all other anticipated antecedent and outcome variables were significant. These correlations ranged from  $r = .19$ ,  $n = 275$ ,  $p < .05$  for transformational leadership and conscientiousness, to  $r = .69$ ,  $n = 275$ ,  $p < .05$  for transformational leadership and trust in management. In addition to being significant, these correlations were generally of moderate strength, indicating that these relationships were fairly important. Although these correlations suggest that transformational leadership had a reasonable association with a number of variables, *very* strong relationships were not established. It is still possible that respondents did not discriminate between the variables.

The strongest correlation was between a positive relationship between perceived organisational support and trust in management,  $r = .74$ ,  $n = 275$ ,  $p < .05$ . Table 3 also indicates that there was a significant positive relationship between procedural justice and trust in management,  $r = .71$ ,  $n = 275$ ,  $p < .05$ . In addition, higher levels of perceived organisational support, procedural justice, trust in management and trust in peers was related to lower turnover intention and greater affective commitment.

### Regression Analysis

Four stages of standardized regression analyses were performed to test the feasibility of the mediating model of transformational leadership. Firstly, the effect of the antecedent variables (trust in management/peers, procedural justice, and perceived organisational support) on transformational leadership was examined (Hypothesis 1). Next, the influence of transformational leadership on each of the outcome variables (affective/continuance commitment, turnover intention, and OCB conscientiousness) was investigated (Hypothesis 2). Third, the effect of the antecedent variables on each of the outcomes, independent of transformational leadership was determined. The fourth stage explored the extenuating effect of transformational leadership by including all antecedents and transformational leadership as predictors of each of the outcome variables and comparing these results to the variance levels noted in the third stage of regression analysis (Hypothesis 3). Each regression controlled for the effects of gender, age, tenure and disposition towards trust.

**Antecedent Variables and Transformational Leadership.** The results displayed in Table 4 indicate that the combined antecedent variables significantly influenced transformational leadership,  $F(8, 266) = 39.12$ ,  $p < .001$ , accounting for 53 percent of the variance in levels of the variable. Trust in management ( $\beta = .51$ ,  $p < .05$ ), trust in peers management ( $\beta = .25$ ,  $p < .05$ ) and dispositional trust ( $\beta = -.15$ ,  $p < .05$ ) were the only significant predictors of transformational leadership perceptions.

**Table 4: Summary of Standard Regression Analysis for Antecedent Variables Predicting Transformational leadership**

Variable	Transformational Leadership		
	B	SE B	$\beta$
Perceived Organisational Support	.13	.07	.11
Procedural Justice	.01	.09	.06
Trust in Peers	.41*	.08	.25*
Trust in Management	.59*	.08	.51*
Age	.01	.10	.03
Gender	.18	.25	.02
Tenure	.01	.08	.05
Dispositional Trust	-.28*	.09	-.15*

Note.  $R = .73$ ,  $R^2 = .53$   
\* $p < .05$

**The Influence of Transformational Leadership on Outcomes.** The F values in Table 5 demonstrate the significance of each regression model used to predict outcomes using transformational leadership and demographic variables,  $p < .005$ . Transformational leadership was a significant predictor for turnover intention, OCB conscientiousness and affective commitment, yet did not significantly influence continuance commitment. Gender was more influential than transformational leadership in predicting levels of OCB conscientiousness, while tenure had a notable influence on continuance commitment. Between six and 27 percent of the variance in outcome scores could be attributed to transformational leadership and control variables.

**Table 5: Summary of Standard Regression Analysis for Transformational Leadership Predicting the Outcome Variables**

Variable	Turnover Intention	Conscientiousness	Affect. Commitment	Contin. Commitment
	$\beta$	$\beta$	$\beta$	$\beta$
Trans. Leadership	-.33*	.14*	.47*	.07
Age	-.19*	.06	.14	.04
Gender	-.06	.26*	-.05	.01
Tenure	.06	-.02	.00	.24*
Dispositional Trust	-.03	.12*	.14	.05
	$R = .39$	$R = .35$	$R = .53$	$R = .27$
	$R^2 = .13$	$R^2 = .11$	$R^2 = .27$	$R^2 = .06$
	$F = 9.4^{**}$	$F = 7.6^{**}$	$F = 20.9^{**}$	$F = 4.3^{**}$

\* $p < .05$

\*\* $p < .001$

**The Influence of the Antecedents on Outcome Variables.** The regression analyses presented in Table 6 demonstrate that the antecedents had a direct influence on each outcome variable, accounting for between 11 and 43 percent of the total variance across outcomes ( $p < .001$  for each model). Each of the antecedents had an effect on at least one outcome variable, despite the influence of some control variables. Trust in peers and trust in management significantly influenced turnover intention. Procedural justice played a central role in reported levels of OCB conscientiousness, while turnover intention, affective

commitment and continuance commitment was significantly influenced by perceived organisational support.

**Table 6: Summary of Standard Regression Analysis for Antecedents Predicting the Outcome Variables**

Variable	Turnover Intention	Conscientiousness	Affect. Commitment	Contin. Commitment
	$\beta$	$\beta$	$\beta$	$\beta$
POS	-.21**	-.11	.50**	.24*
Procedural Justice	.09	.22*	-.01	.07
Trust in Peers	-.31*	.06	.16*	-.03
Trust in Management	-.20*	-.06	.13	-.03
Age	-.19*	.07	.14*	.04
Gender	-.05	.26*	-.08	-.10
Tenure	-.22*	-.2	.10	-.3*
Dispositional Trust	.14*	.12	-.02	-.02
	$R = .51$	$R = .37$	$R = .67$	$R = .36$
	$R^2 = .24$	$R^2 = .11$	$R^2 = .43$	$R^2 = .13$
	$F = 11.8**$	$F = 5.2**$	$F = 26.4**$	$F = 4.8**$

\* $p < .05$

\*\* $p < .001$

**Table 7: Summary of Standard Regression Analysis for Antecedents and Transformational Leadership Predicting the Outcome Variables**

Variable	Turnover Intention	Conscientiousness	Affect. Commitment	Contin. Commitment
	$\beta$	$\beta$	$\beta$	$\beta$
Trans. Leadership	-.03	.19*	.14	-.12
POS	-.21*	-.13	.48**	.25**
Procedural Justice	.10	.21*	-.02	.08
Trust in Peers	-.30*	.02	.13*	.01
Trust in Management	-.17	-.15	.06	.03
Age	-.19*	.07	.14*	.04
Gender	-.05	.26	-.08	-.01
Tenure	-.02	-.03	.10	.30*
Dispositional Trust	.14*	.15*	.00	-.2
	$R = .51$	$R = .39$	$R = .67$	$R = .37$
	$R^2 = .24$	$R^2 = .12$	$R^2 = .43$	$R^2 = .10$
	$F = 10.5**$	$F = 5.2**$	$F = 24.3**$	$F = 4.5**$

\* $p < .05$

\*\* $p < .001$

**The Mediating Effect of Transformational Leadership.** If transformational leadership acted as a mediator, the influence of the antecedents on outcomes would presumably decrease significantly if leadership and the antecedent variables were added simultaneously as predictor variables. Yet Table 7 illustrates similar patterns, concerning the influence of antecedents on outcomes, with those presented in Table 6. A minor exception is that trust in management is interceded by transformational leadership. Its influence on turnover intention is reduced to insignificant when leadership is added to the model, although this reduction was slight. Transformational leadership was only a significant predictor for OCB conscientiousness when the antecedents were included. The antecedents with leadership also

explained a similar amount of variance in outcomes to the models with the antecedents alone, between 10 and 43 percent. Of the four  $R^2$  figures, two are the same, one is increased and one is decreased. Therefore, overall, transformational leadership has a negligible impact on outcomes when included with the organisational antecedent variables.

## DISCUSSION

The results partially supported the first hypothesis that the organisational 'levers' would impact on transformational leadership. With this hypothesis, the trust variables (trust in management, trust in peers and dispositional trust) were the only significant influences on ratings of transformational leadership. Perceived organisational support and procedural justice were not significant determinants. In support of the second hypothesis, transformational leadership was a significant predictor of three outcomes: turnover intention (Bycio, Hackett & Allen 1995), OCB conscientiousness (Gerstner & Day 1997; Bycio et al. 1995) and affective commitment (Podsakoff, MacKenzie & Bommer 1996; Bommer 1996; Bycio et al. 1995). Each antecedent also had a significant influence on at least one organisational outcome variable, and this was consistent with expectations. In agreement with the literature, trust was found to influence turnover intention and affective commitment (Albrecht & Travaglione, in press; Cunningham & MacGregor 2000). Perceived organisational support impacted on both turnover intention (Eby & Dematteo 2000) and commitment variables (Eisenberger et al. 2001; O'Driscoll & Randall 1999), while increased perceptions of procedural justice influenced greater OCB conscientiousness (Menguc 2000). Overall, across several organisational antecedents and outcomes, the results did not support the third hypothesis that transformational leadership would mediate the effects of the antecedent 'levers'.

This study does not question the contribution of transformational leadership to exceptional leadership practices, even though results did not show its moderating effects across the chosen dependent variables. Our findings may suggest that research into the effects of transformational leadership is substantive to the particular setting in which it is conducted (Whittington 1998), especially considering the current research was conducted within the one organisation.

Our study did, however, show that trust was a precursor to transformational leadership and its impact on positive employment outcomes. This finding, and the fact that perceived organisational support and procedural justice were not shown to be determinants of transformational leadership, means that the model outlined in Figure 1 requires revision, as discussed in the following section of this paper.

Consistent with other researchers' findings, transformational leadership was found to be an important determinant of the principal indicators of individual effectiveness for workplace studies (see Podsakoff et al. 1996; Bommer 1996; Bycio et al. 1995). The results of this study indicated that employees who rated their managers as transformational leaders were less likely to want to leave the organisation, were more likely to be emotionally attached to their workplace, and were more likely to perform duties that were outside their expected job tasks. Nonetheless, transformational leadership did not influence continuance commitment. The data showed that the average employee stayed with the organisation because they felt they had no other choice, and that transformational leaders could not influence this perception. This implies that management and human resource professionals need to look at not only

management development, but also broader organisational strategies to build affective, rather than continuance, commitment.

### **LIMITATIONS OF THE STUDY AND FUTURE DIRECTIONS**

There were some methodological concerns with the current research. Firstly, the effect of position level on results was also not explored because of unequal numbers of employees at each level. Secondly, while the management and gender distribution was representative of the population within the organisation where the study was conducted, care must be taken when generalising these results to other organisations and industries, especially those in the private sector. Thirdly, the use of shortened scales was not optimal for the internal reliability of the procedural justice and turnover intention measures. The scope of the study and organisational requirements restricted the use of a longer questionnaire, but this parsimony and the probability of an increased response rate offered by the shortened scales may have outweighed the potential disadvantages outlined here. Another concern involved single method variance of self-report data; random responding could have impacted on results due to the use of just one Likert scale for all but five questions. A related matter concerns the issue of multicollinearity. Some high correlations among predictor variables may have increased the variance of the estimates of the regression coefficients, masking significant results with nonsignificant effects. Finally, high means for the measures of dispositional trust and OCB conscientiousness indicated socially desirable responding within the questionnaire.

While the sample bias was unavoidable, some of the methodological concerns can be addressed in future studies. Questionnaire items should not be presented construct by construct, but mixed together randomly and multiple response scales implemented to decrease the effects of single method variance. The 'theme' or title of the construct being measured should not be included in the questionnaire. This omission may increase the range of responses and reduce both skewness and social desirable answers. A social desirability scale may also be introduced to future research as a control measure. Longitudinal designs and the use of structural equations modeling are also encouraged to refine possible relationships and distinguish causal directions.

When considering future research directions, our findings reinforced the integral role of trust in transformational leadership (Jung & Avolio 2000; Pillai et al. 1999; Butler, Cantrell & Flick 1999). This suggests that future models should highlight this relationship, especially considering that organisational trust variables were more significant than dispositional trust and demographic factors. The present research did not exclude trust in management and trust in peers as consequences of transformational leadership. Transformational leadership may also be placed alongside trust as an antecedent, rather than as a mediator, when testing the effect of transformational leadership within an organisation. These interpretations may be explored in alternate models.

### **CONCLUSION AND IMPLICATIONS**

The principle variables of transformational leadership and trust used in this study have repeatedly been shown to have important consequences for organisations. As such the findings have significant implications for both managers and human resource professionals. At the most basic level, results suggest that managers should devote some time to energising and developing themselves as transformational leaders. As management reserves the power

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and authority to significantly influence employment conditions, they need to be aware of the influence their leadership style has both on employees and the organisation. Promoting trust both within and across management divisions seems central to effecting perceptions of transformational leadership behaviours. In addition, the strong influence of organisational variables on constructs compared to the influence of personality/demographic factors demonstrates that management *can* affect positive organisational outcomes through practices that engender the 'levers' of trust, support and fairness in the workplace.

These results suggest that organisations should adopt a holistic approach, which can be achieved by focusing on the various constituents, policies and procedures of the organisation in addition to relationship levels (Tan & Tan 2000). As occurred within the organisation investigated for this research, whereby annual staff surveys are conducted, the deficits and problems within organisations should be monitored regularly. Where interventions are introduced to address those deficits and problems, feedback needs to be obtained periodically.

In summary, although the findings presented here did not support the mediating effect of transformational leadership, they have advanced the theoretical development of a number of factors and noted the importance of trust in the development of transformational leadership. Once a model detailing all relevant factors is empirically supported, it can provide managers and human resource professionals with a functional guide that can contribute to the development of more effective organisations.

## REFERENCES

- Albrecht, S.L. & Travaglione, A. (in press), 'Trust in public sector senior management', *Journal of International Human Resource Management*.
- Alexander, S. & Ruderman, M. 1987, 'The role of procedural and distributive justice in organizational behavior', *Social Justice Research*, 1, pp. 177-198.
- Alimo-Metcalfe, B. & Alban-Metcalfe, R.J. 2001, 'The development of a new Transformational Leadership Questionnaire', *Journal of Occupational and Organizational Psychology*, 74 (1), pp. 1-27.
- Allen, N.J. & Meyer, I.P. 1990, 'The measurement and antecedents of affective, continuance, and normative commitment to the organization', *Journal of Occupational Psychology*, 91, pp. 1-18.
- Allen, T.D., Freeman, D.M., Russell, J., Reizenstein, R.C. & Rentz, J.O. 2001, 'Survivor reactions to organizational downsizing: Does time ease the pain?', *Journal of Occupational and Organizational Psychology*, 74(2), pp. 145-164.
- Bass, B.M. & Avolio, B.J. 1995, *The Multifactor Leadership Questionnaire*, Mind Garden, Palo Alto, CA.
- Bass, B.M. & Avolio, B.J. 1997, *Full range leadership development: Manual for the Multifactor Leadership Questionnaire*, Mind Garden, Redwood City.

- 
- Bass, B.M. 1997, 'Does the transactional-transformational leadership paradigm transcend organizational and national boundaries?', *American Psychologist*, 52(2), pp. 130-139.
- Basu, R. & Green, S. 1997, 'Leader-member exchange and transformational leadership: An empirical examination of innovative behaviors in leader-member dyads', *Journal of Applied Social Psychology*, 27(6), pp. 477-499.
- Bennett, H. & Durkin M. 2000, 'The effects of organisational change on employee psychological attachment: An exploratory study', *Journal of Managerial Psychology*, 15, pp. 126-147.
- Bommer, W.H. 1996, 'Contextual influences on transformational leader behavior's effectiveness: Transformational leader behavior in a substitutes for leadership framework', Doctoral dissertation', *Dissertation Abstracts International*, 56, p. 3204.
- Bryman, A. 1992, *Charisma and leadership in organisations*, Sage Publications, London.
- Butler, J. Cantrell, R. & Flick R. 1999, 'Transformational leadership behaviors, upward trust, and satisfaction in self-managed work teams', *Organization Development Journal*, 17(1), pp. 13-28.
- Bycio, P. Hackett, R.D. & Allen, J. 1995, 'Further assessments of Bass's (1985) conceptualization of transactional and transformational leadership', *Journal of Applied Psychology*, 80(4), pp. 468-478.
- Cammann, C., Fichman, M., Jenkins, D. & Klesh, J. 1979, 'The Michigan Organizational Assessment Questionnaire', unpublished manuscript, University of Michigan, Ann Arbor.
- Carsten, J.M. & Spector, P.E. 1987, 'Unemployment, job satisfaction, and employee turnover: A meta-analysis test of the "Muchinsky Model"', *Journal of Applied Psychology*, pp. 374-381.
- Clark, M.C. & Payne R.L. 1997, 'The nature and structure of workers' trust in management', *Journal of Organizational Behavior*, 18, pp. 205-224.
- Clarkson, A. 1998, 'Relationships at work that help get things done: Social capital in organizational settings', Doctoral Dissertation, *Dissertation Abstracts International*, 59, p. 2096.
- Connell, J., Ferres, N. & Travaglione A. 2002, 'Engendering trust in the workplace: The importance of perceived organisational support', *Manuscript submitted for publication*.
- Cook, J. & Wall, T. 1980, 'New work attitude measures of trust, organizational commitment and personal need non-fulfillment', *Journal of Occupational Psychology*, 53, pp. 39-52.
-

- 
- Costa, P.T. & McCrae, R.R. 1985, 'Revised NEO Personality Inventory (NEO-PI)', Psychological Assessment Resources, Florida, Odessa.
- Creed, W. & Miles, R. 1996, 'Trust in organisations: A conceptual framework linking organizational forms, managerial philosophies, and the opportunity costs of controls', in R.M. Kramer & Tyler, T. R. *Trust in Organisations: Frontiers of Theory and Research*, Sage, Thousand Oaks, CA.
- Cunningham, J. & MacGregor, J. 2000, 'Trust and the design of work: Complementary constructs in satisfaction and performance', *Human Relations*, 53(12), pp. 1575-1591.
- Eby, L. & Dematteo, J. 2000, 'When the type of move matters: Employee outcomes under various relocation situations', *Journal of Organizational Behavior*, 21(6), pp. 677-687.
- Eisenberger, R. Fasolo, P. & Davis-LaMastro, V. 1990, 'Perceived organizational support and employee diligence, commitment, and innovation', *Journal of Applied Psychology*, 75(1), pp. 51-59.
- Eisenberger, R., Armeli, S., Rexwinkel, B., Lynch, P. & Rhoades, L. 2001, 'Reciprocation of perceived organizational support', *Journal of Applied Psychology*, 86(1), pp. 42-51.
- Eisenberger, R., Huntington, R., Hutchinson, S. & Sowa, D. 1986, 'Perceived organisational support', *Journal of Applied Psychology*, 71, pp. 500-507.
- Fairholm, G.W. 1994, 'Leadership and the culture of trust', Praeger, Westport Connecticut.
- Folger, R. & Greenberg, J. 1985, 'Procedural justice: An interpretative analysis of personnel systems. In K. M. Rowland and G. R. Ferris (Eds)', *Research in Personnel and Human Resource Management*, Vol 3 (pp. 141-183), JAI Press, Greenwich.
- Folger, R. & Konovsky, M. 1989, 'Effects of procedural and distributive justice on reactions to pay raise decisions', *Academy of Management Journal*, 32, pp. 115-130.
- Freund, C.H. 1995, 'The dual impact of leadership behavior and leader-follower and leader-follower tolerance for ambiguity congruence on organizational commitment', Doctoral dissertation, *Dissertation Abstracts International*, 56, p. 3489.
- Gillespie, N. & Mann, L. 2000, 'The building blocks of trust: The role of transformational leadership and shared values in predicting team members' trust in their leaders', paper presented at the 2000 Academy of Management Conference, Toronto.
- Gilmore, T.N., Shea, G.P. & Useem, M. 1997, 'Side effects of corporate cultural transformations', *Journal of Applied Behavioral Science*, 33, pp. 174-189.
-

- 
- Hartog, D.N., House, R., Hanges, P., Ruiz-Quintanilla, S. & Dorfman, P. 1999, 'Culture specific and cross-culturally generalizable implicit leadership theories: Are attributes of charismatic/transformational leadership universally endorsed?', *Leadership Quarterly*, 10(2), pp. 219-256.
- Hartog, D.N., Van Muijen, J. & Koopman, P.L. 1997, 'Transactional versus transformational leadership: An analysis of the MLQ', *Journal of Occupational and Organizational Psychology*, 70(1), pp. 19-34.
- Hosmer, L.T. 1995, 'Trust: The connecting link between organizational theory and philosophical ethics', *Academy of Management Review*, 20, pp. 379-403.
- Howell, D.C. 1997, *Statistical methods for psychology*, 4<sup>th</sup> edn, Duxbury, Belmont, CA.
- Hulin, C.L., Reznowskil, M. & Hachiya, D. 1985, 'Alternative opportunities and withdrawal decisions: Empirical and theoretical discrepancies and an integration', *Psychological Bulletin*, July, pp. 223-250.
- James, L.R. & Brett, J.M. 1984, 'Mediators, moderators, and tests for mediation', *Journal of Applied Psychology*, 68(2), pp. 307-321.
- Jaros, S.J., Jermier, J.M., Koehler, J. & Sincich, T. 1993, 'Effects of continuance, affective, and moralcommitment on the withdrawal process: An evaluation of eight structural equation models', *Academy of Management Journal*, 36(5), pp. 951-995.
- Jordan, C. & Sevastos, P. 2001, 'A construct validation and cross-validation study of organisational citizenship behaviour', *Best Papers Proceedings of the 4<sup>th</sup> Industrial and Organisational Psychology Conference*, Sydney, Australia, pp. 80-90.
- Jung, D. & Avolio, B. 2000, 'Opening the black box: An experimental investigation of the mediating effects of trust and value congruence on transformational and transactional leadership', *Journal of Organizational Behavior*, 21(8), pp. 949-964.
- Kramer, R. 1996, 'Divergent realities and convergent disappointments in the hierarchic relation: Trust and the intuitive auditor at work', in R. M. Kramer & T. R. Tyler (eds), *Trust in organisations: Frontiers of theories and research*, Sage, London.
- Kramer, R.M. & Tyler, T.R. (eds) 1996, *Trust in organizations: Frontiers of theory and research*. Sage, London.
- Mayer, R., Davis, J. & Schoorman, F. 1995, 'An integrative model of organisational trust', *Academy of Management Review*, 20(1), pp. 709-734.
- Menguc, B. 2000, 'An empirical investigation of a social exchange model of organizational citizenship behaviors across two sales situations: A Turkish case', *Journal of Personal Selling & Sales Management*, 20(4), pp. 205-214.
-

- 
- Moorman, R.H. 1991, 'Relationship between organizational justice and organization citizenship behaviors: Do fairness perceptions influence employee citizenship?' *Journal of Applied Psychology*, 76, pp. 845-855.
- Mowday, R.T., Steers, R.M. & Porter, L.W. 1979, 'The measurement of organisational commitment', *Journal of Vocational Behavior*, 14, pp. 224-247.
- Nelson, A., Cooper, C.L. & Jackson, P.R. 1995, 'Uncertainty amidst change: The impact of privatization on employee job satisfaction and well-being', *Journal of Occupational and Organizational Psychology*, 68, pp. 57-71.
- O'Neill, H.M. & Lenn, D.J. 1995, 'Voices of survivors: Words that downsizing CEOs should hear', *Academy of Management Executive*, 9, pp. 23-34.
- O'Driscoll, M. & Randall, D. 1999, 'Perceived organisational support, satisfaction with rewards, and employee job involvement and organisational commitment', *Applied Psychology: an International Review*, 48(2), pp. 197-209.
- Organ, D.W. & Konovsky, M. 1989) 'Cognitive versus affective determinants of organizational citizenship behavior', *Journal of Applied Psychology*, 74(1), pp. 157-164.
- Organ, D.W. 1988, *Organizational citizenship behavior: The good soldier syndrome*, Lexington Books, Lexington, MA.
- Parry, K.W. 1998, 'The New Leader: A synthesis of leadership research in Australia and New Zealand', *Journal of Leadership Studies*, 5 (4), pp. 85-95.
- Pillai, R., Schriesheim, C. & Williams, E. 1999, 'Fairness perceptions and trust as mediators for transformational and transactional leadership: A two-sample study', *Journal of Management*, 25(6), pp. 897-933.
- Podsakoff, P.M., MacKenzie, S.B. & Bommer, W.H. 1996, 'Transformational leader behaviors and substitutes for leadership as determinants of employee satisfaction, commitment, trust, and organizational citizenship behaviors', *Journal of Management*, 22(2), pp. 259-298.
- Podsakoff, P.M., MacKenzie, S.B., Moorman, R.H. & Fetter, R. 1990, 'Transformational leader behaviors and their effects on followers' trust in leader, satisfaction, and organizational citizenship behaviors', *Leadership Quarterly*, 1(2), pp. 107-142.
- Podsakoff, P., MacKenzie, S., Paine, J. & Bachrach, D. 2000, 'Organizational citizenship behaviors: A critical review of the theoretical and empirical literature and suggestions for future research', *Journal of Management*, 26(3), pp. 513-563.
- Robinson, S.L 1996, 'Trust and breach of the psychological contract', *Administrative Science Quarterly*, 41(4), pp. 574-400.
-

- 
- Sashkin, M. 1988, 'The visionary leader', in J. A. Conger & R. N. Kanungo (eds) *Charismatic leadership: The elusive factor in organizational effectiveness*, The Jossey-Bass management series, Jossey-Bass, San Francisco, CA, pp. 122-160.
- Schnake, M. & Dumler, M.P. 2000, 'Predictors of propensity to turnover in the construction industry', *Psychological Reports*, 86, pp. 1000-1002.
- Schweiger, D.M. & De Nisi, A.S. 1991, 'Communication with employees following a merger: A longitudinal field experiment', *Academy of Management Journal*, 34, pp. 110-135.
- Shaw, R.B. 1997, *Trust in the balance: Building successful organizations on results, integrity and concern*, Jossey-Bass Publishers, San Francisco.
- Shore, L.M. & Wayne, S.J. 1993, 'Commitment and employee behavior: Comparison of affective and continuance commitment with perceived organizational support', *Journal of Applied Psychology*, 78, pp. 774-780.
- Simon, L.S. 1995, 'Trust in leadership: Its dimensions and mediating role', doctoral dissertation, *Dissertation Abstracts International*, 56, p. 556.
- Sosik, J., Avolio, B. & Kahai, S. 1997, 'Effects of leadership style and anonymity on group potency and effectiveness in a group decision support system environment', *Journal of Applied Psychology*, 82(1), pp. 89-103.
- Sweeney, P.D. & McFarlin, D.B. 1997, 'Process and outcome: Gender differences in the assessment of justice', *Journal of Organizational Behavior*, 18, pp. 83-98.
- Tan, H. & Tan, C.S. 2000, 'Toward the differentiation of trust in supervisor and trust in organization', *Genetic, Social, & General Psychology Monographs*, 126 (2), pp. 241-260.
- Tett, R.P. & Meyer, J.P. 1993, 'Job satisfaction, organisational commitment, turnover intention and turnover: Path analyses based on meta-analytic findings', *Personnel Psychology*, 46, pp. 259-293.
- Tyler, T.R. & Kramer, R.M. 1996, 'Wither Trust?', in R.M. Kramer & T.R. Tyler (eds.) *Trust in Organizations: Frontiers of Theory and Research*, Sage Publications, Thousand Oaks, CA.
- Velez, P. 2001, 'Interpersonal trust between a supervisor and subordinate', doctoral dissertation', *Dissertation Abstracts International*, 62, p. 589.
- Wayne, S.J., Shore, L.M. & Liden, R.C. 1997, 'What's loyalty? Perceived organisation support and leader-member exchange: A social exchange perspective', *Academy of Management Journal*, 40, pp. 82-111.
-

---

Whittington, J.I. 1998, 'An integrative model of transformational leadership and follower behavior', doctoral dissertation, *Dissertation Abstracts International*, 58, p. 3216.

Yammarino, F.J. & Bass, B.M. 1990, 'Long-term forecasting of transformational leadership and its effects on naval officers: Some preliminary findings', in K. E. Clark & M. B. Clark (eds) *Measures of Leadership*, Leadership Library of America, West Orange, NJ.

Yammarino, F. J., Spangler, W. Dubinsky, A. 1998, 'Transformational and contingent reward leadership: Individual, dyad, and group levels of analysis', *Leadership Quarterly*, 9(1), pp. 27-54.